Social media information and everyday life in Malaysia

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Abstract

This thesis sets out to illustrate the significance of social media as networked information utilities in the everyday lives of Malaysian users: affordances of global platforms are interpreted with regard to local cultural contexts. I offer a detailed analysis of social media participation in Malaysia, an important middle income country in Southeast Asia that has been understudied in new media scholarship. This thesis will show that for a significant portion of Malaysian internet users from different socioeconomic and ethnic groups, social media use is an integral part of their daily life. I employed two methods in my thesis. Firstly, I distributed a quota-based questionnaire sampled from a pool of 85,000 Malaysian internet users. Respondents were comprised of 400 Malaysian users, split evenly among Malay, Chinese, Indian and English speakers, with language serving as a proxy for ethnicity. Secondly, I conducted a content analysis of Malaysian Twitter use to understand social media information practices in more detail.

Primarily, I set out to contribute to a literature gap on active and passive information practices on social media that serve both functional and recreational needs by Malaysian users, set against social and communication motivations for participation. Networked media, everyday life information seeking (ELIS) and domestication approaches are used to frame information practices on social media. I demonstrate that Malaysians value a range of social networks on social media for useful and trusted everyday information, particularly traditional networks comprised of family and friends. I critique the applicability of a networked individualism perspective to Malaysia as a collectivist society. Nuances in styles of social media participation are reported across Malaysian ethnic groups, with reference to debates about differential practices and social inequality in race and internet studies. My findings suggest significant divides by Malaysian users of higher education attainment in their networking practices with their peers on social media while low-income users prefer traditional media.

Drawing from social imaginaries and localisation approaches, I attempt to capture the cultural life of Malaysians as it is expressed through their social media participation. Using social inclusion and internet for development (ICT4D) frameworks, I contend that social media are inclusive because they are valued by a broad spectrum of groups; although social media are not necessarily tools for conferring socioeconomic mobility. Social media participation plays a role in the development of the nation and social cohesion by allowing Malaysians to access independent information from their social networks.

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[1] The services were restricted to Standards D. Language and illustrations and E. Completeness and consistency of the Australian Standards for Editing Practice (ASEP).

Declaration

This thesis contains no material which has been accepted for the award to the candidate of any other degree or diploma. To the best of my knowledge, it contains no material previously published or written by another person except where due reference has been made.

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Chapter 1 Introduction

Good morning all! It is astonishing how many social media users routinely start their day with a salutation to the world, duly followed in the evening by, Good night all! In Malaysia, daily social media content is imbued with references to *makan* (eating), traffic complaints, study tips, relationships advice, electronics hype, political scandals, religious quotes, celebrity fandom, gossip, and all manner of topics. This thesis is concerned with the information seeking and sharing that occurs in and amongst this chatter, and how social media information is connected to the everyday lives of users. I take the position that social media participation is embedded in the local cultural context of users (Postill 2011), even while platforms are built on global infrastructures (Hunsinger 2014). While many of the prominent social media websites such as Facebook and Twitter have evolved out of the Silicon Valley tech-hub in the United States, platforms attract users of diverse cultural backgrounds from around the globe. Sina Weibo, a leading social media website in China, is one notable exception to the dominance of Facebook (Hjorth et al. 2014). This thesis offers an in-depth analysis of social media participation in Malaysia, an important middle-income country in Southeast Asia. The value of localised social media studies lies in demonstrating that information and communication technology adoption is heterogeneous, shaped by the particular societal concerns of users. This thesis will show that for a significant portion of Malaysian users from different socioeconomic and ethnic groups, social media participation is an integral part of their daily life experiences. I explore the implications for social inclusion of differential styles of social media participation comparing diverse social networks.

Before I provide the background to my research questions, I acknowledge that I am an outsider – a foreigner – in analysing social media use in Malaysia. I draw on my experiences in Malaysia over a period of more than five years. New media Asian studies scholar Susan Leong (2014, pp. 20-21) writes that "strangers and newcomers can quickly and easily access a society's social imaginary" (the public culture governing everyday life). She observes that acquisition is "largely a matter of spending time living within and becoming part of that society". The 'insider-outsider' research dilemma, for example, is a contentious area in all ethnography and action research (Bartunek and Louis 1996; Parker Webster and John 2010). These concerns inform how I reflect on the findings of this thesis. In 2010, I began to travel back and forth between Malaysia and Australia as my partner was seconded to set up a global development centre in Cyberjaya, Malaysia's answer to

Silicon Valley. I was immediately struck by burgeoning internet-driven economies and cultures in Kuala Lumpur, reflected by activity in new coworking hacker spaces, wi-fi enabled cafés and tech meet-ups. In attempting to understand how everyday life worked here as a foreigner, it made sense to base my study on the quotidian social media habits of Malaysian users. My own background was in commercial internet measurement, analysing diverse content over millions of websites. When visits by users to social media websites overtook search engines in mid-2010 in many countries including Australia, Singapore, United Kingdom and United States (Experian Hitwise 2010, data from client website), I soon became interested in whether the diversity of information content on the internet was replicated within social media platforms. The idea of investigating social media as information utilities that allowed participants to operate with greater ease in their everyday lives sowed the seed of this thesis. My approach is largely grounded in internet studies that investigate the wide range of uses of the internet (Bakardjieva 2005; Blank and Groselj 2014; Chen, Boase and Wellman 2002; Salman and Rahim 2011a; Wellman and Haythornthwaite 2002). Zittrain (2008) refers to the 'generative' or productive capacity of the internet, manifest in a range of utilities such as e-commerce, community and government services, entertainment, news and consumer research. I build on these studies by focusing on social media and their diverse uses in everyday life.

I will demonstrate that social media adoption is widespread in Malaysia, raising the question as to their wider value across social networks in Malaysian society. I examine the relevance of information that is sought and shared on social media for everyday life, and why social media participation is important in the cultural context of Malaysia. These two general streams of inquiry reflect both an interest in the global and local implications of social media participation. The significance of this study is in offering a detailed account of new media practices in a Southeast Asian setting. My objective is to illustrate everyday information seeking and sharing practices that have social meaning in a local Malaysian context. The primary and secondary research questions that guide my investigation are as follows:

What is the importance for users in Malaysia of social media as information utilities embedded in networked, everyday contexts?

What are the implications of social media participation in terms of social inclusion for Malaysian users of different socioeconomic and ethnic groups?

In this thesis 'social media' means networked platforms that support information, communication and social practices. Hunsinger and Senft (2014) acknowledge that the meaning of social media is contentious. They adopt a definition by Bruns and Bahnisch (2009, p. 5): "Websites which build on Web 2.0 technologies to provide space for in-depth social interaction, community formation, and the tackling of collaborative projects." My thesis is primarily concerned with personal uses of social media through information seeking and sharing in everyday contexts. Types of social media may include social network sites (SNS), microblogs, forums, chat rooms and more. The distinction between types of social media is not always clear; for example, Twitter fits the description of both a social network site and micro-blogging platform. Social media refer to a collective set of diverse participatory web 2.0 technologies and services, which evolve to meet the everyday needs of users. Hogan and Quan-Haase (2010) point out the difficulty of characterising social media as platforms as user practices rapidly evolve. They state that one affordance which is common to social media is 'many-to-many' interactions, on top of conveying information in a one-directional manner (p. 310). Hogan and Quan-Hasse's emphasis on interaction direction is useful for this thesis (see also Wohn et al. 2011). I will introduce terms for when users seek and share information and communicate directly with another person ('micro-broadcast') or with a wider audience ('broadcast').

As in many countries, the most highly used form of social media in Malaysia are social network sites (Effective Measure and Experian Hitwise, data from client sites 2014). In this thesis, I pay particular attention to the affordances of social network sites. Ellison and boyd (2013 p. 6) describe a social network site as a "networked communication platform". The important characteristics of social network sites that they identify are unique identity profiles, public connections, and the ability to consume and produce user-generated content. In 2007, boyd and Ellison (p. 211) defined social network sites as web-based services allowing users to "(1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system". Ellison and boyd (2013 pp. 3-4) argue that other features such as news aggregation, in curating "streams of quotidian, ephemeral content", have become more important in understanding social network sites. The authors' emphasis on networked communication is relevant to this thesis as I explore information and communication affordances outside the sociality of social media websites. Like Ellison and boyd, I consider the vast amount of social data and everyday content generated and consumed by users to be a defining

characteristic of social media. Focusing on specific architectural features of platforms is likely to result in definitions that become quickly outdated. Zhang and Leung (2014) emphasise that defining social network sites as services, rather than static technology objects, better reflects the rapid change of features and social patterns of how social network sites are used in everyday life. I acknowledge that there are limitations in my study in examining social media broadly; some of the differences in my results may be due to varying perceptions of what 'social media' means to each user. I am also aware that information practices that I highlight in this study may evolve as platforms change. This investigation is situated not only in a specific geographical location, but in a particular period in the development of social media.

1.1 The internet and social media adoption in Malaysia

Internet access by a broad spectrum of users in Malaysia has been to a considerable degree achieved (Salman and Rahim 2012). There were 18.6 million internet users in Malaysia in 2012, representing 64 percent of all inhabitants, according to the *Internet survey report* by the Malaysian Communication and Multimedia Commission (MCMC 2012, p. 8). This represented a growth rate of 10 percent in a 5-year period, and 185 percent since 2000 (The World Bank 2012).[2] The MCMC (2012) reports that the majority of users, 83 percent, had an internet subscription at home; mobile broadband was the most common connection type at 62 percent. Other common points of access included work, school, public internet access centres, cybercafés, free wi-fi hot spots or access at another person's home. Internet users were more likely to be urban compared to the offline population. The split between rural and urban internet users was roughly 1 to 3 compared to an offline split of 1 to 2.4 (Department of Statistics, Malaysia 2010a).[3] Malays made up 58 percent of internet users, Chinese 22 percent, *Bumiputra* Sabah and Sarawak 8 percent, Indian 6 percent, *Orang Asli* 0.1 percent and 'Others' 5 percent.[4] The representation of Malays, Chinese and Indians comprising users online, was similar to the offline population; 55 percent, 24 percent and 7 percent respectively. *Bumiputra* Sabah and Sarawak and *Orang Asli* users collectively were under-represented on the internet, accounting for 13

[2] In-text references to percentages this thesis are rounded to the nearest whole number.

[3] 2012 census data was not available at the time of writing this thesis. The census was last carried out in 2010 and is conducted every 10 years.

[4] *Bumiputra (also spelt Bumiputera)* translates to 'sons of soil', referring to the dominant Malay population. *Orang Asli* refers to the 'original' people who were predecessors to the Malays. Nah (2003) discusses the social and political complications of indigenous identities in Malaysia.

percent of the offline population. Male internet users accounted for 56 percent, reflecting an offline sex ratio of 106. Users were predominantly young, with 72 percent under the age of 35; in comparison, 55 percent of the offline population were under the age of 35 in 2010. The largest age-group online was 20-24 year olds, forming 21 percent of users. 'Seniors' (defined by the MCMC as users over 50 years) accounted for 6 percent of users. The internet attracted a high percentage of users with higher education; tertiary-educated users made up 41 percent of the user base, compared to 6 percent of the total Malaysian population. The majority of internet users in Malaysia earned between RM1,000 and 3,000 per month, accounting for 52 percent of users. The median monthly income was RM2,229. This compared with a mean monthly household income of RM5,000 for the total Malaysian population (Economic Planning Unit 2012).[5] The income difference can be explained by the fact that 30 percent of internet users had no recurrent income (housewives, students, unemployed and retirees), and 18 percent were still in school, reflecting high accessibility to the internet by dependents in Malaysia.

The internet has achieved mainstream adoption in the Malaysian media environment (Ding, Koh and Surin 2013). Television is still dominant, attracting 43 percent of all media consumption, followed by the internet at 27 percent, radio at 24 percent, and newspaper readership at 6 percent (Nielsen's *Media index* cited in Ding, Koh and Surin 2013, p. 17). MCMC (2009) reports that the majority of their respondents viewed the internet as either 'very important' (28 percent) or 'important' (51 percent) in their daily lives. However, the 'trust' value of the internet is yet to be established for the majority of users, with 55 percent responding they "neither trust nor distrust what they read on the internet" (p. 22). Trust will be an important theme in this thesis in relation to how users evaluate information on social media. MCMC (2011) further reports that the types of websites users visited ranged from entertainment and education to transactional websites in banking, government and shopping. The diversity of websites that are visited by users informs my typology of social media information. MCMC (2011) identifies the top three uses of what Malaysians do online as getting information, social networking and communication by text (Table 1.1). This prioritisation influences my examination of information practices on social media, with secondary interests in social and communication motivations. Information seeking and sharing activity on the internet is a fundamental activity by users. Information gathering motivations appear to be common to users across low, middle and

[5] A median monthly household income for the total Malaysian population in 2012 was not available for comparison.

high income countries, such as Vietnam, Malaysia, and Australia respectively. [6] For example, in 2011, 'getting information' was selected by 88 percent of users in Malaysia, compared to 'research, news and general browsing' by 91 percent of users in Australia, (Australian Bureau of Statistics 2011) and 'online information gathering' by 86 percent of users in Vietnam (Cimigo 2011). In contrast, transactional activities can differ across countries of varying income levels; for example, internet banking was selected by 41 percent of users in Malaysia, 64 percent of users in Australia, and 10 percent of users in Vietnam.

Table 1.1 Purpose of Use of the Internet by Malaysians 2011

Purpose of Use	% of users
Getting information	88.3%
Social networking	84.4%
Communication by text	66.4%
Education	63.5%
Downloading files	62.3%
Reading	57.2%
Surfing	54.6%
Internet banking	40.9%
Government services	38.4%
Internet telephony	29.5%
Online shopping	24.5%
Navigation systems	22.5%
Maintain homepages	18.2%
Selling goods	9.4%
Others	8.8%

Source: Survey of household use of the internet, *Malaysian Communications and Multimedia Commission* 2011 (p. 19).

The significance of social media in Malaysia is underpinned by the proportion of internet users that participate on it. Malaysians are particularly active on social media compared to global benchmarks. According to comScore (2011a), the social networking category attracted 91 percent of Malaysian internet users, 29 percent higher than the worldwide

[6] Income levels defined by OECD at The World Bank http://data.worldbank.org/ viewed 18 May, 2015

average. As a point of comparison, the portion of Australian internet users on social media in 2011 was 62 percent (Sensis 2011).[7] Malaysians spend at least a third of their time online on social networking websites (comScore 2011b). For Malaysian internet users that chose not to use social networking sites, reasons included a lack of time, disinterest, trust and security issues (MCMC 2011, p. 29). Malaysian users' adoption of social media was higher than search engine use at 88 percent (Comscore 2011a). This is in line with global trends I previously highlighted in visits to social media websites overtaking search engines. In this thesis I explore a possible preference by users in Malaysia and Southeast Asia for information derived from online social networks rather than third-party sources, such as search engines. Facebook and Twitter are major online properties in Malaysia; in October 2012 Facebook was the top ranking website, slightly ahead of Google Malaysia, while Twitter was ranked #14 (Effective Measure, data from client website[8]). The top five social media platforms were Facebook, Twitter, Google Plus, Tumblr and LinkedIn. The presence of LinkedIn, a website for professional networking, demonstrates the appeal of specialist social media platforms. The design of LinkedIn allows users to promote their skills and to network across 'weak ties' for jobs, as I will discuss in this thesis. Pinterest, a photo-sharing website that allows users to share lifestyle tips (fashion, homeware, cooking, and so forth) was also amongst the most popular social media websites in Malaysia. More recently in 2013, photo-sharing website Instagram enjoyed increased user adoption (Effective Measure, data from client website). This reflects a keen interest by Malaysians in sharing food and photography content (comScore 2011a).

In this thesis, I focus my content analysis on Twitter, given its popularity and accessibility to public content. In October 2012, the user-base of Twitter in Malaysia was young, with 25 percent of users in the 20-24 age bracket (Effective Measure, data from client website). The cohort was also highly educated, with 58 percent having tertiary education. The user profiles of social media are certainly not fixed; cohorts change over time for a multitude of reasons, including the introduction or removal of features, marketing exposure, competing platforms, user boredom, and so on. Twitter was launched in 2006 as a microblogging website with social media features, allowing users to post 140-character 'tweets'. Technology and marketing leaders were early advocates of Twitter, notably Tim O'Reilly and Steve Rubel. Celebrity figures, including Oprah Winfrey and Ashton Kutcher, helped

[7] The discrepancy between the 2011 figures provided for the percentage of users who use online social networking between MCMC (85%) and Comscore (91%) is likely due to a difference in data collection methodology.

[8] Unit of measurement is 'unique browser' which provides a 'proxy' of the number of 'unique' visitors to a website.

propel the global mainstream use of Twitter (Long 2009). Use of Twitter by politicians also helped to 'legitimise' it as a space for public discourse; in Australia politicians started using Twitter in late 2008 (Bruns 2013a). In Malaysia, Twitter has been used by the Prime Minister, Najib Razak, to reach out to the electorate, and it was actively used during the Malaysian 2013 general election (Asohan 2013). During the Malaysian *Bersih* protests in 2011 and 2012 calling for 'clean' elections, activity on Twitter was monitored by journalists and authorities for updates on what was happening on the ground (Palatino 2011). Journalists have adopted Twitter for both sourcing stories and personal promotion (Farhi 2009). As Twitter develops, it is being transformed into a bona fide media platform, reflected by its hiring of a head of news (Wolff 2013). Aside from tech, celebrity, and journalism use of Twitter, my thesis will demonstrate that the platform contains a significant amount of everyday content generated by 'ordinary' users.

Malaysian studies on social media are emerging. Social media participation has been recognised as an important motivation for Malaysians in using the internet generally (Salman et al. 2010). Wok, Idid and Misman (2012) present findings demonstrating high information sharing practices by Malaysian youths on social media. Youths are highly influenced by their peers to adopt services such as Facebook (Mustaffa et al. 2011). Information sharing on social media allows Malaysians to spread information widely and engage in citizen discourse (Ahmad et al. 2012). Malaysian scholars have argued that social media has the potential to enhance social solidarity, in the context of ethnocentrism in Malaysian society (Ridzuan et al. 2012; 2014). In addition to these studies, I reference numerous media reports on the role of social media in the national and political life of Malaysia (for example, O'Brien 2013; Palatino 2011; Zurairi 2013). There is a gap in Malaysian new media scholarship on how social media function as information tools that are useful in everyday life. This thesis addresses the need for a broad study of social media participation in Malaysia related to quotidian information practices. My objective is to articulate how and why social media are important compared to other media, as a contribution towards understanding the contemporary media environment in Malaysia. As stated, my primary research question asks: *what is the importance for users in Malaysia of social media as information utilities embedded in networked, everyday contexts?*

1.2 Race and socioeconomic status in everyday life in Malaysia

After spending some time in Malaysia, it became apparent to me that 'race' was an important issue in everyday life, intersecting with concerns about socioeconomic status and politics. In this thesis, I use 'race' to discuss social constructs employed by the public and the state, and the term 'ethnicity' as a broader concept accepted in social science, encompassing socially recognised cultural differences (Hawkins 2006). I suggest that ethnicity is a socially meaningful concept referring to how groups form and interact in everyday life, while race is a construct politicised at a national level. There are three major ethnic groups in Peninsular Malaysia; Malay, Chinese and Indian (see percentages on p. 4), which I focus on in this thesis. Migrant groups include nationals from Indonesia, the Philippines, China, Bangladesh, India, Singapore, Thailand, Japan, Myanmar and Pakistan (The World Bank 2011, p. 170). Expatriates are represented from countries such as India, Japan and China (Ahmad 2012) to European and Western nations such as Australia, the United Kingdom, the United States and France. The cultural practices of Malaysia's diverse ethnic groups constitute the rhythm of everyday life. Regular seasons in the year can be measured by religious festivals; for example, Chinese New Year, Ramadhan and Hari Raya Aidilfitri, Deepavali and Christmas. Being close to the equator, there are no climatic seasons in Malaysia other than the dry and the monsoon seasons. While Malaysia attempts to celebrate the diversity of its cultures, a constant point of frustration for Malaysians is that 'everything is about race', underpinning tensions in the social and economic fabric of the country (Noor 2011). In this thesis I use the term 'racial polarisation' to refer to social division, inequalities and segregation between the major groups in Malaysia. I use the term 'ethnic' groups for comparing online practices on social media and for the operationalisation of my research questions. I will explain how 'ethnicities' are nuanced and 'practised' in quotidian settings, but become abstracted into the construct of 'race' in relation to issues of identity.

National concerns of how race and socioeconomic status influence ICT adoption (Rahim et al. 2011) inform my comparison of social media practices by groups in Malaysia. I discuss how social media adoption might be related to social inclusion; the degree of participation in the social, economic and political life of a country (Buré 2006; Stewart 2000; Warschauer 2004). I will outline significant programs in Malaysia that have been introduced to address economic and social divides between ethnic groups, namely the New Economic Policy and 1Malaysia. Policies such as Vision 2020 have implications for the development of ICT and media environments. Divides between ethnic groups have

significant socioeconomic and political implications in Malaysia. Jomo (2004) argues that Malaysian political leaders have identified the need to lift the wealth of the middle class of the country to achieve racial unification. ICTs potentially have a role in how these divides are closed or compounded. Postill (2009a, 2011) outlines how ICTs have been promoted by the government as a key means for achieving economic goals in Malaysia; yet he raises the concern about whether the internet is adding another social divide in Malaysia by magnifying differences in access to resources amongst ethnic groups. I build on this work by investigating whether there are 'divides' in social media participation that distinguish users of different socioeconomic and ethnic backgrounds.

In Malaysian political and anthropology scholarship, the issue of race is a prominent theme (for example, Gomez 2007; Jomo 2004; Shamsul 2001a, 2001b). There are fewer studies that examine race or socioeconomic status and new media technologies (Leong 2014; Postill 2011; Rahim, Pawanteh and Salman 2011), and fewer still that examine race and social media (Ridzuan et al. 2012; Ridzuan et al. 2014; Wok, Idid and Misman 2012). I will discuss how Malaysians have the opportunity on social media to seek and share information across socioeconomic and ethnic groups, while traditional media is polarised along racial lines. In framing everyday information social practices on social media with regard to socioeconomic and ethnic differences, I am localising my study based on issues that are important in Malaysian society. I discuss the implications of participation differences in terms of the development agenda of Malaysia (Siam-Heng 2014). As Malaysia strives to achieve status as a 'fully-developed' nation by 2020, ICT literacies form an important part of improving social and economic outcomes (Salman 2009). Broader criteria of development such as cultural preservation and media freedoms are relevant to social media participation; in particular, the implications of sharing cultural values through social media practices, and the degree to which information seeking and sharing can occur unhindered by government censorship. As stated, my secondary research question asks: *what are the implications of social media participation in terms of social inclusion for Malaysian users of different socioeconomic and ethnic groups?*

1.3 Thesis outline and chapter summaries

This thesis sets out to illustrate the significance of social media as networked information utilities in the everyday lives of Malaysian users: affordances of global platforms are interpreted with regard to local cultural contexts. Primarily, I set out to contribute to a literature gap on active and passive information practices that serve both functional and recreational needs by Malaysian users, set against social and communication motivations for participation. I compare these practices across socioeconomic and ethnic groups in Malaysia, and discuss the implications of differential practices for social inequality. I argue that social media participation plays a role in the development of the country by allowing Malaysians to access information directly from social networks, bypassing mediation by authorities that constrain traditional media. I contend that social media are inclusive platforms and services valued by a broad spectrum of groups, while not necessarily tools for conferring socioeconomic advantage. Content on Twitter in Malaysia is strongly characterised by small-talk, rather than information of a highly-technical nature. A comparative lack of trust in social media information compared to other media highlights that verification features of platforms are immature. The importance of exchanging everyday information through conversations on Twitter suggests the influence of both platform affordances and collectivist values in Malaysia. My findings show that Malaysian users are able to source useful and trusted information on social media across a broad range of social networks. While family and friends are particularly important as information sources, connections of shared religion and ethnicity are not necessarily prioritised above other social networks in everyday information practices for domestic purposes on social media. This finding sits in contrast to the issue of racial polarisation which pervades national discourse in Malaysia, especially during times of political sensitivity. While the scope of this thesis may be regarded as ambitious for a single work by one person, my objective is to contribute a groundwork study on the significance of social media platforms in a well-connected country that has been understudied in new media scholarship.

This thesis is organised into nine chapters. In Chapter 2, I provide contextual background to social media participation in Malaysia, describing socio-historical debates on 'race' and socioeconomic divides. In Chapter 3, I provide an outline of my theoretical framework, methodology and methods; namely, an online questionnaire on social media broadly, and content analysis of Twitter. Situated in new media studies, I describe practices on social media platforms in terms of architectures and affordances, everyday life information

seeking, and domestication. Practices are contextualised within the network society with regard to information sharing across social networks on technology platforms. My theoretical framework outlines societal factors that give meaning to participation, using localisation, racial polarisation and concepts of social imaginaries. Later, I describe the consequences of social media participation for social inclusion and development (ICT4D). My results are presented in Chapters 4 – 8, framed by relevant literatures that guide more specific questions of investigation for each chapter. These sub-questions are designed to interrogate specific aspects of my primary and secondary research questions. While Chapters 4 and 8 are dedicated to the wider societal implications of social media participation, Chapters 5, 6 and 7 focus on information practices on platforms. My approach in presenting social media use results is largely descriptive, except for Chapter 8, where I conduct an inferential analysis to identify where there might be significant divides in participation. I introduce each chapter with a brief prologue illustrating everyday life in Malaysia, reflecting on personal experiences that influence my observations of social media participation.

At a macro level, Chapter 2 situates media use within the local cultural dynamics of Malaysia, building on the work of media and anthropology scholars Susan Leong (2014) and John Postill (2011). I explain why race is an important historical and contemporary issue in Malaysia, referencing the work of prominent Malaysian scholars Jomo Kwame Sundaram (2004), Shamsul Amri Baharuddin (1996, 2001a, 2001b, 2004), Farish Noor (2011) and others. The term 'racial polarisation' is introduced to describe deep divisions in Malaysian society. I use the notion of a 'two-social' reality (Shamsul 1996, 2001a) to explain why everyday practices in domestic contexts between ethnic groups on social media should not be assumed to be determined by macro frameworks that contribute to racial polarisation, such as the New Economic Policy (Jomo 2004). I discuss the government program of 1Malaysia that symbolises attempts to promote racial unification in Malaysia. While race and ethnicity is an emerging theme in Malaysian literature regarding a digital divide in internet use, there is scope to focus on social media for this topic. My study is informed by global race and internet studies scholarship, including the work of Hargittai (2010, 2012), Howard et al. (2002), Hoffman, Novak, and Scholosser (2001), Jones et al. (2009), Nakamura (2002), Nakamura and Chow-White (2012) and Sandvig (2012).

I frame my choices of data collection techniques with a discussion of 'big data', alluding to an era of increasing volumes, velocities and varieties of social data, in Chapter 3. I highlight

the promises and pitfalls of big data for researchers seeking to combine quantitative and qualitative approaches in studying human behaviour. A conceptual 'map' for the thesis linking empirical data with frameworks of interpreting social media practices is provided. One objective of the chapter is to define terms that are used to evaluate social media information throughout the thesis, including 'usefulness' and 'trust'. I provide a detailed description of the methods employed in my thesis. Briefly stated, I firstly distributed a quota-based questionnaire sampled from a pool of 85,000 Malaysian internet users through a third-party marketing firm (Effective Measure). Respondents were comprised of 400 Malaysian users, split evenly among Malay, Chinese, Indian and English speakers, with language as a proxy for ethnicity. I use 'ethnicity' to operationalise my comparison between groups, even though I discuss 'race' as a social and political construct. Secondly, I conducted a content analysis of Twitter (using Datasift.com) to understand social media information practices in more detail. I outline the scope of my thesis by discussing why other approaches such as social network analysis and qualitative interviews were not adopted, and their value for future studies. My approach contributes to internet in everyday life studies by offering a ground-up typology of information that is used on social media in everyday life.

In Chapter 4, I set out to establish the significance of social media in the everyday lives of users. I describe social media adoption in terms of the 'network society,' based on sociologist Manuel Castells' conceptualisation of society and technology (Castells 1997, 2000a, 2000b, 2001, 2004, 2009, 2010). I am informed by the strength of weak ties hypothesis (Granovetter 1973) in conceptualising the value of different types of social networks for building social capital. The chapter argues that social media are significant not only because they are regarded as important by Malaysian users and are accessed frequently and widely, but because users are connected through information practices to a wide range of social networks. I assess how Malaysian users prioritise social networks, using the criteria of 'connectedness' (increased contact with social networks, either online or offline, through their use of social media), sources of useful information, and sources of trusted information. Further, I speculate that everyday information practices on social media for domestic purposes should not be assumed to be polarised along racial lines, based on my findings that Malaysian users do not appear to prioritise information from connections of shared religion or ethnicity over other types of social networks. The chapter raises the debate of whether networked individualism (how individuals operate across multiple networks) is an appropriate concept outside Western contexts in describing social networks (Rainie and Wellman 2012; Postill 2008a, 2008b, 2011).

The objective of Chapter 5 is to establish social media as information media, on top of their communication and social affordances. My approach is influenced by the work of new media scholars Wohn et al. (2011), Zizi Papacharissi (2011), danah boyd (2011) and Bernie Hogan (2009). First, I present findings that show social media are valued over other forms of traditional and new media for useful information, but not necessarily for trusted information. I discuss these preferences in relation to the media environment in Malaysia, where factors such as media censorship constrain both traditional and new media choices. I then present findings which demonstrate that information seeking and sharing is a key motivation in the use of social media by Malaysians, emphasising that information, communication and social practices are particular to the architectural affordances of a platform. I distinguish between 'broadcast' and 'micro-broadcast' content on Twitter to illustrate how users direct information at both wide and specific audiences. In my discussion, I emphasise that social media architectures afford useful information because users have the ability to curate relevant sources.

Chapter 6 examines information practices in more detail. My application of an 'information ecologies' framework to social media is informed by the work of information scholars Bonnie Nardi and Vicki O'Day (1999). Precedent studies that focus on information uses of social media include work by Wohn et al. (2011) and Lampe et al. (2012). My approach to describing actual information practices is influenced by everyday life information seeking (ELIS) literature which examines how information seeking solves practical goals. I apply an information model to social media use by ELIS scholar Pamela McKenzie (2003) which outlines active and passive types of information seeking. The work of Jannis Kallinikos (2006) on the nature of data, information and knowledge is used to discuss the immediacy and temporality of content on social media. I describe how social media are efficient information ecologies for distributing and consuming temporal everyday information. Nuanced differences in information practices across ethnic groups in Malaysia are highlighted, inviting future work on the social and economic implications of these differences. My results demonstrate that for Twitter, content distribution is characterised by users 'pushing' information rather than asking questions ('pulling' information). I further analyse whether there is practical value in content shared on Twitter, in terms of tips, advice and recommendations.

I extend my examination of information practices in Chapter 7 in order to identify the everyday contexts in which social media information is used in Malaysia. My first objective is to establish whether social media make everyday life easier for Malaysians. Next, I

examine the diversity and range of information topics on social media and use this as a proxy for the 'use contexts' in which social media information is employed. My contribution here is in applying a diverse information-use typology of the internet to social media environments. I adopt a domestication of technology approach to analyse 'immediate contexts' of social media information use, informed by the work of communication and culture scholar Maria Bakardjieva (2005, 2006). I shift from an 'ecology' to 'utility' metaphor to connect information practices to online and offline worlds outside social media platforms; that is, information practices are integrated with uses and purposes in the 'outside' world. Information that is shared on social media gains value when users are able to apply this information in their everyday activities. An important finding in this chapter is the dominance of 'small-talk' on Twitter, highlighting recreational motivations by Malaysian users. Finally, I examine the balance of functional and recreational content on social media. How much of social media information serves practical goals? I briefly touch on mobile domesticity (Wilken 2005) to emphasise that domestication is not fixed by location; rather, it relates to the familiar and everyday experiences of users.

In Chapter 8, my scope broadens again in a discussion of the consequences of social media use in Malaysia. I ask whether Malaysians of different socioeconomic and cultural backgrounds participate equally on social media. Does differential social media participation affect the ability of users to participate in wider Malaysian society? What are the outcomes of social media participation in relation to education, employment and quality of life? The discussion frameworks applied include social inclusion and information and communication technologies for development (ICT4D). I build on the work of Malaysian-based internet studies scholars who have introduced ethnicity as an important concept in studies of digital inclusion (Rahim, Pawanteh and Salman 2011; Salman and Rahim 2011b, 2012). My position on development is partly influenced by a human rights approach that values cultural diversity and media freedoms, beyond economic dimensions (Willis 2011). My central argument is that social media as information utilities can benefit users with outcomes that matter in their everyday lives, but are not necessarily instrumental for achieving higher education and occupation attainment. I attribute this to the quotidian, rather than highly-technical or validated, nature of social media information. In order to simplify my analysis of relationships between dimensions of social participation, I group social networks into categories; namely, 'friends / family', 'peers', 'acquaintances / strangers', and 'religious / ethnic'. There are two significant differences in participation that I highlight; highly-educated

users are more likely to value information from 'peers'; and low income users are more likely to value information from traditional media.

My concluding chapter summarises why social media should be valued in Malaysian society. I survey cultural and contemporary values of how Malaysians prioritise social networks on social media, and speculate on a cultural fusion of traditional and 'modern' values reflected by how Malaysians value information across a range of ties on social media to achieve everyday goals; these include both 'collectivist' and socially distant networks. A broader question this thesis raises for further work is whether global platforms such as social media promote dominant Western cultures to the detriment of local values. The findings of this thesis are situated in a particular time and place. There are concerns about increasingly extreme religious values in Malaysia; for example, use of the word 'Allah' by non-Muslims was banned by Shariah authorities in 2013 (BBC News 2013). These conditions could lead to more pronounced biases in the way Malaysian social media users prioritise everyday information from their social networks, particularly ethnic groups. In this final chapter I speculate on how social media globally might change, asking whether platforms will evolve to include features that improve verification, storage, retrieval and interpretation processes. As tools for promoting skilled information seeking and sharing, social media can be constructive means for Malaysian users to share common values and to facilitate social cohesion, depending on how users choose to participate.

Chapter 2 The 1Malaysia context: Intersecting one nation and three races with the media

As you take a flight into Kuala Lumpur on the national carrier, a video plays with a catchy, saccharine tune, '*Malaysia...truly, Asia'*. The promotional clip features a woman with eerily blended Pan-Asian features; accompanying her are three children, respectively of Malay, Chinese and Indian heritage. Together, they are a symbolic representation of official racial identities in Malaysia. When I first booked a flight to Malaysia and filled out the loyalty program application, I was taken aback to be asked for my 'race'. Listed were the options 'Malay', 'Chinese', 'Indian' and 'Other' (in Malay: *lain lain*). Bemused, I duly registered myself as 'Other'. I was also struck by the fact the form asked for my race rather than ethnicity or ancestry or any other term that would seem more politically correct in Australian and New Zealand official documents. I soon learnt that race is politicised and institutionalised in Malaysia. The race of every Malaysian is stored in the national registry and is visible on the Identity Card which each citizen must carry. Each day in the press there is a new story about racial and religious sensitivities being stirred up over real and perceived insults. One cannot live in Malaysia without being aware of the daily discussion in public and private spaces of race and religion, and what it means to be Malaysian or an 'Other'.

This chapter situates social media participation in the wider socio-historical, political, cultural and media contexts of Malaysia. Here I provide the background for my secondary research question concerning how different ethnic and socioeconomic groups in Malaysia participate on social media. I will outline why it is important to analyse race and socioeconomic status when examining the relationship between social media adoption and society in Malaysia. I examine the dynamics of social constructs in Malaysia, while being aware of debates surrounding the conceptualising of race and digital divides in new media scholarship (Nakamura and Chow-White 2012). I take the position that an analysis of local contexts is necessary in understanding the significance and meaning of social media use. Information and communication environments are shaped by the local cultural dynamics of a given society. It should not be assumed that social media participation, or the implications of social media use, is homogenous globally; rather, participation is particular to, and reflective of, social structures that exist offline. In Chapter 1, I introduced

race as an issue pervading national life in Malaysia, and ethnicity as a more nuanced concept describing groups of shared characteristics at an everyday level. Perceived divisions in race and religion in Malaysia have complex historical roots that contribute to racial polarisation and socioeconomic inequality in Malaysia today. These issues have a role in shaping how media are adopted by heterogeneous groups of Malaysian users.

One objective of this chapter is to foreground the work of scholars who have investigated new media and national issues in Malaysia. I will use selected frameworks to analyse how constructs of race and religion intersect with factors shaping motivations for social media use; namely culture and pluralism, racial polarisation, social imaginaries, and localisation. The title of this chapter references '1Malaysia', a government program that symbolises a continuing national conversation about racial harmony and polarisation affecting every sphere of life in Malaysia, including, education, employment and access to resources. 1Malaysia represents a national desire for racial unification, even while there are macro frameworks that contribute to polarisation; such as the New Economic Policy. Furthermore, I analyse government ICT initiatives and regulatory constraints on ownership of traditional media. I add to the body of scholarship in Malaysia that examines the relationship between nation, media, technology and identities by focusing my enquiry on social media. Social media participation and concerns of digital divides become the locus for re-engaging in the topic of racial unification and socioeconomic equality in Malaysia.

2.1 Conceptualising everyday life in Malaysia

Malaysia is a country that celebrates multiculturalism; yet it is a racially polarised society where there are tensions in defining the national identity. The colonial history of Malaysia is ingrained in contemporary policies that shape how Malaysians interact in everyday life. I connect macro factors that shape everyday life with participation on social media. Culture is a central concept across the frameworks that I employ to identify what is unique about social media participation in Malaysia. First, I discuss approaches in defining culture and identity; in particular, challenges in reconciling national and everyday notions of identity and reality, referencing the work of Shamsul Amri Baharuddin (1996, 2001a). I build on the work of Susan Leong in *New media and the nation in Malaysia: Malaysianet* (2014), in particular her analysis of how internet use 'intersects' with a conception of the nation. I use Leong's socio-historical framework to justify my approach of contrasting

everyday mundane practices of information seeking and sharing on social media with political narratives. My emphasis on culture is consistent with a 'localisation' perspective. I reference John Postill's advocacy of a 'field' metaphor in his 2011 anthropological account, *Localizing the internet*, set in Subang Jaya, Kuala Lumpur. These are approaches for examining the relationships between nation, identities and social media participation.

2.1.1 Cultural contexts and the origins of pluralism in Malaysia

In this thesis, culture refers broadly to 'ways of everyday living' commonly accepted by groups, including their everyday social media practices. Culture is a difficult term to define, yet is fundamental in understanding the dynamics of everyday life within a society; it is a pivotal factor in grasping the complexity of social problems (Baldwin et al. 2008). Cultural theorist Stuart Hall (1990) argues that cultural identity refers firstly to people who have a shared history and ancestry; and secondly to processes of negotiating narratives of history, culture and power. In Malaysia, the delineation of cultural identities is linked with race, socioeconomic status and historical power structures. Using a broader definition, media scholar Basile Zimmerman (2013, p. 439) writes that culture "concerns human beings and artifacts, and relates to the ways of life and of thinking of human populations". Culture is a term that bounds groups of people at the population level; Malay, Chinese and Indian groups are categorised each with their own cultural attributes and values. Zimmerman advocates a research approach of describing micro-levels of cultural and media practice (for example, how often a Chinese website is visited). This is to avoid abstract macro-level definitions of culture that are difficult to comprehend empirically (for example, 'Chinese culture'). With this in mind I examine the 'styles of participation' (defined in the next chapter) of ethnic groups on social media in order to identify whether there might be meaningful cultural differences. In describing aspects of Malaysian cultures to explain what is unique about social media use, I remain cognisant of the dangers of stereotypes and attributing patterns which are not necessarily based on cultural values.

The coexistence of multiple cultures in Malaysia has historical colonial roots. British administrator and political writer John Sydenham Furnivall in the early 20th century conceived of a plural society as a single political unit consisting of social orders existing separately, yet side by side; citing Indonesia, Malaysia and Singapore as important examples (Hefner 2001). The contemporary reality of how multiple cultures exist side-by-

side is more complex; divisions that continue in Malaysia today have origins arising out of the social tensions that have resulted from importing migrant workers. Malaya was under rule by the British as part of its empire in the 18th century, and an independent Malaysia was formed only in 1957 (Drabble 2000). Colonial expansion had created a cheap labour market based on world demand for rubber, with the British employing 'divide-and-conquer' strategies to manage migrant workers. Chinese immigrants began moving to the Malay Peninsula in large numbers only in the nineteenth century. Historically, the second major migratory population was low-caste South Indian Tamils. Thousands migrated to Malaya in the late nineteenth and early twentieth centuries to work in plantations and on public works in order to escape a life of poverty and servitude. The legacy of this history has had repercussions in terms of identity, race, politics and language that persist in contemporary Malaysia. While the Malays have a recognised status of being '*Bumiputera*' or 'indigenous' to Malaysia (Shamsul 2004), other groups have the lingering status of migrants ('*kaum pendatang'*), including the Chinese and Indians who have been in Malaysia for several generations. In this thesis, I have chosen to limit the domain of my study to Malaysian Malay, Chinese and Indian ethnic groups, based on these powerful socio-historical trajectories shaping Malaysian society.

2.1.2 A two-social reality and racial polarisation

In Malaysia, pluralism is espoused, but not necessarily put into practice by the state. Shamsul (1996, 2001a) describes a "two-social reality" to explain Malaysian identity in everyday versus national levels. This notion provides a framework for explaining the dual nature of race relations in Malaysia. Shamsul (1996, p. 447) explains that in the formation of identity and identities, there is an "authority-defined" reality dictated through authority and state power structures, and an "everyday-defined" social reality as experienced by 'the people' in the course of their everyday lives. There is a disconnect between the two social realities; official categories of identity do not reflect hybrid ethnicities that exist in everyday life. Shamsul describes attempts by authorities to shape identity and pluralism at the policy level. He examines the role played by equating 'Malayness' with the national identity in asserting independence, given Malaysia's colonial history (Shamsul 2001a, 2001b). The Malay Reservation Act in 1913, for example, strengthened the definition of `Malay' and `Malayness'. Shamsul contends that the Malay nationalism that developed was cultural, equating the `Malay race' with a `Malay nation'; yet this process excluded other major ethnic groups. There have been ongoing attempts to identify and manage the

changing face of the Malaysian identity. For example, the National Cultural Policy, formulated in 1971, represented the first official attempt to regulate the so-called "unregulated multiculturalism" in Malaysia (Zawawi 2004, p. 133). Multiculturalism continues to be a heavily debated policy in contemporary Malaysian society (J. Lee 2010; Loh 2010; Zaharom 2013). In this thesis, I will argue that despite crude ideologies of racial division in Malaysian public life, a comparison of domestic everyday practices on social media between groups of users should examine more meaningful categories of socioeconomic status and ethnicity, apart from relying solely on 'race.'

The term 'polarisation' appears in the public sphere in Malaysia and is an emotive label for the divisions between racial groups (Abraham 2004; Arrifin 2013; Gomez and Rashid 2014). I use the term 'racial polarisation' in this thesis to frame issues of social division, inequalities and segregation between the major ethnic groups in Malaysia; Malays, Chinese and Indians. Urban studies scholar Chris Hamnett in *Social Segregation and Social Polarization* (2001) identifies the lack of a concrete definition of polarisation. He argues that it is not always necessary to have a tight, empirically constructed definition of a social phenomenon such as polarisation. Terms can be used to reflect a variety of associated meanings, including rhetorical uses. The term 'polarisation' is more commonly used than 'segregation' in Malaysia and reflects the current tenor of acrimony between racial groups, although it can also refer to divisions between members of political parties. Another definition of polarisation by Castells refers to income inequalities and social differences between segments of the population (2000b, p. 349). I conceptualise 'polarisation' in Malaysia as existing when ethnic diversity and pluralism is not truly respected, even when there is pretence of doing so under ideologies such as *1Malaysia*. Polarisation describes a state that is the antithesis of a socially inclusive society where all cultural groups can participate equally and freely. In the context of new media scholarship, polarisation can also refer to a problem of information diversity on the internet. Cass Sunstein's hypothesis of 'cyberbalkanisation' in *Republic.com 2.0* (2007) describes how values in society could become more polarised as users filter out opinions online that conflict with their own beliefs. The technology of the internet means that users are not necessarily exposed to different viewpoints, as they would be in other media forms such as traditional newspapers with editorial direction. While the scope of this thesis excludes a detailed analysis of siloed information practices, polarisation is a useful framing concept for discussing the potential implications of new versus traditional media in allowing information to flow across ethnic social networks.

2.1.3 Macro frameworks: social imaginaries and localisation

I justify framing issues of national concern, such as racial polarisation, to everyday information practices on social media, using a social imaginaries approach. Leong (2008, 2014) describes both mundane and profound social acts and practices that are informed and shaped by social imaginaries. She defines the social imaginary as the "loosely co-ordinated body of significations that enables individual social acts and practices by making sense of them" (2014, p. 16). The term 'loosely co-ordinated body' refers to the result of ongoing social and historical forces; while 'significations' refer to a process of 'objectivation' where individual knowledge is aggregated and accepted into a collective understanding of the entities that constitute or typify 'social imaginaries'. Leong argues that social imaginaries are "collective depositories of knowledge" that "enable our social acts and practices by transmitting the elements that constitute the public culture of each society" (2008, p. 131). Building on the work of social theorists Charles Taylor, Cornelius Castoriadis and Alfred Schutz, Leong contends that each society has a unique 'social imaginary' or framework that guides how the citizens within it act in their daily lives, including their everyday media use. Her conception of society is a dynamic one, based on the accumulated historical actions and practices of social actors. Leong's model provides flexibility in illustrating the 'objects' that define a society on both a large and small scale; these range from daily co-ordinated behaviour between individuals (for example, drivers cooperating during peak hour traffic conditions) to participation in state ceremonies (for example, acts of patriotism and war). Leong explains how race and religion are important significations in the Malaysian social imaginary which shape media and technology use. While Leong articulates 'entities' of national significance, John Postill focuses on localisation.

A localisation perspective emphasises the local cultural contexts in understanding the social meaning of media use. Culture is embedded in local contexts, but cultural values may also be transmitted through global technologies such as the internet. Local sources, contacts and information gain relevancy when they are used in local contexts. Situating his digital ethnography of the internet in suburban Kuala Lumpur, Postill (2011) outlines two prevailing approaches to the study of internet localisation: 'community informatics' and 'networked individualism'. Postill challenges the dominance of both perspectives. His first concern is avoiding the assumption of a 'static' community being impacted by global technologies such as the internet. He problematises the "boundedness and homogeneity at work" (p. 13) in the notion of community. Postill's concern with networks is similarly

about creating arbitrary boundaries around networks when attempting to study whole populations. A network perspective, according to Postill, does not sufficiently take into account the motivations and actions of the people who constitute networks. Postill proposes the concept of 'field' as a way of overcoming problems in community and network approaches. He advocates broadening internet studies literature by using terminology such as 'internet field' and 'social field' and by "conceiving of sociality as being inherently plural and context-dependent" (Postill 2011, p. 28). A localisation approach is vital in understanding the social implications of media use, based on the assumption that online practices are reflective of, and integrated with, offline worlds. This contrasts with a 'virtualisation' perspective that emphasises global over locally-embedded social formations. Internet ethnographers Miller and Slater (2000) critique a 'virtual' approach divorced from location in their study of internet use by Trinidadians. Postill's advocacy of location informs my interpretation of social media information seeking in Malaysia; however, a network approach (see Chapter 4) remains useful at a macro scale for examining differential information practices by socioeconomic and ethnic groups on social media.

2.2 The construct of 'race' in the social imaginary

The waves of ethnic migration during the colonial era constitute an important entity in the Malaysian social imaginary as citizens struggle to reconcile racial tensions and national identity. The purpose of this section is to discuss race as a social construct that is embedded in the everyday lives of Malaysians; here I justify why race should be analysed parallel to socioeconomic status in any national study of media and technology in Malaysia. I explain how ethnicities are nuanced and 'practised' in quotidian settings, but become abstracted into the construct of race in social imaginaries by the state for nation-building purposes. An important component of ethnic identity is language, which is relevant to the methodology of this thesis. Language practices in Malaysia are complex and overlapping between groups. While race is a political construct that pervades everyday life, it remains evident that Malaysians are taught early on to respect the cultures of other ethnic groups. There are positive, as well as negative, consequences for pluralism in inculcating ethnic differences in everyday settings. A fine line exists between promoting cultural diversity versus polarisation, which I will continue to explore.

2.2.1 The politicisation of race

The race riots of 1969 between ethnic Chinese and Malay has significantly altered the course of modern Malaysian history. On May 13, 1969 hundreds of people were killed in clashes between Malays and Chinese (Soong 2008). Rioting began after the General Election when the ruling coalition, United Malays National Organisation (UMNO) suffered a setback in the polls, with economic differences between groups as root causes of the riot. The legacy of this socio-historical entity is the ongoing persistence of racial tensions in political life in Malaysia. Noor (2011, p. 59) laments that "despite the illogical and nonsensical status of the concept of racial difference, Malaysian politics, from the late-19th century all the way to the post-colonial present, has been shaped and determined by the logic of racial differences nonetheless". He goes on to explain that ethno-nationalist conservative parties are "differentiated by virtue of the ethnic and religious backgrounds of their respective constituents and supporters" (p. 60). Noor points out the peculiarity of this political system compared to countries where parties are divided by ideological positions rather than race. Leong (2008, p. 5) also questions why "modern Malaysia's heterogeneous population persists in imagining and living their nation primarily in terms of race, in comparison to Singapore, which has a similar colonial background yet is defined by a capitalist meritocracy". While the two countries share a common history, their respective public cultures have evolved in very different ways.

There have been increasing calls in Malaysia for politics to be separated from race and religion. Malaysia's political structure is led by the ruling Barisan Nasional (The National Front) which is a 14-party coalition, led by UMNO, that has governed Malaysia since 1957. In April 2008 opposition parties established Pakatan Rakyat (People's Coalition of Barisan Rakyat), advancing a two-party political system in the country (Loo 2008). Significantly, Pakatan Rakyat is not based on a racial group. Despite this progress, race and political party divisions continued to be defining features of the 2013 general election (Fuller 2013a). Barisan Nasional remained in government, but lost the popular vote, the result of alleged gerrymandering in rural areas (Puyok 2013). UMNO blamed a diminished support-base on a 'Chinese tsunami', referring to Chinese voters who moved to the opposition (The Economist 2013). This campaign ignored the rising number of urban and educated middle- class Malays who switched allegiances because of perceived corruption (The Economist 2013). Barisan Nasional has always had a strong base in poor and rural areas of Malaysia where Pakatan Rakyat has a weaker presence; this has been attributed to poor internet access and exposure to information from independent sources on new media

(Houghton 2013). I will return to the issue of new media access and democratic participation later in this chapter. The point I make here is that race is embedded in the political narrative of Malaysia, which in turn, means that the construct of race in everyday life warrants closer inspection.

2.2.2 Race and ethnicity as interchangeable terms

As stated, in this thesis I use race to refer to social constructs employed by the state and authorities, and ethnicity as a broader concept accepted in social science. In my home countries the term 'race' has connotations of human divisions based on biological or genetic factors; the implication being that some races are inherently superior or inferior to others. In the social sciences, race is viewed as problematic for similar reasons; ethnicity has a different meaning from race. Sociologist Mary Hawkins, in *Global ethnicities, local racisms* (2006), distinguishes race as pertaining to biological differences, while ethnicity is based on socially recognised cultural differences. Hawkins' perspective on ethnicity is helpful in understanding the relationship between racism and the process of nation-building. It is important to note that the term race does not necessarily have the same connotations in Malaysia that it might have in other countries. Malaysian-based scholars Julian Hopkins and Julian Lee in their compilation, *Thinking through Malaysia: culture and identity in the 21st century* (2012, p. 5), observe that use of the term race is widespread in Malaysia and might be used interchangeably with ethnicity. From my experience, this too is how I believe the term race is understood by Malaysians; as a broad cultural concept consisting of many factors, beyond the biological.

Ethnicity is a complex notion consisting of many dimensions. Sociologist Lian Kwen Fee (2006a) includes 'blood', language, cultural and religious practices. Hawkins (2006) also includes a shared ancestral homeland. Tong Chee Kiong (2006, p. 96) argues there are two approaches to understanding ethnicity: "primordialism", where ties of religion, blood, race, language and custom are "immutable" or "natural"; versus a situational approach which credits each person with choice in how they define their ethnicity. Tong suggests that these approaches need not be seen as mutually exclusive, given that ethnicity is defined both internally (how you view yourself) and externally (how others view you). There are different cultural approaches to defining ethnicity in Malaysia. For Malays, ethnicity is deeply linked with the Islamic religion and conservative values, as well as the practice of eating halal food. Attributes such as bloodline, phenotypical characteristics and

language are regarded as core elements of Chinese identity (Tong 2006); one cannot become Chinese, one is born Chinese. Food is important to the Chinese, and pork is regarded as a symbol of wealth (in conflict with Islamic values).[9] Religious activity is a dominant expression of Tamil identity (Lian 2006b). The Thaipusam festival is major cultural event celebrated by working class Hindu Tamils throughout the country, involving the fulfilment of religious vows.

There are complications in drawing arbitrary lines between the three major ethnic groups. Debates about removing 'race' from official forms, especially for Malaysians of mixed heritage, is ongoing (Ushar 2014; Zachariah 2014). Malaysian media scholar Caryn Lim, in *Locating 'mixed' identities in a racialized society* (2012), highlights that cultural boundary-crossing and hybridity are often ignored or suppressed with individuals of mixed-parentage. She identifies the problematic nature of the immutable categories of 'Malay', 'Chinese' and 'Indian', given the existence of those with mixed ethnic ancestry, including *Chindian* (half-Chinese, half-Indian) and *Chalay* (half-Chinese, half-Malay). According to Lim, these categories have little significance in national discourse. The *Baba Nyonya* and *Peranakan* in Melaka and Penang respectively, are hybrid cultures resulting from intermarriage between the local Malays and migrant Chinese (SK. Lee 2008). Lim (2012) contends that race and ethnic stratification is taught from a young age. Awareness of 'race' influences how Malaysians conduct themselves at all levels of society, from the public and political to everyday choices around eating, educating, worshipping, and relating to people socially and professionally. Charles Hirschman's text, *The meaning and measurement of ethnicity in Malaysia* (1987) demonstrates how ethnic categories and subcategories in the Southeast Asian region as seen through European eyes have changed over time. As stated earlier, there is a dichotomy between identities as defined by 'authorities' and 'the people' in everyday reality.

2.2.3 Language as an identifier of ethnicity

Language may be regarded as a marker of ethnic identity, a public point of differentiation between ethnic groups (Chee-Beng 1997). The communication function of language may inspire commonality and the 'feeling' of belonging. Groups naturally assimilate to share in the experience of speaking a common language; for example, Chinese people group together to speak their language, not necessarily on ethnic grounds. If ethnicity is defined

[9] Comment made by Malaysian media and ethnicity scholar Hong Chuang Loo during a conversation in 2012.

by the construction of 'boundaries' (Nagel 1994) then language may constitute a very clear 'boundary'. I subscribe to the position that language can be used as an identifier of ethnicity, although this is a topic of intense debate in socio-linguistic research (Dow and Fishman 1991). One of the strongest proponents for the view that language is possibly the most significant marker of ethnicity is American linguist Joshua Fishman. He writes that "At every stage, ethnicity is linked to language, whether indexically, implementationally or symbolically" (1989, p. 7). It is certainly not a given that language and ethnic identity are absolutely co-related. In a multilingual society such as Malaysia, residents may speak languages with which they have no ethnic affiliation; for example, speakers who converse in the national language, Malay (*Bahasa Melayu*), but who do not identify as being Malay. Language practice is fluid depending on everyday contexts. Language scholar Alastair Pennycock (2010, p. 124) argues that "language and identity are the products of our language practices". He suggests that language should be viewed as a 'cultural artefact', rather than a natural or boundary object in a political framework. In Malaysia, ethnic groups adapt their language practices in daily contexts. They may speak the dominant language at school and the work place (that is, Malay or English) but speak their mother tongue at home; for example, Chinese who attend Malay schools, may use Malay in public or when dealing with Malays, both at work and in daily interactions, but in the home use always a Chinese dialect, such as Mandarin or Cantonese (Tong 2006). While language is not a perfect indicator of ethnicity, it provides clues about the social, cultural and ethnic heritage of the speaker.

The relationship between language and pluralism in Malaysia is complex. While there is token homage paid to linguistic heterogeneity in Malaysian public life, language remains a contentious issue (Tong 2006; Rajantheran, Muniapan and Govindaraju 2012). Ongoing debates in Malaysia include whether English should be taught in schools, as preparation for global economic participation, as opposed to Malay, as preservation of cultural heritage. In 1967, the National Language Bill was introduced to make Malay the sole official language (Tong 2006). According to the constitution, the definition of 'Malay' is a purely cultural one, including those who habitually speak the Malay language (Nagata 1974). For Mandarin speakers, the mother tongue functions as a means of preserving one's 'roots', a "preserver and repository of cultural traditions and signifier of ethnicity" (Yee 2006, p. 201). Though Yee writes about the Chinese in Singapore, there are strong ethnic ties with Chinese in Malaysia. For the Tamil population, comprising 75 percent of Indians in Malaysia, language represents inclusion within a community (Rajantheran, Muniapan and Govindaraju 2012). Neglecting to recognise a language may be equated

with a failure to recognise the status of an ethnic group. It is not my intention to weigh in on the politics of language choice; my objective is to employ language as a means of connecting ethnic groups to their social media practices. Language, like ethnicity, culture and identity is complex, not least because language is continually evolving through everyday practice.

2.3 Statecraft in economic and race relations

The New Economic Policy, Vision 2020 and 1Malaysia are government programs of historical and national importance that can be understood as entities in the Malaysian social imaginary; they are macro entities that influence everyday life in Malaysia, including domestic practices on new media environments. Here I trace the historical background of 1Malaysia, conceived by the Malaysian Prime Minister, Najib Razak, in 2009 as a foundational concept to foster national unity between racial groups. 1Malaysia is a government program which represents many things: ideology, utopia, discourse, narrative, nation-building tool, and for some a cheesy tourism catch phrase. 1Malaysia is an institutional approach to addressing problems of racial divisions that were institutional in genesis. I highlight problems in reconciling tenets of 1Malaysia with legacy policies that have created inter-racial resentments, specifically the New Economic Policy. Other programs such as Vision 2020 have provided a framework to foster ICT industries and literacies. These policies, oriented towards development goals, address both economic and ethnic relations in Malaysia.

2.3.1 The New Economic Policy and Vision 2020

Malaysia's passage to establishing itself as a nation-state required some semblance of racial unification. Social anthropologist Zawawi Ibrahim (2004) argues that the New Economic Policy (NEP) was only the beginning of a state interventionist approach to resolving problems that were perceived as being based on race. The NEP was first announced in 1970 as the principal policy response to the post-election race riots of May 1969 (Jomo 2004).[10] The NEP served, and continues to serve, as a socioeconomic policy to protect the status of the *Bumiputera* through affirmative action. Special rights were given

[10] The Economic Planning Unit of Malaysia has outlined the New Economic Policy here: http://www.epu.gov.my/en/dasar-ekonomi-baru Viewed 6 November, 2014.

to *Bumiputera* in a program that included education quotas, business equity and housing discounts. When the NEP was introduced, *Bumiputera* become a recognised ethnic category (Shamsul 2001b). The NEP was intended to facilitate the redistribution of wealth and support an emerging Malay middle class, set against the perceived economic status of the Chinese. While the NEP was a program intended to reduce interethnic disparities, the legacy of positive discrimination has resulted in deep resentment from other ethnic groups (Jomo 2004). This is particularly the case for non-*Bumiputera* who were born in Malaysia. Indian Tamils, for example, continue to be subject to a marginalised economic status in Malaysia (Lian 2006b). Jomo points out that "Resentment is arguably greatest amongst the middle classes, where ethnic rivalry is perceived to be greatest" (2004, p. 1). T. G. Lim (2014) argues that the NEP is no longer considered an economic policy, but a means for institutionalising Malay power. The question of whether economic inequalities between the major ethnic groups still exist requires ongoing analysis and remains highly politicised. In Chapter 8, I will discuss how the issue of race and polarisation is widely regarded as an issue hampering Malaysia's economic development.

The intersection of technology, knowledge and economic development is deeply embedded in the Malaysian political narrative. Vision 2020 was fourth Prime Minister, Tun Dr. Mahathir bin Mohamad's 'dream' of transforming Malaysia into a developed nation. Launching Vision 2020 in 1991, Mahathir outlined it as a call to achieve a "self-sufficient industrialized nation by the year 2020", encompassing "all aspects of life, from economic prosperity, social well-being, educational world class, political stability, as well as psychological balance" (Mahathir 1991). He highlights economic inequalities between ethnic groups and specifically calls for the "healthy development of a viable and robust *Bumiputera* commercial and industrial community". Vision 2020 built on the nationalist ideology of *The Malay dilemma* written by Mahathir (1970). From the mid-1990s, the Malaysian government called for a knowledge-based economy in line with Vision 2020. The Multimedia Super Corridor initiative in Cyberjaya, launched in 1996, was designed as a global centre for multimedia technologies with the aim of bringing Malaysia into the information era (Postill 2009a). The Multimedia University was established in part to create a labour market to attract global ICT firms. The Multimedia Development Corporation (MDeC), a government agency in charge of the nation's ICT development, was set up to incentivise and assist global technology firms to set up their operations in Malaysia. The 'democratic' use of information technology was seen as a key means of ensuring economic prosperity for all Malaysians. However, these initiatives did not necessarily mean a more open and transparent Malaysia. The ensuing rapid growth of this

period, and expansion of the middle classes, was in parallel to a state move towards authoritarianism (Loo 2008). Despite investment in ICT by the government, divisions between ethnic groups continue to exist, indicating a deep-rooted problem requiring more than technological solutions.

2.3.2 The rhetoric and realities of 1Malaysia

As racial conflict flared again after the 2008 general elections, Prime Minister Najib Razak launched the 1Malaysia concept as a key strategy of his administration (Sankar 2011). The Barisan National coalition government had suffered a significant reduction of its majority in parliament. Najib (2009) described 1Malaysia as "a belief in the importance of national unity irrespective of race or religious belief". Not only was it a concept that connected the "multi-ethnic *raykat* (people) of Malaysia", Najib said, but it should be "substantiated by key values that every Malaysian should observe". Najib called on all Malaysians to 'practise' the concepts of 1Malaysia in their daily lives; the wider function is to support economic progress; in particular, achieving the goal of Vision 2020. 1Malaysia has its roots in Mahathir's notion of *Bangsa Malaysia*. '*Bangsa'* (people) is a relatively modern term in the construction of national ethnicity in Malaysia (Loo 2008). Najib states that, "if the idea of *Bangsa Malaysia* which was engendered through Vision 2020 becomes the final destination, then 1Malaysia is the roadmap that guides us towards that destination". Najib is arguing that the foundation of economic success for Malaysia is to be a country that is stable and united. His paper asserts that 1Malaysia "varies from the assimilation concept practised in other countries where the ethnic identities are wiped out and replaced with one homogeneous national identity". Najib further states: "1Malaysia values and respects the ethnic identities of each community in Malaysia… 1Malaysia will continue the agenda of nation-building. When solidarity is achieved, the task of nation-building can truly and smoothly be carried out." He presents a dual concern with respecting ethnic diversity and creating a national identity.

It is not impossible to reconcile Najib's call to respect ethnic difference with his championing at the same time of national unity. The problem lies in matching ideology with practice: 1Malaysia calls for unity amongst racial groups, yet programs such as the New Economic Policy continue to institutionalise measures of disparity. Indeed, Kee Thuan Chye, Malaysian actor, dramatist, poet and journalist, writes in *No more bullshit, please. We're all Malaysians* (2012, p. 147):

> How can you have the NEP and at the same time say that we are all 1Malaysia? The NEP is exclusive to a particular group of people; such exclusivity sets them apart. There is no 1Malaysia then; there are 2Malaysias. I say it again for emphasis: There are 2Malaysias embedded in that policy.

Chye raises the broader question of why is it still necessary for Malaysians to specify their racial category, especially given the rhetoric of the 1Malaysia program. Why are not all born Malaysians simply defined as Malaysians, as opposed to being racially identified as Malay, Chinese or Indian? Is 1Malaysia essentially a useless concept? The reasons why the NEP program continues to exist despite the 1Malaysia program are complex and the subject of ongoing debate and analysis (Pesek 2010; Ramani 2013; Ramli, Kamarunzaman and Ramli 2013). The tension between the NEP and 1Malaysia policy, and between rhetoric and reality, belies the national obsession with race and socioeconomic status in everyday life. These conflicting programs create a situation where Malaysians face uncertainty over the recognition of their individual, group and collective identities. It is a conversation that becomes central to everyday living; and which pervades media consumption and social media use.

2.4 The Malaysian media environment and the nation

The media industry is tightly regulated and controlled by the Malaysian government and can be analysed in terms of the policies outlined so far in this chapter. Malaysian media scholar Yeoh Seng Guan remarks that the "brutish control and monopoly of the mainstream media continues to be a lasting legacy of statecraft in Malaysia" (2010, p. 4). He further observes that traditional and new forms of media can help map and index the "cultural shifts and social transformation of different publics in Malaysian society". The media environment reflects national narratives and everyday life. Traditional media in Malaysia is regulated by state policies that constrain democratic participation. The internet and social media offer a compelling democratic space for Malaysians to consume news and share information on platforms that can be free from state censorship, although the continuance of this freedom is not guaranteed. Importantly, Malaysians have the opportunity to seek and share information across ethnic groups on social media, while traditional media is polarised along racial lines. Concerns of differential access and participation along race and socioeconomic lines continue to be of interest in global and

Malaysian new media scholarship. This section foregrounds Chapter 5, where I compare traditional and new media in Malaysia in more detail.

2.4.1 Parallel traditional and new media trajectories

Traditional media is tightly controlled by the government, despite the appearance of a liberal media environment. Media analyst Zaharom Nain (1994, p. 183) observed that following Mahathir's Vision 2020 policies, crude quantitative measures appeared to show that Malaysians were "spoilt for choice". The proliferation of new titles in the press in the 1990s signified to many a liberalisation of media policies. Zaharom suggests that the growing number of titles in the 1980s was remarkable given the introduction of the Printing Presses and Publications Act in 1984, which tightly regulates media publications in Malaysia. He points out that there was in fact a concentration of ownership between the two local media giants, the *New Straits Times Press (NSTP)* and *Utusan Melayu Berhad*. This concentration of media ownership, at least of the traditional press, continues today. Not only is media ownership concentrated, but government interference is also a concern. The Printing Presses and Publications Act (1984) for the press, and the Communications and Multimedia Act for the broadcasting industry and the internet (1998), directly empower ministers to determine who can own and operate mainstream and broadcasting outlets (Salman et al. 2011). In the television industry for example, the major media conglomerate, Media Prima, owns all major private stations; Media Prima is also linked to the political group, UMNO. Furthermore, the media play a powerful role in propagating ideology in Malaysia (Ahmad et al. 2012). Government-owned news agencies, such as *Bernama*, have been used as an outlet for government propaganda during elections (Houghton 2013). Malaysians assume that the traditional media is a mouthpiece for the government. The Sedition Act, 1948, a legacy from the British colonial era, has been used to stamp down hostility between the races in Malaysia and disaffection with the government, but has also been used widely to curtail legitimate political criticism in media environments (Whiting 2015).

Online news websites that are critical of the government and stimulate debate have emerged and flourished. *Malaysia Insider, Malaysiakini* and *Free Malaysia Today* are apparently free from partisan ownership constraints and offer critical analysis of the government. In the 1990s Mahathir promised, through the Bill of Guarantees, that the internet would be free from government controls and censorship (Salman and Hasim

2011, p. 3). Journalism academic, Cherian George (2005) cautioned, however that internet users were still not guaranteed immunity from security laws covering seditious or libelous content. Further, there was no certainty over how long the government would honour the no-censorship guarantee. Leading up to the 2013 general election, *Malaysiakini* co-founder, Premesh Chandran, broke the news, with a live demonstration during a data journalism panel I moderated at Taylor's University in April 2013 that *Malaysiakini* was under denial of service attacks, suspected to originate from government-owned ISPs (Wagstaff 2013). While social media have allowed Malaysians to express their views with more freedom, legitimate concerns remain regarding government monitoring and censorship. According to the Centre of Independent Journalism (CIJ 2012), internet freedom in Malaysia is at risk due to "restrictive laws such as recent amendments to the Evidence Act, the prevalence of acts such as several cyber-attacks of prominent news websites and opposition-linked sites, and the arrest of bloggers". In 2015, amendments were made to the Sedition Act, which could block news websites and social media platforms, and which increased penalties for users posting content deemed as seditious (Anbalagan 2015). Media freedom and open information sharing cannot be taken for granted in Malaysia.

2.4.2 Racial polarisation on new media

Not only are traditional media in Malaysia tightly controlled by the government, they are siloed along racial lines, which each group having identifiable preferences across newspapers, television channels and radio stations (Firdaus 2006). Examples among the newspapers include *Utusan Malaysia* preferred by Malays, *Sinchew Daily* by Chinese and *Vanakkam Malaysia* by Tamil Indians. These preferences are likely to be partly influenced by language choices. Polarisation on media environments poses a threat to a healthy democracy through reinforcing niches or silos within the community (Sunstein 2007; Pariser 2011). Another important idea in Sunstein's cyberbalkanisation hypothesis (2007) is the 'social glue,' or set of common experiences in society. According to Sunstein, this is under threat by an increasingly fragmented communications universe. Sunstein argues that information is a public good and is most effective when it is shared widely. One risk of information silos is that people will generate or share too little information that is of value to other users. In the case of Malaysia, social media use may actually promote social cohesion given that information distribution on traditional media is constrained by censorship.

Racial polarisation on media can be heightened during times of political upheaval. Hate speech has the potential to spread rapidly, facilitated by the viral qualities of social media. Racism on social media was at a fervent level during the Malaysian 2013 general election. For example, I observed on social media the vilification of Bangladesh foreign workers who were accused of voting illegally in service of the ruling coalition (Zahiid 2013). There were incidents of citizens at polling booths harassing legitimate voters who didn't 'look Malaysian,' mobilised by social media to monitor fraudulent activity (Malaysiakini 2013). An environment of online persecution and fear followed the election. The Malaysian Communications and Multimedia Commission (MCMC) targeted individuals who were protesting the election result by accusing these individuals of inciting racial hatred (The Edge 2013). Future studies would be of value on the role of social media in the spread of xenophobic attitudes towards new marginalised groups, such as migrant workers, in Malaysia.

2.4.3 Examining race and socioeconomic status through social media

Social media potentially alter the relationship between the nation and 'the people' by providing new platforms for discourse and information sharing between ethnic groups. Ahmad et al. (2012) argue that social media affords a space for Malaysians to engage critically in topics of national debate and to spread information widely and at a local level. There is further scope for Malaysian studies that link social media participation with national identity and ethnicity, using the NEP, Vision 2020 and 1Malaysia as framing concepts. There is a small body of scholarship on 1Malaysia and media, focused on communication practices in traditional media. Abdullah and Salman (2012) present results based on the views of youths in the Klang Valley towards the 1Malaysia concept and how it has been communicated in the media. Their findings indicate a positive response to 1Malaysia and enhanced awareness of interethnic relations. In a similar vein, Hashim and Mahpuz (2011) examine practices of public relations using human communications tactics to accomplish goals of 1Malaysia. Work by Ridzuan et al. (2012; 2014) argues that social network sites play a role in building social solidarity in Malaysian society, given the problems of ethnocentrism. My contribution is to compare information practices across ethnic and socioeconomic groups in Malaysia in everyday settings. Future research is invited on studying whether ethnic boundaries may be either fortified or weakened by interactions on social media.

Despite early conceptions in the field of internet studies, digital media is not free of racism (Daniels 2013). Nakamura and Chow-White (2012, p.2) in *Race after the Internet* argue that "the digital is altering our understanding of what race is as well as nurturing new types of inequality along racial lines." Chapters by Hargittai and boyd challenge assumptions that large social network sites have universal appeal across groups. Hargittai (2012, p.224) observes that these websites "may encourage different types of activities and may attract different populations". Boyd (2012) describes the formation of digital ghettos, where divisions between African American and White students are replicated from offline contexts to different levels of representation on Myspace and Facebook. However, it is unclear whether these contours of social formations online are necessarily negative; Nakamura (2002) argues that internet use can both propagate racial stereotypes and offer opportunities for supporting diverse racial identities and communities. Senft and Noble (2014) claim that not only are there 'racisms' in enacting social relationships online, but content has a 'performative' aspect that expresses different 'racial' types. They cite a 2009 study of online dating website OKCupid that demonstrates that 'Whites' in the United States seek out partners of the same or similar ethnicity, despite 'advertising' no preferences in this regard. At the same time, they highlight 'Black Twitter', which represents a proportion of African Americans online who communicate in ways that constructively express their cultural identity.

The relationship between racial identity and internet use is not straight-forward. Issues of differential access and participation between racial groups is of continuing examination in internet studies. This thesis contributes research on 'second-level' divides that focus on the relationship between skills and internet use (for example, Dimaggio et al., 2004; Hargittai 2012). Nakamura and Chow-White (2012) call for an examination of new forms of inequality that may emerge through digital use and to re-think the 'rhetoric' of the digital divide. They critique techno-utopian perspectives that inequality between races are automatically addressed by closing digital gaps. The authors contend that the internet will not necessarily eradicate social divisions, and that power structures that govern society offline may shape the 'topographies' of online communities. Accordingly, in this thesis I examine how constructs in everyday life in Malaysia, such as race and socioeconomic status are reflected in differential information practices across networks on social media.

2.5 Conclusion

The central position of this chapter is that media use is shaped by local contexts that have social, cultural, historical and political contours. My objective has been to set the background of how social media participation by socioeconomic and ethnic groups might be significant to Malaysian society. I have introduced terms and frameworks for linking social media participation to broader societal concerns; namely, culture and pluralism, racial polarisation, social imaginaries, and localisation. I described how Malaysia's social imaginary consisted of a socio-historical engagement with the construct of 'race,' in relation to socioeconomic status, and associated cultural identifiers such as religion and language. Significant historical and contemporary entities, including macro policy, constitute the public culture of a nation. Cultures are made up of ways of everyday living, including daily media participation. Macro programs in Malaysia that I highlighted include the New Economic Policy, Vision 2020 and 1Malaysia. I explained the relevance of these policies, firstly to race and economic relations, and secondly to the media landscape. I identified the possibility of new media in disrupting the traditional media environment, which is constrained by censorship and racial polarisation. Debate continues on the realities and rhetoric of how racial groups coexist in the nation state in everyday life. The cultural dynamics of Malaysia all point to a significant issue of racial polarisation with underlying socioeconomic problems, from which media use cannot be separated.

My discussion of localisation contributes to wider new media debates about the globalisation of media technologies and concerns of differential access and participation. I will continue to explore the theme of how some differences in social media use between ethnic and socioeconomic groups are not necessarily indicative of a digital divide. There is scope to extend internet and racism studies by using the hypothesis of cyberbalkanisation to understand information sharing across ethnic and religious boundaries on new media platforms. While there is valid concern about the potential of global technologies to have homogenising cultural effects (Castells 2004), users and their local contexts remain a powerful factor in shaping diverse media use. Empirical research is required to determine when theoretical frameworks are relevant and when they need to be adapted to local settings. I have cited Sunstein's *Republic.com 2.0* (2007) which is steeped in the political culture of the United States. Since Sunstein's first edition in 2001, universal frameworks for contextualising internet use have become more questionable as a greater number and diversity of people across vast regions of the world gain internet access. There is value in assessing how universal frameworks play out in different cultural contexts around the

globe, particularly in framing internet and social media participation with the 'social imaginary' of a specific country. Some recent race and internet studies (for example, Senft and Noble 2014) provide a reminder to consider interpretations of distinct practices between racial groups as being constructive. The performative component of online communication may be a vehicle for Malays, Chinese and Indians to express their distinct beliefs and cultural idioms in a way that strengthens diversity.

As a foreigner, there are limitations to my interpretation of cultural patterns displayed on social media in Malaysia. Firstly, there is a danger of perpetuating cultural stereotypes. I was once at a conference in Kuala Lumpur where a local presenter used the term "communal culture" to explain particular social media use in Malaysia. He commented that, "Malaysians like to know what's going on with their neighbours, that's why Facebook is very effective for work place gossip!" There is both cultural stereotype and truth here. Communal values of Malay and Malaysian culture include serving one's family, neighbours and community, over the individual (Stimpfl 2006; Tong 2006). Yet in a global world, with overlapping networks and values, this account of culture in Malaysia may be incomplete. A second limitation of my approach is a concern for how my research could be perceived based on my status as a foreigner. It is a delicate proposition for an outsider to comment on the internal politics of a country without being seen as interfering, or having a colonial attitude. My perspective is as an outsider, who has spent a substantial amount of time in the country, and as one who uses social media on a daily basis to interact with born-and-bred Malaysians. I acknowledge that in some cases my understanding of Malaysian culture is hindered by lack of knowledge of local idioms and language, which may take many more years to absorb.

Chapter 3 Methodologies and methods: Distances in reading everyday life

As a foreigner in Malaysia, I attempt to make sense of everyday life in a new country for both research and personal reasons. There is a dual process of absorbing how everyday life works here on a micro level, parallel to participating in a discourse about the national state of affairs. It is not always immediately obvious how the two are connected. When I learnt, for example, that superfluous driving routes are influenced by competing toll companies (Malaysia Chronicle 2013), or that the affordability of *kangkung* (tropical spinach) can be enough to stir up racial sensitivities (Mustafa 2014), I began to appreciate how macro forces affect the practice of everyday living. The daily activities of individuals and groups are constrained by social infrastructure and macro policies. In the previous chapter, I introduced a 'social imaginaries' framework for connecting the mundane and significant entities of a society through a socio-historical analysis. In this methodology chapter, I continue the theme of understanding everyday life on both a small and large scale as a problem that social researchers encounter as a matter of course in their work.

My investigation into the role of social media in the everyday lives of Malaysians assumes that there are conditions beyond the individual that shape how the individual sources, uses and values information on social media. I adopt a sociological approach by analysing factors such as age, gender, residence, ethnicity, religion, education, income and occupation of the user. Each of these factors serves to connect individual usage to social patterns. There is a dualism in investigating social life at either a macro categorical level, or 'upfront and close' to the subject. My chapter title, 'Distances in reading everyday life' refers to this problem (influenced by Eckert 2013). While quantitative methods offer a large-scale picture of general trends and indicators, qualitative methods offer richer depth of detail (Bryman 1984). 'Big data', which refers to increasing volumes, varieties and velocities of data (Laney 2001), offers new sources for analysis of human behaviour and sentiment, including social data from online media. There are limitations in using big data to capture qualitative and cultural nuances. The direct access to online population-based samples invites researchers to review both quantitative and qualitative methods (boyd and Crawford 2012; Dandavate, Barness and Seema 2013; Manovich 2011).

In this chapter I reflect on what big data and the increasing availability of social data means to social researchers, and the opportunities and pitfalls of online data gathering

techniques; this is to describe the contemporary research environment and the choices that are available to researchers in understanding online media. Secondly, I touch on quantitative approaches to studying everyday life. Everyday life has traditionally been a foundation subject for sociological research (Certeau 1984; Douglas 1970; Maffesoli 1989). Each person has an understanding of what 'everyday life' means to them, which makes it a difficult concept to measure. In the third part, I provide an overview of theoretical frameworks that are used in the thesis and which link chapters together. I introduce terms for evaluating information on social media, namely 'usefulness' and 'trust', drawing on internet credibility research (for example, Flanagin and Metzger 2007). In order to discuss practices on social media broadly, I introduce the term 'styles of participation'. The final two sections describe my data collection methods; namely, an online questionnaire and content analysis of the social media platform, Twitter. Since my objective is to compare social media participation across socioeconomic and ethnic categories in the Malaysian online population, I take a largely quantitative approach. In order to analyse actual patterns of social media use, I inspect information and communication content on Twitter. My choice of a multi-method approach is intended to represent both the stated preferences of social media use and actual information practices. My wider goal is to capture the cultural life of Malaysians as it is expressed through their social media participation.

3.1 An age of increasing social data

Humanities disciplines, including media and communications, social science and political studies, are increasingly sourcing data from social media such as Facebook and Twitter (Manovich 2011). This trend is part of a wider 'computational' movement in the digital humanities and social sciences (Schroeder 2014). Increasing amounts of data generated by humans and machines, measurement approaches, and data-centric cultures constitute an era of 'big data'. The availability of entire online populations allows social and political scientists to revisit old hypotheses and theoretical paradigms that were previously based on traditional sampling methods.[11] Burgess, Bruns and Hjorth (2013) similarly highlight that new methods in media studies have emerged as digital environments have rapidly changed. They point out a number of research trends including a computational focus on

[11] Comment made by political scientist, Helen Margetts during a presentation the Oxford Internet Institute Summer Doctoral Program, August 2012, Oxford.

natively digital objects, the big data paradigm, and a 'hard-science' approach to measuring online behaviour. Capturing everyday digital culture, however, poses contextual and qualitative challenges. Lewis, Zamith and Hermida (2013) advocate a blending of computational and manual methods in content analysis to provide sensitivity to cultural contexts in a systematic manner. Kluver, Campbell and Balfour (2013) further highlight the problem of a Western-centric focus in data-driven research, where there is an opportunity to apply advances in digital methodologies to understand global media environments.

Computational approaches in the humanities should be understood with regard to measurement trends that have evolved out of internet industries. There are precedents for academic researchers applying the logs of website visits and searches from commercial vendors to measure social and media trends, such as online mainstream media concentration (Hindman 2009) and user content preferences (Waller 2011a, 2011b). Social media platform owners are employing 'data scientists' and sociologists to analyse users in their 'natural' online habitats (Taitai 2014). Evolving website structures and usage patterns unique to types of online platforms have spurred new commercial models for collecting behavioural data (Drell 2011). The internet has been lauded as a highly measurable medium, disrupting advertising business models for mainstream media (Belnaves, O'Reagan and Goldsmith 2011; Given 2012). Commercial approaches largely fall into three categories, namely panel, website, and network based measurement.[12] The first two approaches generally rely on embedded web-analytic tools on the website server and software ('cookies') or toolbars installed on the user's computer; while network-centric measurement relies on data provided through Internet Service Providers (Brennenraedts and Velde 2011). 'Geo-demographic' survey data based on the traditional sample survey, can be overlaid with website metrics to provide a more detailed picture of users' everyday lives through their online data. There are several challenges to measuring online behaviour, including collecting attitudinal data, selection and observation bias, matching online with offline data, and accounting for discrepancies between users' stated preferences and their actual behaviour.

The general public's enthusiasm for 'big data' (Brooks 2013; Harford 2014) has been viewed critically by media scholars; Kate Crawford (2013) reminds us that "data sets are not objective; they are creations of human design." Crawford argues that data is accessible through human interpretation, and is linked to "physical place and human culture". She

[12] Examples of vendors include Compete, comScore, Effective Measure, Experian, Nielsen and others.

emphasises that insights can be derived from multiple levels of granularity; that big data can be supplemented with 'small data' such as qualitative interviews and ethnography. There are limitations to all methodological procedures, including big data and social media measurement approaches. Savage and Burrows (2007) identify a 'crisis' in empirical sociology where the proliferation of new types and levels of social data do not have established methodological frameworks. The sample survey, for example, has evolved out of traditional scholarship that provides guidance on concept measurement and the significance of results. Savage and Burrows raise the possibility that the social sciences, with increasing access to data, might need to embrace a 'descriptive' approach to studying society and abandon its focus on causal relationships (p. 896). Traditional methods such as the sample survey will continue to be valued and complemented by the tools of big data.

3.2 A multi-method quantitative approach

In comparing social media practices across groups of Malaysians, I adopt a large-scale, quantitative approach, while remaining aware of the limitations already discussed. My thesis offers a broad rather than deep account of social media participation in Malaysia. Bryman (1984) argues that quantitative data contribute to the ability to 'generalise,' while qualitative data enable the ability to 'interpret'. The generalisations of quantitative approaches help researchers to capture trends and patterns across wider social distances. Douglas (1970, p. 11) concedes that macroanalysis is useful insofar as it allows sociologists to detect general patterns and structures, and "to know what is going on across the far reaches of our social world". As such, a survey is an appropriate method to examine how different categories of Malaysians participate on social media; in particular Malay, Chinese, and Indian groups. By comparing patterns of use on social media groups, I question whether these racial constructs are relevant, or if other categories such as education or employment attainment have a greater influence on participation. The task of categorising users, each into a single group, may be problematic, given overlapping memberships; for example, users may be of mixed ethnic heritage. Identifying exclusive patterns of use between groups may also be difficult, such as recognisably different Chinese versus Malay versus Indian information practices on social media. Zimmerman (2013) in his analysis of culture and new media, writes that macro level entities such as 'Chinese culture' and 'nationalism' are problematic when there are everyday practices shared across different groups. The employment of my secondary method, a content analysis of Twitter, is intended to provide further insight into actual social media

information practices. The advantage of multiple research approaches lies in compensating for the limitations of a single method with the strengths of another (Jick 1979). It should be pointed out that the sample for my questionnaire and the content analysis are two separate data sets; any direct comparisons made are limited because the groups of users are different.

The scope of the project excludes other valid methods including online ethnographies, social network analysis and qualitative interviews, owing to logistical constraints. A social network analysis (SNA) approach was not taken, despite its theoretical and cost-benefit advantages in measuring online interactions at scale. Hogan (2008) explains the research opportunities in the social sciences of using SNA to examine how social action is enabled or constrained through network linkages on new media platforms. SNA is well-suited for new media topics such as information diffusion (for example, Kwak et al. 2010), information silos and personal propaganda (for example, Lotan 2014) and mapping public political communication (for example, Bruns et al. 2011). In this thesis, I compare user demographics such as ethnicity and income to question the relevancy of constructs such as race and socioeconomic status as differentiating factors of how groups of users participate on social media. As such, I have taken a primarily descriptive approach through my online questionnaire. While a social network analysis would be useful for investigating phenomena such as online racial polarisation, I have not collected enough data for this approach. In the next chapter, I will discuss how my study lays the groundwork for further research in Malaysia using social network analysis to examine situational information and communication online interactions within and between networks.

While my methods are not ethnographic, I supplement my quantitative analysis with reflections of own experiences in using social media and observing everyday life in Malaysia. The researcher's own conception of everyday life is unique and will inevitably colour how they approach the task of describing their subjects. There has been a renewed call for reflexivity in social science and internet research methods in the critique of big data (boyd and Crawford 2012). Internet studies scholars Nancy Baym and Annette Markham (2009, xviii) write that "reflexivity may enable us to minimize or at least acknowledge the ways in which our culturally embedded rationalities influence that which is eventually labelled 'data'". The researcher, and their relationship to the method and data, is a subject for reflexive inquiry; these include the "social, economic, geographic, cultural, racial, and gendered position of the researcher" (Markham 2009, p. 133). Although I do not take a formal reflexive approach, I consider my location and background,

a foreigner of mixed Tongan and Pakeha ethnic heritage, and how it influences my investigation; [13] particularly where I both study, and participate on, social media in Malaysia. Further, I have ensured this thesis references both local Malaysian literature on race, ethnicity, socioeconomic status and ICT adoption (for example, Rahim et al. 2011) and global race scholarship that has evolved from early internet studies out of the United States (for example, Hoffman, Novak, and Scholosser 2001). Scholars borrow ideas and theories from different countries and cultural contexts, Malaysian academics included. Ultimately, the social researcher has a responsibility to respect and attempt to understand the cultural norms of a particular context. Indeed, Markham (2009, p. 134) contends that reflexive inquiry can "help facilitate more globally sensitive research". This argument aligns with the localisation stance of this thesis.

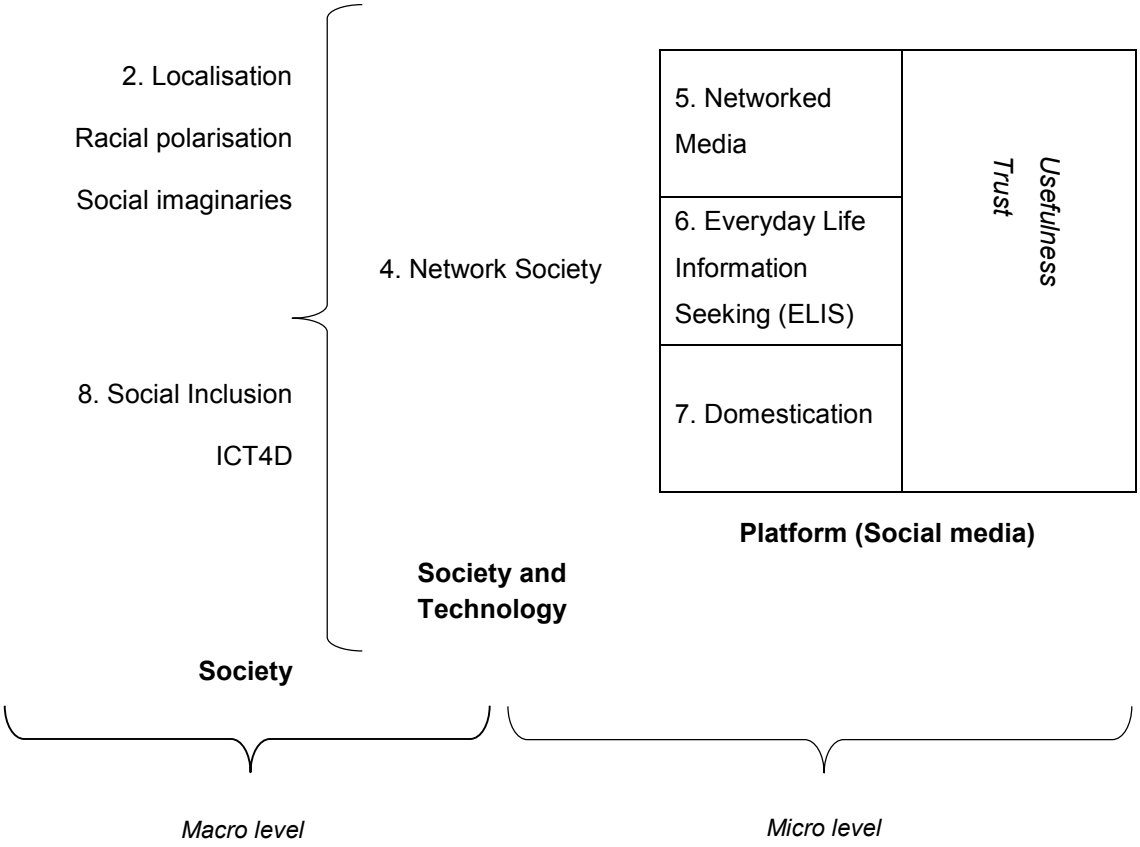
3.3 Theoretical frameworks and longitudinal concepts: usefulness, trust and participation

Against these inherent methodological challenges, I have devised a framework to help identify relevant content on social media that reflects everyday use. I draw on diverse literatures to frame my analysis of social media platforms, social relationships and technology, and the implications of social media participation in Malaysian society. At a macro level, key concepts and areas of debate I reference are localisation, racial polarisation and social imaginaries. Further, I discuss implications of social media use for social inclusion, and information and communication technologies for development (ICT4D). Bridging the macro and micro level of analysis, the notion of the network society frames the relationship between technology and society. I also critique a networked individualism approach as not necessarily appropriate to a non-Western setting. I illustrate how Malaysians prioritise social networks for information on social media, using the criteria of connectedness (increased contact with social networks), sources of useful information, and sources of trusted information. At a micro level, my analysis of platforms is focused on information practices, using networked media scholarship to discuss how the architectures of platforms afford information, communication and social practices. An Everyday Life Seeking (ELIS) framework is used to model active and passive information activity on social media. Finally, I draw on domestication scholarship to emphasise that social media are information utilities that have purposeful outcomes in everyday settings. Terms that I adopt for my analysis of information criteria are 'usefulness' and 'trust',

[13] Pakeha is a term for New Zealanders of English and European heritage.

which are used in my data collection instrument. The functional and recreational attributes of social media information are also important, and they are explored in detail in Chapter 7. Figure 3.1 summaries the key theoretical approaches for each chapter:

Figure 3.1 Major theoretical perspectives in each chapter*



**Numbers indicate chapters which are devoted to each literature area.*

3.3.1 Usefulness and trust in evaluating information

A central concern in this thesis is the value of information seeking and sharing on social media, based on relevancy criteria determined by users. Users require 'filters' to navigate, make sense of, and apply information to help achieve their everyday goals. Two important criteria for evaluating information are 'usefulness' and 'trust'. I define the quality of usefulness as the relevance and utility of social media information in the everyday lives of

users. My definition draws on everyday life information seeking studies, outlined in Chapter 6. Usefulness is tied to utility, the state of being useful or beneficial for a variety of functions. Information is useful if it helps each user achieve a personal objective, whether it is mundane or significant in the context of the user's life. The quality of trust refers to the credibility of information. Usefulness of information is amplified when the source is regarded as trustworthy; conversely, information that is not trusted is rendered less useful to the user. I examine in this thesis whether different sources are perceived as more likely to distribute information that is useful or trusted. The types of sources include people (for example, family, friends and strangers) and media (for example, newspapers, television and online media). I suggest that trust is a rarer commodity than usefulness. Earning trust involves fact-checking, editing, peer validation and more. Both the usefulness and trust of information are dependent on the relevance of the source to the situation at hand.

There is a substantial body of information assessment research on internet use, particularly on the question of credibility. Past work includes testing the role of website features on verification habits across different genres and the diversity of users (Flanagin and Metzger 2007). Hargittai et al. (2010) examine not only final judgements of evaluation, but the relevant information seeking steps and processes that are taken by users. Much of the scholarship done on 'high value' information creation by users has focused on collaborative encyclopaedias, particularly Wikipedia (Goldspink 2010; Menchen-Trevino and Hargittai 2011; Niederer and van Dijck 2010). The attribute of trust is an important component of credibility assessment research (Blanchard, Welbourne and Boughton 2011). Trust has been linked to expertise, social status and relevancy (Stewart 2011). The source of information is a bigger factor in how information is valued than the media or channel environment (Walther et al. 2011). Gasser et al. (2012) provide an overview of studies on youth and information and credibility practices online, examining the influence of socioeconomic status and race. They argue that online information-seeking and evaluation skills shape and are shaped by contextual and demographic variables. The topic of information quality on social media is substantial and deserving of ongoing study, given the viral and evolving nature of these information environments. A Twitter study by Schmierbach and Oeldorf-Hirsch (2010) on credibility perception demonstrates that Twitter is considered less credible than content posted on news websites. This thesis makes a contribution by analysing types of media sources and social networks that are regarded as useful and trusted for information.

3.3.2 Styles of participation

While I focus on information practices in this thesis, there are multiple dimensions of participation on social media. I use the terms 'participate' and 'participation' deliberately. Participation suggests choice on the part of the user in how they adopt social media platforms for their own purposes; it further alludes to a wider cultural phenomenon in recent decades with regards to the agency of users and individuals as opposed to institutions, and has become common in describing new media use (Ekström et al. 2011). Technology and legal scholar Joe Karaganis (2007, p. 9) writes that platforms have become "touchstones for a wave of accounts of digital culture that emphasize its participatory dynamics". Adoption of social media by users involves active 'practices' of consumption and production, content seeking and sharing. Karaganis states that 'practices' refer to "the things people do with and in relation to new technologies" (p. 11). In the context of technology and literacy, Jenkins (2009, pp. 5-6) argues that 'participatory culture' relates to values that emphasise involvement, creative expression, sharing, mentorship, co-contribution and social connections. My application of participation refers to involvement and active information sharing practices on social media platforms. I tie various dimensions of social media practice together (described below) to encapsulate 'styles of participation'. Participation on social media suggests practices by the user that are networked and connected to their everyday life goals; while 'use' suggests technology adoption that is not necessarily networked.

My study contextualises styles of participation with reference to the social, political and cultural factors in the Malaysian media landscape. Particular cultural values may shape how Malaysians evaluate information on social media and how they choose to participate. My interpretation of styles of participation considers nuanced practices that may emerge amongst socioeconomic and ethnic groups within Malaysian society. The focus is on how Malaysian users assess sources of information based on their usefulness and trust perception within social networks. In Malaysia, there are entrenched notions of trust connected with traditional social structures such as the family. Whether factors such as ethnicity or religion have a role in how Malaysians evaluate information on social media is a subject of investigation in this thesis. Salman et al. (2011) argue the internet has yet to improve its credibility in the eyes of Malaysians, which I explore in Chapter 5. This premise needs to be re-tested, given increasing internet adoption and social media participation. An important limitation of my analysis of information qualifiers is that they are subjective measures. There would be value in future comparative research examining

cultural nuances in the ways criteria are agreed upon; for example, does 'trusted' information in a Malaysian setting have different connotations from a Western context? Further qualitative analysis could provide insights into whether identified styles of participation are in fact meaningful to offline contexts.

3.4 Method I: Online questionnaire

The first source of data for the thesis is an online questionnaire. As stated, the rationale for using a survey approach is to determine how Malaysians within various social categories (ethnicity, education, income and so forth) participate on social media, and to compare for differences and similarities. There is a rich body of scholarship that uses questionnaires to determine how the internet is used in everyday life (for example, Anderson and Tracey 2008; Ewing and Thomas 2010; Howard, Rainie and Jones 2002; Quan-Hasse et al. 2002; Wellman and Haythornthwaite 2002). There is scope for studies that frame social media in a similar manner to internet use and everyday life, including Malaysian scholarship. 'Metrics' on basic internet and social media usage, such as where and how often they are accessed, are commonly found in the commercial internet measurement sector (Faris and Heacock 2013).[14] My objective in designing the questionnaire was to capture a broad range of participation dimensions; namely engagement, networks, sources, and purposes. This section outlines the processes involved in the online questionnaire; including data collection and design, profile of the sample and respondents, and descriptive and inferential analysis. First, I provide a brief literature overview on internet and everyday life studies that have focused on race and socioeconomic status.

Scholars in internet studies have gone beyond the question of access and digital divides to consider differences in the background of users and the 'quality' of their participation. Hoffman, Novak, and Scholosser (2001, p.50) question the relationship between race, internet access and the "ability to participate and reap the rewards of that participation in the emerging digital economy". They consider both race and income as factors influencing the full spectrum of online participation, including 'transactional' activities (for example, shopping behaviour), search behaviour, multicultural content and community building. Similarly, Howard et al. (2002) not only compare internet access across African American, Asian American and White American users, they examine the propensity for groups to

[14] The availability of social media analytics tools changes rapidly. Examples of vendors include Hootsuite, Radian6, Socialbakers.com and others.

engage in entertainment versus 'useful' activities; for example, checking sports scores and playing online games versus researching politics, e-commerce and job-hunting. While they observed differences between the ethnic groups, the authors reported only a 'straight-forward' relationship between education and online activities; tertiary-educated users were more likely to search for information online and be comfortable in conducting transactions. A study by Hargittai (2010) found that women, students of lower socioeconomic status, students of Hispanic origin and African Americans had lower levels of web 'know how' than others. This was determined by users' level of understanding of internet-related terms and diversity of web usage; such as getting news and financial information, and getting information for school work. Hargittai's study found that socioeconomic status was an important predictor of how people incorporate the web into their everyday lives, with those from more privileged backgrounds using it in more informed ways for a larger number of activities. Similarly, I examine socioeconomic status as an equally important factor as ethnicity of how groups of Malaysian users' value and participate on social media.

3.4.1 Data collection and design

I chose to use Effective Measure, a commercial internet measurement firm in Malaysia, for their survey service delivered through websites visited by Malaysian users at a census level.[15] Effective Measure is a global operation headquartered in Melbourne, and has a wide representation of internet users in Southeast Asia. There are two main approaches in their method; market-wide survey and panel. The market-wide survey is randomly sent out based on a pre-selected rate that can be varied for each website. Any user who visits a tagged website (user measurement software that is embedded in a third-party publisher website) may be invited to participate in the survey. During March 2012, Effective Measure had more than 200 websites tagged in Malaysia across a range of industries (for example, 'news websites') with demographic profiles on more than 85,000 users. Once a survey is completed, Effective Measure will save the demographic profile of the user according to the answers given to their 'cookies' (software that contains website usage history for each user). Demographic profiles remain in a user's cookies only as long as the web browser cache is not cleared, a disadvantage of this sampling methodology for measurement continuance. Each time a user who has completed the survey visits a

[15] www.effectivemeasure.com

website tagged by Effective Measure, the saved demographic profile will be allocated to the relevant website. The panel method provides audience data on websites which are not tagged with Effective Measure, including global social media websites such as Facebook and Twitter. Upon completion of an Effective Measure research survey, a user will be invited to contribute to the Effective Measure panel. If a user accepts the invitation, the user will be guided to install the Effective Measure plugin software in their browser. Once the plugin has been installed, it 'communicates' to Effective Measure by sending back each page request. Based on a defined index of websites, the traffic will be allocated. Using the total number of active panellists, the data is then extrapolated to represent the total internet population in Malaysia; this is indexed by external sources, including Malaysian government census data. The data is weighted to ensure that it is representative of the online population.

The questionnaire was limited to 21 questions due to the collection method (see Appendix 1). Effective Measure advised me that online users (unsurprisingly) have a limited attention span, so recommended a short survey. A pilot study was carried out with test questions sent via email to 30 respondents who were my ex-colleagues from the ICT industry in Malaysia. Test respondents were evenly split by gender. Further, I ensured I had representation from different ethnic groups. All respondents were of a similar age, mid-20s to mid-30s. I used the following definition for social media on the pilot and final questionnaire: '*Social media is an online platform where you can share content privately or publicly with your lists of contacts; such as friends, family and peers, acquaintances or strangers. Examples of social media include Facebook, Twitter, Google+, Orkut, LinkedIn and Reddit.*' I deliberately opted for a loose definition as a guide to help users decide which social media platforms were relevant to their answers. One limitation in this approach is that users may be responding about different platforms; this could be a factor in accounting for differences found in responses to how social media is perceived and used in my results. Based on feedback, I added search engines as an information source and politics as an everyday topic of social media. The original division of information topics along functional and recreational uses reflected my own biases; I amended this to provide one list of information topics, then asked respondents in a separate question to characterise their use of social media as being either typically functional or recreational. As a result of the pilot, I also simplified the wording of the questions as some users found them too complicated. This was to cater for respondents whose first language was not English (many Malaysians are tri-lingual but are not necessarily fluent in all three); ideally, the questionnaire would have been distributed in multiple languages. The format for

Effective Measure did not allow me to ask open-ended questions; the company's rationale is to ensure that questionnaires are completed quickly, at the cost of a richer level of detail in the answers. I discuss the limitations of each question in more detail when I outline my approaches and methods for each chapter.

The online questionnaire was launched on 4 October 2012 across a syndication of 50 publisher websites in Effective Measure's network (see Appendix 1.2). These websites represented a range of industries (including news, motoring, shopping, parenting, travel), likely to appeal to users irrespective of age or gender. A number of major news websites were used, including The Star Online, New Straits Times Online, ChinaPress, sinchew.com.my, MSN Malaysia - News and Bernama. While there could be a bias towards users in the sample with preferences for online news, these websites have wide appeal, catering to various languages spoken in Malaysia. While there were not any Tamil news websites in the sample, Indian users were proportionally represented. I collected a quota sample of responses from 100 social media users in each primary language group; namely, Malay, Chinese, Indian – all dialects – and English; comprising a total sample of 400 respondents. As discussed in the previous chapter, language is used as a proxy for ethnicity, although I acknowledge that language is not an absolute indicator of ethnicity. Effective Measure is an Australian-owned company, and because of privacy legislation, the respondents were not allowed to be selected by ethnic identity. Instead, respondents could be chosen by the primary language of the household. Literature in Malaysia helps to justify this approach; for example, Tong (2006) writes that even for Chinese who speak Malay in public, they always use a Chinese dialect at home. I refer to ethnicity rather than race in operationalising my research questions (see Chapter 2). Effective Measure offered a number of inbuilt demographic profiles based on previously collected information from their sample. The demographics requested for inclusion were gender, age, residence, education, monthly household income and occupation. I decided not to weight the sample, given that the analysis was based on comparing ethnic groups rather than providing a breakdown of the total sample by demographic categories. It should be acknowledged that this approach, unlike Leong's (2014) study of the internet in Malaysia, focuses on users of the internet and social media, and excludes non-users. My study also excludes other migratory populations in Malaysia, such as refugees and labour workers from poorer south-east Asian nations. It is therefore likely that my quota is biased towards users who enjoy social advantages; I am not collecting information on perceptions of social media by those who cannot, or choose not to use it.

3.4.2 Sample

In this section, I provide a breakdown of my sample compared to the online population as measured by Effective Measure. I did not expect the profiles to be the same because 'social media users' are not the same as 'internet users' (refer to data in Chapter 1 which highlighted the percentage of users who choose not to use social media). My comparison provides context as to who is online in Malaysia and a guide as to how I should limit the ability to generalise from my findings. The social media sample was based on a quota of 100 respondents per language group, deliberately not 'representative' of the population. I did, however, set out to collect a wide cross-section of users. In my demographics analysis, education, income and occupation are often used as indicators of socioeconomic status. A composite index was not offered by the survey provider and it was outside the scope of my thesis to create one. Table 3.1 provides details on the spread of demographic categories in my respondent pool, compared to the internet population.

Table 3.1 Comparison of questionnaire sample vs. online population

Demographic variable	Category	Sample	Online	Delta
Total Sample	N	400	98,782	
Gender	Female	45%	44%	1%
	Male	55%	56%	-1%
Age	15-24	25%	16%	9%
	25-34	34%	34%	0%
	35-44	25%	24%	1%
	45-54	13%	15%	-2%
	55+	4%	10%	-6%
Residence	Urban	83%	71%	12%
	Rural	17%	29%	-12%
Primary Language+	Malay	25%	55%	N/A
	Chinese	25%	16%	N/A
	Indian	25%	2%	N/A
	English	25%	22%	N/A
Education Level	Tertiary	85%	69%	16%
	Secondary	13%	27%	-14%
	None / Primary	2%	4%	-2%
Monthly Household Income	Very high (Above USD5,001)	11%	8%	3%
	High (USD2,001-5,000)	21%	19%	2%
	Middle (USD1,000-2,000)	27%	26%	1%
	Low (USD<1,000)	23%	45%	-22%
	No income	9%	3%	6%
	Prefer not to say	9%	0%	9%
Occupation	High-skill white collar	52%	47%	5%
	Low-skill white collar	17%	22%	-5%
	Non white collar	4%	9%	-5%
	Other	6%	3%	3%
	Unemployed	7%	9%	-2%
	Full time student	15%	10%	5%

See Appendix 2.1 for category definitions. Includes USD to MYR conversion process.

Period: January 2013 (taken at end-point of data collection).

Source: Sandra Hanchard questionnaire sample and Effective Measure

+Language Delta is N/A because these percentages were based on a set quota.

Data is rounded to nearest full percentage.

Overall, my sample of social media users suggests a group of users with advantages in terms of income, education and occupation, compared to the general online population. Middle class Malaysians were well-represented in the sample; the sample was also younger and more likely to be urban. The differences in income, education and residence (urban or rural) could suggest that there are socioeconomic divides between users who participate on social media versus those who do not. In Chapter 1, I highlighted that a high proportion of Twitter users in Malaysia had tertiary education. As observed earlier, demographic biases of my sample could be due to the websites where the survey was distributed, including online news websites. In comparing my sample against MCMC data (see Chapter 1) general trends in important categories such as age, education and income levels were similar. For the analysis, I collapsed categories in some instances so that there was a minimum of five respondents in each cell for reporting. I describe reasons for grouping and ignoring some categories for each demographic variable below (See Appendix 2.1 for a summary). In this thesis, I use the notation (A:##) to refer to tables in Appendices with supplementary data.

3.4.2.1 Gender, age and residence

Gender in the sample closely matched the online population, with only a 1 percent difference between them. In terms of age, my sample of social media users included more 15-24 year olds (9 percent difference) and fewer respondents over 55 years old (6 percent difference). The bias towards young users is not of concern, given that social media services are relatively recent. About half of 15-24 year olds in my sample were students, 10 percent unemployed, and the remainder in employment (A2.2). The over-representation of urban users (12 percent difference) also makes sense; it would be counter-intuitive if the sample had more rural users. The rural users had high levels of tertiary education, but not as high as urban users; 79 percent and 86 percent respectively (A2.3). Socioeconomic divides between urban and rural users were reflected in income and occupation profiles. Urban users had higher levels of income than rural users overall; 34 percent of urban users had high or very high income levels, compared to 19 percent of rural users (A2.4). Similarly, urban users had a higher proportion of 'high-skill white collar' users; 52 percent compared to 47 percent (A2.5). While there are white collar users (defined below) represented from both urban and rural areas, urban centres are more likely to offer higher paying, high-skill roles.

3.4.2.2 Language

There were no notable differences in education and occupation between language groups, but there were differences in residence and income. Chinese and English speakers were more likely to be urban users (88 percent and 91 percent respectively) compared to Malay and Indian speakers (75 percent and 78 percent respectively). See A2.6. Chinese and English speakers had higher incomes overall; 31 percent of Chinese and 54 percent of English speakers had high or very high income levels, compared to 21 percent of Malay and 21 percent of Indian speakers (A2.7). An income gap in the general population between Chinese versus *Bumiputera* Malay and Indians is documented in Malaysian national statistics (Department of Statistics, Malaysia 2012). English speakers could not be identified in terms of ethnicity, but were included in my analysis as a comparative reference. English is widely spoken in Malaysia, given the country's colonial British roots, and remains an active second language taught in schools. Malay and English are 'privileged' languages in terms of public use (Gupta 1997). Postill (2011, p. 43) notes that in households of mixed Chinese dialects, English will often become the main family language; this is also true of Chinese-Indian households (David 2008). In my sample, information on country of birth was also not available, which meant that the percentage of foreign nationals represented could not be estimated. Any socioeconomic advantages of English speakers in the sample could be in small part due to the presence of expatriates who are on professional secondments in Malaysia. Expatriates, however, were likely to be a very small percentage of users, given that 0.6 percent of internet users in Malaysia were in the ethnic category of 'Other' (MCMC 2011). It is worth noting that 45 percent (n=9) of users in the 'Director / Owner' category were English-speakers (A2.8). English speakers were not just young users, with 28 percent of the group above the age of 45 (A2.9). Given the uncertainty in determining the ethnic background of English speakers in my sample, I limit my discussion of the racial implications of any differences identified in this group.

3.4.2.3 Education, income and occupation

Tertiary educated users were over-represented by 16 percent, while secondary educated users were under-represented by 14 percent. My sample was more affluent overall than the broader online population, with fewer low income users (difference of 22 percent) and more users in the middle, high and very high income groups (difference overall of 6

percent). Nine percent of respondents in my sample answered 'No income' or 'Prefer not to say'. While there was a general linear relationship between income level and occupation levels ('low-skill white collar' and 'high-skill white collar') there were some users who were on low incomes but had 'high-skill white collar' roles (n=25; A2.10). This suggests that there are wide income brackets in the Malaysian labour market. Students were ignored in my analysis of low income groups, based on the assumption that this is not necessarily a disadvantaged group, having future earning capacity. My sample overall had more 'high-skill white collar' users than the overall population (difference of 5 percent) and fewer 'low-skill white collar' users (difference of 5 percent). I describe 'high-skill white collar' roles as being typically office-based, requiring a high level of education, and usually attracting a higher income. 'Low-skill white collar' roles are similarly typically office-based, requiring lower levels of education, and usually associated with lower incomes (A2.11). While 'non-white collar' roles (comprised of blue collar and service roles, but not including sales and customer service) are of interest in comparing job types, online access and information practices, there were not enough users in this category in my sample (n=15) for further segmentation. The 'Unemployed' category was comprised of homemaker, unemployed and retired users (n=28) and was ignored in the analysis as it was made up of users of very different life circumstances.

3.4.3 Analysis

In analysing my quantitative data, I am aware that I am 'constructing' statistics and stories. Internet researcher Scott Ewing (2013, p. 5) writes that "statistics are 'made' or 'created' not 'taken' or 'discovered'; they are part of the process of creating the object they measure". Further, he states that the construction of statistics involves the process of creating "believable fictions". Statistical analysis is a particular knowledge practice. These practices are shaped by discipline guidelines and conventions, but also reflect choices by the researcher in how they analyse, compare and present statistics that lead towards a certain narrative. Ewing references French statistician and historian Alain Desrosieres who reminds us that we need to consider whether constructed statistics fairly represent reality. Desrosieres (2001) examines ongoing critical attempts by statisticians to connect practices of their craft with notions of reality. In this thesis, my objective is to provide an informative, fine-grained description that reasonably reflects how users of different backgrounds participate on social media. Ewing writes that in the context of internet

research, statistical objects are created for modern governments to define policy problems. My objective is to discuss the implications of social media in Malaysian society, by presenting patterns of participation in user categories that make sense at a national demographic level. For example, I compare new media adoption between rural and urban users, and analyse what the differences mean for democratic participation.

I primarily take a descriptive approach in analysing my questionnaire data (Ewing 2013; Savage and Burrows 2007). I took several criteria into consideration when curating the statistics presented. Generally, the research questions of the chapter informed the variables to which I paid closer attention. I also considered whether there were linear trends in ordinal categories; whether there was a large percentage difference between pairs of categories, or between a category and the average across all categories. I also highlighted differences between sets of category pairs (for example, Malay and Indian speakers compared to Chinese and English speakers). Results where categories had a small *n* count were sometimes included for illustrative purposes, but not identified as a major trend. Further, I focused on comparing results where there was the largest number of users. The following chapters will show that these tended to be concentrated in positive responses such as 'Significantly improved' and 'Slightly improved'; or 'Strongly agree' and 'Slightly agree'. My approach is limited in not comparing users who might have provided negative responses (for example, 'Strongly disagree' or 'Disagree'). In taking a primarily descriptive approach, I am informed by debates on presenting data of statistical significance. Nakagawa (2004) in the field of behavioural ecology argues that meta-studies of overall effects might be more informative and important to progress a field rather than studies which publish results that satisfy conventions of statistical significance but are of trivial importance in the long-term. He refers to the application of Bonferroni procedures in reducing the number of variables published to minimise Type I errors (the incorrect rejection of the null hypothesis). In this thesis, my objective is to provide detailed, illustrative data of social media participation. I therefore describe trends across a number of cross tabulations.

I conducted a secondary inferential analysis of participation in Chapter 8. My objective was firstly to identify whether there were dimensions of use that were correlated towards identifying styles of participation; and secondly to determine if there were significant differences in participation across demographic groups. I compared relationships between pairs of derived behavioural metric measures ('styles of social media participation') and between behavioural metrics and demographic variables. I reduced the number of metric

measures and demographic variables from my descriptive analysis and applied a Bonferroni correction to reduce Type I errors. I tested for bivariate correlations in the metric measures, and applied ANOVA (analysis of variance) procedures to compare metric measures against demographic categorical data (De Vaus 2002). A more comprehensive method would have been to apply MANOVA (multivariate analysis of variance) procedures to examine interactions among three or more variables. I take a preliminary approach to identifying usage patterns between pairs of variables. It was outside the scope of this thesis to create typologies of styles of participation on social media.

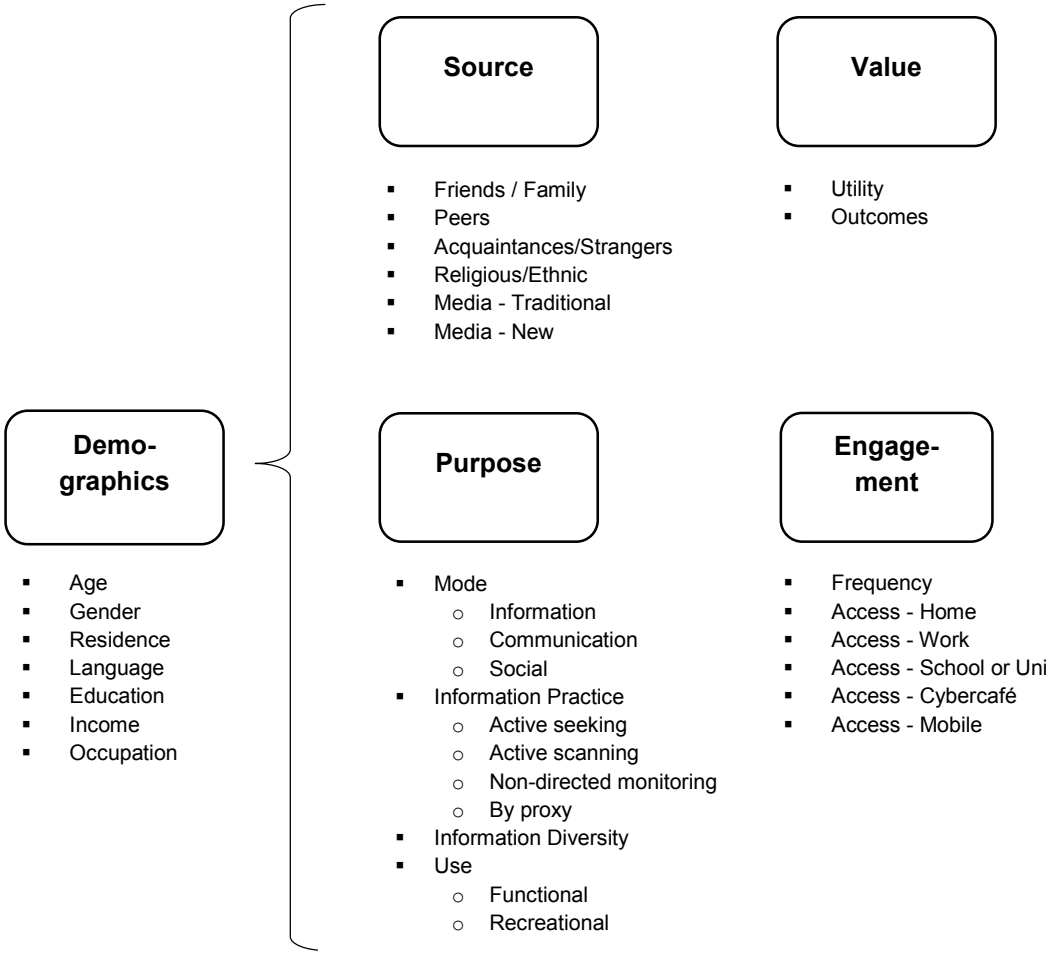
The dimensions of social media participation that I examine are 'engagement', 'source', 'purpose' and 'value'. See Table 3.2 and Figure 3.2 below. Engagement encompasses firstly the frequency of social media use, and secondly the place of access, including home, work, school or university, cybercafé and mobile device (Chapter 4). Source describes 'who' and 'where' respondents get information from on social media. I identify seven types of social networks ('who'); namely, 'Friends and / or Family', 'Work peers', 'School, College or University peers', 'People who share your interests', Acquaintances and / or strangers', 'People who share your religion' and 'People who share your race / ethnicity' (Chapter 4). In Chapter 8, to simplify my analysis, I group social networks into the categories of 'Friends / Family', 'Peers', 'Acquaintances / Strangers', 'Religious / Ethnic'. Media sources are categorised as 'Traditional' or 'New' (Chapter 5). Purpose refers to practices on social media; namely, 'mode', information practice', 'information diversity' and 'use'. Mode describes the information, communication or social intention of social media participation (Chapter 5). Information practice refers to information seeking using McKenzie's (2003) model of active seeking; active scanning, non-directed monitoring and by proxy information seeking types (Chapter 6). Information diversity refers to the number of information topics (for example, 'food' or 'entertainment') that respondents use on social media (Chapter 7). Use refers to the functional or recreational application of information (Chapter 7). Finally, value describes the utilities and outcomes of social media participation. Utility refers to the degree to which social media can make everyday life easier for users (Chapters 4, 6, 7, 8). Outcomes refer to impacts on education, employment/training and quality of life (Chapter 8).

Table 3.2 Dimensions of social media participation and associated questions

Dimension	Question* and Questionnaire ID [#]
Engagement - **Frequency**	How often do you use social media? [2]
Engagement – **Access**	Where do you commonly access social media? [1]
Source – Social Networks	Has social media increased your everyday contact, online or offline, with any of the following? Tick all that apply:" [6]
	Do you get information on social media that is useful in your everyday life from any of the following? [7]
	Do you get information on social media that you generally trust from any of the following? [8]
Source – **Media**	From which of the following do you get useful information for your everyday life? [9]
	From which of the following do you get information that you generally trust? [10]
Purpose – Mode	What is your usual reason for using social media? [15]
Purpose – Information Practice	Do you ever use social media with the intent of finding the answer to a specific question? [11]
	Do you ever browse social media for information that might be useful in your everyday life? [12]
	Do you ever get information on social media that is useful in your everyday life, even when you were not looking for it? [13]
	Do you ever get information on social media which you could not obtain elsewhere? [14]
Purpose - Diversity	Which of the following topics have you found information on using social media in the past month? [16]
Purpose – Use	Do you view items on social media for mostly functional or mostly recreational purposes? [17]
	Do you post/share items on social media for mostly functional or mostly recreational purposes? [18]
Value - Utility	How important is social media to you in your everyday life? [3]
	Agree or disagree: social media makes everyday life easier for me. [4]
	Agree or disagree: social media is an efficient means for me to get useful everyday information. [5]
Value - Outcomes	How has your use of information on social media in general affected your education studies? [19]
	How has your use of information on social media in general affected your employment / training opportunities? [20]
	How has your use of information on Social Media in general affected your quality of living? [21]

*Full question with options in Appendix 1. The number ID following each question represents the number of the question on the survey.

Figure 3.2 Summary of dimensions of social media participation



3.5 Method II: Content analysis of Twitter

The second data method for this thesis is a content analysis of the public Twitter feed of Malaysian internet users. As mentioned in Chapter 1, Twitter, at the time of data collection, was the most popular social media website in Malaysia after Facebook. While Facebook content has a range of personal information about the user and their networks (connections can be categorised as family for example), content on Twitter can be shared with relatively little information about the user. Information on Twitter is therefore more conducive to being shared publicly, compared to Facebook. Tweets may be in the public domain (unless the account is privately locked) but can contain personal observations relevant to each user's everyday life. This allows researchers to sample quotidian observations without interfering in users' everyday activities; users are in their 'natural

habitat' so to speak. I take a grounded approach (Strauss and Corbin 1998) in categorising the types of content that Malaysians tweet about but start with broad categories of internet use drawn from industry typologies (Experian Hitwise had over 165 categories in 2012, obtained from client login). These starting categories were subsequently modified by the actual content observed (topic schema is below). I am interested in comparing how general uses of the internet might apply and be prioritised by users in social media environments. Waller's content analysis of commercial search data (2011a; 2011b) offers a precedent to analysing social media data. In the next section, I outline my data collection and design, sample and analysis.

3.5.1 Data collection and design

To access public Twitter content, I used social media analytics firm, Datasift, which was one of two companies (the other being Gnip.com) at the time of sampling that were licensed to resell data from the Twitter 'firehose'. The firehose refers to data that can be collected 'in real-time' or as it is published. Datasift was able to store and provide online access to historical tweets; addressing the immense challenges of data storage and streaming of big data. On top of enterprise services, Datasift in 2012 provided a pay-as-you-go tool where users on limited budgets could access data on a periodical basis. Other examples of third-party software used by academic researchers to gather tweets include 'scraping' tools such as TwapperKeeper. Not all tools provide geo-targeting or historical access. Social media analytics tools can be helpful for understanding engagement and distribution features, but researchers need to 'look under the hood' of how these services measure users to identify any biases in data collection (Bruns et al. 2011). My sampling approach of collecting across a monthly period and covering all periods in a day is intended to get a reasonable spread of users and content. I have not attempted to weight my collection towards any universal estimates of users. Such weighting would be extremely difficult given a lack of public information on users, complicated by the number of fake accounts, estimated to be 5 percent globally (D'onfro 2013). I had access to the full firehose; that is, all data available during the period in Malaysia. My content analysis is limited in that it focuses on only one social media platform.

Using Datasift, I recorded tweets by Malaysian internet users over a total of 21 hours collected over 21 days during late September and early October 2012. My rationale was to cover waking hours (starting at 6am, finishing at midnight) amounting to a total of 18

periods, with an additional 3 periods to ensure each calendar day had a recording on at least one morning, afternoon and evening time frame. There were 2,498,464 tweets recorded and 2,478,833 tweets that could be exported, averaging over 118,000 tweets per hour. The missing 0.8% tweets were likely due to accounts protected by privacy settings or deleted tweets. I recorded tweets from 156,872 unique accounts (with approximately 6 percent consisting of spam or inactive accounts). comScore (2013, p. 24) estimated that 15.9 percent of the Malaysian internet audience over 15 years old used Twitter from a home or work PC, not taking into account mobile access. Based on the online population (approximately 18.6 million, see Chapter 1) and comScore's estimate of Malaysian Twitter users, my collected sample captured content from roughly 5 percent of Malaysian Twitter accounts. After reducing the number of unique accounts to a manageable number for manual categorisation, my sample consisted of 4,103 personal users; or about 0.1 percent of the Malaysian Twitter population at the time of collection.

3.5.2 Sample

I have attempted a systematic, randomised approach to sampling Twitter activity in Malaysia, although there are many constraints in collecting representative data as I have outlined. Sampling Twitter content mitigates to some extent a disparity between what participants say they do versus their actual practices; although I am not measuring the same people as my questionnaire sample. Another limitation is that participants are likely to behave differently within public and private social media environments. Further, there is ongoing debate about the ethics of researchers using public Twitter data, in particular making assumptions about users' expectations of privacy (Zimmer 2010). While users make their content on Twitter publically accessible, they may not intend their tweets as public comments or statements to be referenced or quoted by a third-party. Considerations of the personal content (such as phone numbers) users could share publicly on social media further complicates ethics debates (Humphreys, Gill and Krishnamurthy 2014). I refrained from quoting personally identifiable information and anonymised sample tweets in the presentation of my results, replacing handle names with the notation 'XX'.[16] I acknowledge I make assumptions about the tweet being distributed

[16] Technically a tweet could be entered into a search engine and linked back to the user; but this depends on how the search engine's algorithm ranks the content, taking into account how unique the content is, and the 'popularity' of the user (based on their follower count). I tested entering a few sample tweets that I have quoted, and was not able to find the original Twitter account to which the tweet was attributed.

publically when I reference it. To mitigate against any single user's content being 'harvested' in bulk, my approach was to sample content as widely as possible across a broad number of accounts through randomisation.

To identify active users of Twitter in Malaysia, I used the supplied field, 'time-zone== Kuala Lumpur', which is an export option in Datasift. When users set up a Twitter account, the personal setting is automatically matched to their time zone. I manually filtered out collected tweets from accounts in the Philippines, Indonesia and Singapore (which share the same time zone as Kuala Lumpur). Selecting users who had the geo-coding setting enabled on their Twitter account was not an option, as this resulted in a large bias towards location-based tweets (for example, checking into a café). Location information in the user profile and the content of tweets was used to help validate that the account belonged to a Malaysian user. To select tweets for manual categorisation, I applied a randomisation process to limit the number of tweets to a manageable number. Using a random number generator (http://www.random.org/integers), I generated 1000 tweets for each time period. After a validation process, which I will describe, I then analysed 200 tweets per time period, amounting to a total of 4,200 tweets categorised. I made the decision not to apply machine learning to categorise a larger dataset (Java et al. 2007; Lewis, Zamith and Hermida 2013) as my intention, as stated earlier, was to closely inspect the actual content in a Malaysian cultural context. In randomising the tweets for categorisation, this mitigated highly-active users who tweeted in excess of the population average. Given that my focus was on 'everyday life' content, I was also aware of not allowing special events in the news, or religious holidays, to 'skew' the content analysis (although my sampling period fell outside any of the festival periods in Malaysia).

After collecting my sample, I additionally filtered out tweets to leave only those that belonged to personal accounts. A tweet was excluded if it belonged to a celebrity, public figure, organisation, business, marketing or spam account; I simply moved on to the next tweet in the randomised list. Another check applied to filtering out spam accounts was identifying users with less than 10 followers and less than 10 tweets published (Java et al. 2007). After validation processes, I was left with a sample of 4,108 tweets; representing about one tweet per unique account. Google translate (http://translate.google.com) was used for content in Malay, Chinese and Indian. I acknowledge that there are limitations in this method of translation, as Google Translate is algorithmic, and will not identify cultural nuances implicit in language. In a more extensive study, it would have been beneficial to employ native speakers to translate the tweets and provide advice on cultural

interpretations. Language nuances of the platform, such as slang and emoticons, also require human interpretation. Further, it should be noted that tweets that were part of conversations might only be interpreted correctly in context by the discussants themselves.

3.5.3 Analysis

My analysis of tweets is largely focused on information practices and topics. I made use of fields that were available for collection through Datasift. Each of the 4,108 tweets was coded according to the following dimensions: breadth, media, direction, tips/advice/recommendation, re-distribution, theme, location and use (see Table 3.3). I will provide an overview of each dimension in the following section, and go into more detail on their respective literature backgrounds and definitions in the chapters in which results are presented. My coding scheme was not tested for reliability by multiple coders, a limitation of the approach taken.

Table 3.3 Schema for Twitter content analysis

Code	Chapter	Values	Description
Breadth	5	Broadcast or micro-broadcast	Identifies if the user intends to communicate with a broad audience or seek or share information with specific connections.
Media	5	Blogs to Video (see full list, Chapter 5)	Identifies what types of media is embedded in tweet.
Direction	6	Push or Pull	Identifies if the user is sharing or seeking information.
Tips, advice or recommendation	6, 7	Yes or No	Identifies if the tweet has 'advocacy' content.
Re-distribution	6	Tweet or Retweet	Identifies 'original' content or whether the user is re-sharing information using the RT etiquette.
Theme	7	Automotive to Travel (see full list, Appendix 4.1)	Identifies the topic of the tweet. Sub-topics were also identified.
Location	7	Yes or No	Identifies if the tweet makes reference to a specific location.
Use	7	Functional or Recreational	Identifies if the tweet has a utilitarian versus leisure purpose.

I distinguished between tweets directed at two audience levels: broadcast and micro-broadcast (Wohn et al. 2011). Micro-broadcast tweets related to content sought or shared with specific users, and were identified with the 'mention' notation (@) that signifies a tweet is part of a conversation with another user. Remaining tweets were treated as broadcast; that is, they were directed at the users' total number of connections on the platform. Tweets with embedded links to media content were identified, namely blogs, movies, music, news, photography and video. I further analysed the 'pull' and 'push' direction of content. Pull tweets related to queries and questions where users were directly soliciting for any type of information from their networks. Push tweets related to information distributed to connections and the wider network, without the intent to solicit information. Pull and push type information enquiries could also be embedded within micro-broadcast and broadcast tweets. To further understand the information-value of

shared tweets, I identified and grouped together tweets that could be characterised as a 'tip', a piece of 'advice', or a 'recommendation'. Although tweets categorised as Lifestyle – Inspirational could be regarded as advice (examples provided in Chapter 7) I chose not to include these as I was more interested in advocacy content from a utilitarian perspective. I further counted 'tweets', 'retweets' and 'mentions' to analyse patterns of information sharing and redistribution.

Tweets were categorised with a topic. During coding it became apparent that I would need to have two thematic tags. Despite the constraint of 140 characters per tweet, users' content was often multi-dimensional. Many of the tweets were categorised as being conversational in an everyday setting, yet a second thematic category was needed to capture the information contained. Therefore, each tweet was assigned two parent categories, each with a corresponding sub-category. There were 96 tweets (out of 4,108) that were categorised with a second parent category. The topics I initially selected was informed by my questionnaire, then refined based on a grounded categorisation approach. Categories that had less than 5 tweets were collapsed into parent categories. Tweets were tagged as locational if users 'checked in' to a location (using syndicated features, through location-apps such as FourSquare) or if they specified where they were. I further characterised tweets as either functional or recreational in their purpose, with the goal of analysing the utilitarian value of Twitter.

3.6 Conclusion

The approach used in this thesis is largely quantitative because my objective is to compare socioeconomic groups and categories of Malaysian social media users that have meaning on a national level; in particular, Malay, Chinese, and Indian nationals. I use an online questionnaire and content analysis to analyse both intentions and practices of social media participation. This chapter served not only to outline my methods, but to provide an overarching theoretical framework for literatures directing my inquiry throughout the thesis. I identified 'usefulness' and 'trust' as information qualifiers for how uses value social networks and media sources. In this thesis, I attempt to conduct a systematic questionnaire and content analysis, and enrich my findings with observations derived from my personal use, including anecdotal stories of my experiences, comments made by connections on social media, feedback from respondents during pilot testing, and so on.

Researching everyday life and cultural patterns in social media information environments presents several epistemological and empirical challenges of scale and representation.

Big data and the increasing volume and types of data available on human behaviour opens new avenues of inquiry to social researchers. Methods that might have only been available to the natural sciences might be adapted to social science with access to total populations online; although this is a topic of ongoing debate. More people are 'enacting' their lives online which means their everyday lives can be 'measured'. Limitations to 'knowing' the subjects of study through quantitative approaches, and capturing cultural context in large data sets, remain a challenge to social researchers. Increasing attention is being paid to the algorithms that are constructed for sifting and filtering massive volumes of social media data (Gillespie 2013). Another challenge to researchers of social media data is the problem of platform sustainability. The lifespan of social media platforms is unknown, with fickle user tastes and transitory network patterns (for example, one friend leaves a network and takes many friends with them) threatening to undermine platform sustainability. Salient examples include the major decline of social networking sites, MySpace and Bebo (Arthur and Kiss 2009). The empirical foundation of emerging domains of inquiry is subject to shifts dictated by the whims of users. This has implications for longitudinal research on social media platforms. There are ethical considerations in the vast quantities of personal information that can be stored, and potentially exploited by institutions that collect data. Further, questions of divides in access by scholars to proprietary tools, computing skills, and the ability to replicate research are likely to generate further debate (boyd and Crawford 2012; Bruns 2013b).

There are several limitations to the methodological approach I have taken. I have attempted to address broad research questions with a modest survey alongside analysis of a single social medium. While I have attempted to contribute to groundwork scholarship on understanding social media as integrated everyday information utilities in Malaysia, more detailed survey work is invited on examining information, communication and social practices. In my analysis, there is a cultural and language gap that prevents me from fully understanding the intentions, preferences and attitudes of Malaysian social media users. I am unlikely to understand idiomatic references without extensive qualitative research, which is not feasible for every tweet or response. My online survey may have questions that were interpreted in ways that I did not intend because of language differences. Language as a proxy for ethnicity or race is not perfect; in a qualitative setting, it might be appropriate to ask users for information on their ethnic background. As highlighted in the

chapter, large-scale social network analysis of connections (for example, Eagle, Macy and Claxton 2010; Contractor, Monge and Leonardi 2011) would be useful for future studies. Historical data on Twitter would be valuable for capturing tweets during religious festivals and public holidays to be used for a more in-depth investigation of cultural influences on information sharing. I take a macro, quantitative approach, but my design does not fully employ the capabilities of big data (volume, variety, velocity). Through big data and social media analytics tools, I take advantage of the speed of access to a range of respondents. Larger samples of social media users through my questionnaire and content analysis on Twitter could have been advantageous, although there are limits to 'knowing' that are imposed by scale, whether at distance or at close-range. Despite these constraints, this thesis offers an informative, broad account of the information practices of Malaysian social media users in everyday life.

Chapter 4 The social media society

When you spend time in a new country, you appreciate the networks you took for granted in your home country; friends, for instance. The quickest way for me to make some was to use social media. Through Meetup.com, I soon joined groups with interests in hiking (jungles are wont to grow on your back doorstep), badminton (the national sport and for some, religion) and big data (troupes of engineers and data scientists). The relative smallness of Federal Kuala Lumpur, a population of 1.7 million (Department of Statistics, Malaysia 2010b) soon became apparent as I would bump into the same Malaysians and expats in different contexts. People here seemed friendly and it felt almost too easy to form an instant community. Malaysians, apparently, have the highest number of online friends compared to the rest of the world (Yap 2010). I soon began to wonder whether degrees of separation in Kuala Lumpur felt small because of my own online networking, or because culturally it is a deeply 'networked' city. The role of social media in connecting people of different backgrounds in networked contexts is now examined.

This chapter aims to establish the importance of social media in Malaysian society by illustrating firstly the ubiquity of their adoption, and secondly their role in connecting Malaysian users with their social networks. I set the foundation for demonstrating that social media are information utilities for everyday living and interacting with valued social relationships. The wider goal of the chapter is to examine the relationships between technology and society with reference to social media. I will show that social media are significant in Malaysia because they are regarded as important by users and are accessed frequently and widely; and because users can gain information directly from a range of social networks. I demonstrate that choices in the source of information constitute a differentiating factor between users of socioeconomic advantage and disadvantage. In Chapter 2, I introduced the role of ICTs in Malaysia's nation-building agenda; here I identify social media as platforms and services that have implications at a national level, given mainstream adoption. Wider questions that this chapter asks include: how do relationships in the 'real world' translate to how they are valued on social media? Does daily social media use increase connectedness with social networks in the way that we expect? For example, are ethnic and religious connections valued over other social networks, given the public narrative of racial polarisation? What types of social networks provide information that is useful or trusted by Malaysian users?

I draw on Manuel Castells' (1997) notion of the 'network society' in examining how groups across society interact through networked technologies. Social media as networked platforms facilitate information and communication within and between social networks that have meaning online and offline. My analysis of how social networks are valued by Malaysian users references literature on strong and weak ties (Granovetter 1973) as one approach to evaluating the function and value of types of networks. Users of different socioeconomic or ethnic backgrounds may use information on social media to varying levels of effectiveness to build social capital. Based on a Malaysian cultural context, I pay particular attention to how users value ethnic and religious ties in comparison to other types of ties, such as acquaintances and strangers, which could have higher value in more individualistic societies. Here I introduce debates around networked individualism that emphasise the agency of the individual in operating across networks, versus localisation perspectives that stress the importance of collectivist structures in Southeast Asia. Networked individualism is a perspective derived from the network society framework, advocated prominently by Lee Rainie and Barry Wellman (2012). Not only does this chapter examine how social networks are valued on social media, it also reconsiders the meaning of social networks in a local Malaysian setting. Using my questionnaire results, I firstly seek to demonstrate that social media are foundational tools in the network society of Malaysia. Secondly, I establish which types of social networks are prioritised as information sources in everyday life, using the criteria of 'connectedness' (increased contact with social networks online or offline through social media use), sources of useful information and sources of trusted information.

4.1 Localising the network society in Malaysia

Social media are a set of technology and platform services that have emerged from the network society. Manuel Castells' (1997) ambitious notion of the network society, or networks of networks, is a "comprehensive, persuasive social form, able to link up, or de-link, the entire realm of human activity" (p. 15). The network society is a "social structure constructed around (but not determined by) digital networks of communication" (Castells 2009, p. 4). The information age imposes it logic on social and technology systems; the network society is a social structure that has co-evolved with the technologies of the information age. Scholars have cautioned that Castells' thesis can be interpreted as deterministic in framing information technologies as the driving factor in transforming

societies towards networked structures (Van Dijk 1999; Webster 2006). Social media platforms are clearly 'user-centric', where the value lies in users' content and social networks that are expressed through information and communication practices. Technology platforms and social practices are co-shaped (Mackenzie and Wajcman 1999; Webster 2006). Hunsinger (2014) reminds us, however, that social media use is highly mediated through the physical networked structures of the internet; content is transmitted across geographic boundaries before it reaches the user. Social media platforms are built on global physical infrastructure with inherent design logic. In the next chapter, I will outline how the term 'affordances' has been used to overcome determinism by considering both technology features and human motivations in use (Hogan 2009). Further, a localisation approach which emphasises the local cultural contexts of the users helps us to overcome generalisations that might arise out of a technological determinist perspective. Localised content on social media, shared through relationships that have degrees of value in certain social contexts, is embedded in networked infrastructure that is inherently global.

Diverse patterns connected to local contexts evolve through social media participation. While Castells' notion of the network society is based on a global perspective, it allows for cultural diversity. In Chapter 2, I emphasised that social media use should be interpreted in the local socio-historical, political and cultural contexts of a society. Castells (2004) contends that the network society has common features in all global contexts, but that it takes different forms "depending on the cultural and institutional environments in which it evolves" (p. xvii). Further, he observes that "because the network society is global, it works with and integrates a multiplicity of cultures, linked to the history and geography of each area of the world" (p. 38). Networks can be both global in reach, as afforded by technological infrastructure, and local as characterised by different types of social networks. A network perspective is not intended to convey static social systems; interactions through networks are dynamic and culturally embedded (Arora 2012). Indeed, culture and networks are mutually constructed (Pachucki and Breiger 2010). Social media similarly affords interaction by humans who act within larger cultural systems. Castells goes further to suggest that cultural diversity is maintained and may even prosper in the network society (2004, p. 40). This chapter discusses how cultural narratives in Malaysia are reflected through information seeking and sharing practices on social media. We can speculate on whether the particular value that Malaysians ascribe certain types of connections in social media environments mirrors how social networks are valued offline.

4.2 Social networks and contesting networked individualism

Social networks refer to formal and informal social organisations that articulate relationships between individuals in different contexts; for example, family at home, peers at school or work, co-members of a temple, mosque or church. A social network, according to internet scholars Lee Rainie and Barry Wellman (2012, p. 21) is "a set of relations among network members – be they people, organizations, or nations". Rainie and Wellman observe that networks have always existed but they have received increased attention through use of the internet. The authors advocate the notion of a rising "networked individualism" where "people function more as connected individuals and less as embedded group members" (p. 12). They argue it is too simplistic to view people either as individuals who act in isolation or as members of tightly defined groups. Rather, society is "made out of a tangle of networked individuals who operate in specialised, fragmented, sparsely interconnected, and permeable networks" (p. 21). Each individual can choose to participate across social networks of different kinds, such as families, work or school peers, online communities and more; depending on how individuals and networks can be of mutual benefit. Networked individualism, as the name implies, gives credence to the autonomy of individuals. Rainie and Wellman (2012) argue that through networked individualism, there is less individual loyalty and allegiance to local social structures, including the nation, village and neighbourhood. The authors contend that group boundaries have weakened as information has become more directly available; American society in particular has "become less bounded by ethnicity, gender, religion and sexual orientation" (p. 32). Whether this weakening of boundaries is true outside a North American setting however is not established, especially in collective cultures such as Malaysia where the agency of individuals may be more constrained by traditional values.

Researchers working outside the West have contested the universality of a networked individualism approach; particularly general claims that the "new pattern of sociability in our societies is characterized by networked individualism" (Castells 2001, p. 129, cited by Postill 2011, p. 71). Postill is a vocal critic of networked individualism and its over-emphasis on ego-centric networks, which he says "reduces the rich diversity of social formations found around the globe (families, peer groups, clans, cults, cohorts, age-sets, clubs, committees, firms, fields of practice, markets, states, etc.) to an appealingly simple group vs. network binary" (2008b). It should be noted that the critique of network individualism extends further back to Castells' early conception of the network society and its apparent emphasis on virtual, 'disembodied' social relationships, rather than on

contextually embedded networks (Van Dijk 1999). There is a need for more studies outside of the 'global North' on how social networks are prioritised online and what social and economic values are expressed with the adoption of ICTs (Ling and Horst 2011). For example, in a study on mobile media sharing and relationships among young users in Khayelitsha, South Africa, Walton et al. (2012) found that "when sharing, reciprocal gifts of emotional support and solidarity are expressed. These are just as important to the sharing relationship as the material or economic assistance accessed through sharing" (p. 407). In this case, sharing is implicit in mobile use, given the resource constraints of a developing country. The assumption that group boundaries will weaken as developing societies adopt networked technologies is problematic in not allowing for manifestations of cultural diversity.

While network boundaries might be less stringent in North America as Rainie and Wellman (2012) suggest, it is not certain if this applies to Malaysia, where families and collectivist values are important in everyday life. Stivens (2006) writes about the everyday politics of family values in the context of the Malaysian nationalist project. She notes that the Malaysian state, while participating in economic globalisation, ran a strongly 'anti-Western' line in the 1990s which emphasised the need for 'Asian values', equating family values with an alternative Islamic modernity (p. 356):

> Asian Values, which were represented as responsible for the Asian miracles of the 1990s, supposedly reflect a strongly communitarian collectivism: this privileges societal interests over the narrow, individual self-interest, order and harmony over personal freedom; it also values respect for authority and strong leadership, strong attachment to family, conventional authority patterns and loyalty within the family.

Beyond political discourse, family values are pervasive in everyday settings in Malaysia. Stimpfl (2006, pp. 72-73) writes that "Malay groups have strong cultural bonds, usually in terms of land and village, and their social structure is hierarchical. Aspirations to status positions are directly related to family history and status." For Chinese, "social interaction is family based and is the source of almost every daily activity".[17] Tong (2006) observes the importance of 'family-togetherness' for Chinese-Malaysians. For the Tamil community in Malaysia, family connections constitute an important factor of social status (Willford

[17] Stimpfl's chapter recounts the Malay cultural experience in Singapore. As I have pointed out, this commentary is relevant to Malaysia given the strong cultural and historical links between Malaysia and Singapore.

2007). In Malaysia, family and intimate social networks are integral to how citizens interact in everyday life, including their participation on information and communication environments.

4.3 The value of social networks and strength of ties

I am interested in how social networks are valued in Malaysian society expressed by the value of connections on social media for everyday information. The strength of ties is one way to distinguish the value of social networks, depending on various contexts such as home, work or school. Granovetter's (1973) hypothesis of the strength of weak ties is useful for considering how different social networks might have value to people in society, although I do not attempt to model strong and weak ties on social media. Gilbert and Karahalios (2009, p. 2) provide a lay definition influenced by Granovetter that suggests strong ties are distinguished by greater familiarity and intimacy with each person: "Strong ties are the people you really trust, people whose social circles tightly overlap with your own. Often, they are also the people most like you." Weak ties, "conversely, are merely acquaintances. Weak ties often provide access to novel information, information not circulating in the closely knit network of strong ties." Using the principles of 'homophily', common attributes have been established as factors for defining tie strength, such as socioeconomic status, ethnicity, education, political affiliation and gender (Lin, Ensel and Vaughn 1981). The respective importance of these attributes need to be considered in a Malaysian setting, particularly ethnicity. The task of identifying ties as strong or weak is complex, given the dynamic nature of social relationships. Haythornthwaite (2002) for example, identifies "latent ties", in the context of organisational culture, as being distinct from strong and weak ties; latent ties are defined as "ones that exist technically but have not yet been activated" (p. 389). Haythornthwaite argues that ties can change from latent to weak, and weak to strong. Different social, cultural and technology contexts raise the need to reconsider the relevance of defining social networks as strong or weak.

The function and value of strong and weak ties on networked environments has attracted debate in new media scholarship. According to Kavanaugh et al. (2005) weak ties on the internet are linked to higher engagement, information exchange and community mobilisation. The authors highlight preliminary evidence that high internet take-up in the community increases the number of weak ties (p. 120). Kavanaugh and colleagues argue

that weak ties, such as peers in professional settings, are more instrumental in providing informational and functional resources. Similarly, a study by Facebook research scientist Eytan Bakshy (2012) offers evidence that Facebook users spread more information that they are exposed to from their weak ties, compared to their strong ties. Scholars, however, are revisiting the notion that weak ties are more likely to provide socioeconomic opportunities; greater attention is being paid to what function strong ties serve on new media for information needs. A recent study of job-seeking on Facebook by Burke and Kraut (2013) investigates the role of strong ties in providing levels of support. Their findings dispute the hypothesis that people who interact more with weak ties are more likely to find a job, where interaction with strong ties may be more effective. This is because people may conceal their employment situation from others with whom they do not share a sense of intimacy. Further, strong ties such as family and friends may be more motivated to provide actual support. More research is invited on the role that new media plays in maintaining paths of communication with strong ties.

There is a body of new media research on the role of strong and weak ties for building social capital. Broadly, social capital refers to resources accumulated through social relationships (Coleman 1988). Useful information can be considered a form of social capital (Paxton, 1999). The ability for users to build information resources through social media participation is relevant to this thesis. Ellison, Steinfield and Lampe (2007, p. 1147) argue that there is a positive relationship between certain kinds of Facebook use and the maintenance and creation of social capital. They outline three types of social capital: bridging social capital associated with weak ties, bonding capital associated with strong ties, and maintained social capital associated with staying connected with a previously inhabited community. In their study of undergraduate students, they found that use of Facebook was associated with all three types, the most influential being bridging capital. Some of the dimensions that have been linked to social capital in this study and other work (for example, Papacharissi and Mendelson 2011 and Steinfield, Ellison and Lampe 2008) are outside the scope of this thesis; such as linking social capital with users' psychological traits. Social capital can be used as an explanatory framework for users' motivations for participating on social media, and the 'rewards' that they might gain. These rewards could be social or economic in nature, conferring access to wider societal participation. Ellison et al. (2011) argue that social networking websites can help users convert latent into weak ties thereby building social capital; users can broadcast requests for support or information to these enhanced networks. In Chapter 8, I will discuss the implications of building resources through social media participation for social inclusion.

4.4 Approaches and methods

This chapter addresses the primary research question of this thesis by conceptualising social media as important information utilities in Malaysia as a networked society. I illustrate the mainstream adoption of social media in Malaysia using dimensions of 'engagement' and 'source' in relation to information practices. In this thesis, engagement is reflected by frequency of use, how widely social media is accessed, and how important social media are regarded overall by Malaysian users. Further, I examine users' range of social networks as sources of valued information. I address the secondary research question of my thesis by comparing how socioeconomic and ethnic groups value different types of social networks, and the implications for participation in the network society. There is scope for more media studies in Malaysia that discuss social networks using frameworks of the network society and strong and weak ties. Postill (2009b, 2011) investigates how political leaders use personal media to increase their social influence through building weak ties. My focus is instead on whether Malaysian users adopt social media to connect with a broad spectrum of social networks for information seeking and sharing. Are social networks that are traditionally important in Malaysia (for example, family, friends, ethnic, and religious connections) prioritised by users when they evaluate information on social media? How do different socioeconomic and ethnic groups of Malaysian users value these ties? Studies of ethnocentrism and social media in Malaysia are emerging. Ridzuan et al. (2014) argue that social media has a role in promoting social solidarity through opening communication channels, although they do not provide an analysis of information sharing between groups. They highlight past research that suggests inter-ethnic communication in Malaysia to be wanting in education and traditional media environments (for example, Zainal and Salleh 2010 and others), although the role of social media is not examined. The specific questions that I operationalise in this chapter are:

Are social media foundational information and communication technologies in Malaysian society for users?

How are social networks prioritised on social media for information by Malaysian users of different socioeconomic and ethnic groups?

4.4.1 Measuring the foundations of social media use

The approach I take in measuring the significance of social media is guided by internet studies that measure basic adoption patterns, specifically perception of the internet's importance, frequency of use and accessibility (Ewing 2011; Ewing and Thomas 2010; Wellman and Haythornthwaite 2002). These 'basic' measures are useful because they allow us to gauge the mainstream adoption of a certain technology and if it is likely to have long-lasting significance. In Malaysia, there have been similar survey approaches to understanding basic internet usage (Hasim and Salman 2010; Salman and Hasim 2011; Salman et al. 2010; Salman and Rahim 2011a). Further, there is emerging Malaysian literature on social media usage. Mustaffa et al. (2011) offer a study of Facebook adoption by Malaysian youths, including time spent, amongst other factors. My study instead measures adoption across a range of age groups across social media platforms generally. The first question I ask measures the perception of the importance of social media by Malaysians in their everyday lives. Secondly, I examine whether social media are tools of everyday use; is social media use part of Malaysians' everyday routines? Finally, do Malaysians use social media across locations and contexts, or is use limited to certain settings? I assess importance, frequency and access in the following questions:

How important is social media to you in your everyday life?

How often do you use social media?

Where do you commonly access social media?

As stated, this is a simplified approach that is useful for gauging the ubiquity of social media as non-trivial media services in the everyday lives of Malaysians. I am aware that these are not full measures in determining the importance of social media. In Chapter 8, I present further analysis of the 'value' of social media in terms of education, employment and quality of life outcomes. I acknowledge that ICTs that have not yet achieved mainstream adoption may be worthy of study. Examples range from emerging and expensive technologies affordable for only a few (such as Google Glass) to basic, outdated technologies that marginalised groups have appropriated (such as feature phones). The focus of this thesis is however on social media as networked technologies that have widespread use.

4.4.2 Measuring the value of social networks

I use three dimensions to assess how social networks are prioritised by users for information on social media: connectedness, sources of useful information, and sources of trusted information. I measure against these three criteria the average proportion of respondents who select different types of social networks, in order to arrive at a ranking of prioritised social networks. As mentioned in Chapter 3, I assess 'usefulness' and 'trust' of information as criteria for determining the relevancy and value of an information source. 'Connectedness' refers to whether users have increased contact with a type of social network, either online or offline, through their use of social media. In measuring connectedness, I am influenced by Rainie and Wellman's (2012) notion that ties in the network societies are highly connected. While they refer to 'connectivity' in both social and technical terms (for example, personal and mobile connectivity), my objective is to focus on how often humans connect both online and offline as a result of their social media participation. For this reason, I adopt the term connectedness in preference to connectivity. In new media studies, internet connectedness has been used as a qualitative measure for the ability of people to connect to the internet (Jung, Qiu and Kim 2001; Jung et al. 2005), while social connectedness has roots in psychology referring to interpersonal, community, and general social ties (Wei and Lo 2006, p. 62). The following questions from my survey are used for this analysis:

Connectedness: *Has social media increased in general your everyday contact, online or offline, with any of the following?*

Useful: *Do you get information on social media that is useful in your everyday life from any of the following?*

Trust: *Do you get information on social media that you generally trust from any of the following?*

The multiple types of social relationships respondents could select from, were:

- Friends and / or family
- Work peers
- School, college or university peers
- Acquaintances and / or strangers
- People who share your religion
- People who share you race / ethnicity
- People who share your interests
- Other
- None

I have outlined literature on measuring tie strength using the language of strong and weak ties (Granovetter 1973) to illustrate a set of approaches to categorising social networks. As stated, I do not attempt to categorise strong and weak ties in my analysis, as this would require a more extensive modelling of variables that contribute to tie strength. For example, Gilbert and Karahalios (2009) identified 74 variables based on Facebook behaviours to predict tie strength. While there could be a relationship between my identification of connectedness with strong ties, I would need verification through collecting data on dimensions of intensity, intimacy, duration, reciprocal services, structural, emotional support and social distance (Marsden and Campbell 1984). A formal social network analysis of ties on social media in Malaysia in terms of preferred information sources would be of value in future studies for measuring racial polarisation in online interactions. This could incorporate sentiment analysis of information that is shared by individuals in heterogeneous or homophilic ethnic groups. More data would be required on measuring the frequency and motivations for individual interactions within and between networks (for example, Hogan 2009). This thesis has a narrower scope in examining how different types of social networks are valued for information in everyday contexts. There is an opportunity in Malaysian new media scholarship to build on global studies on internet polarisation in a political context (for example, Yardi and Boyd 2010). Further, I did not collect enough data to adequately measure 'social capital' derived through social media participation; the study by Ellison, Steinfield and Lampe (2007) had 19 questions in their instrument ranging from students' sense of belonging to a community, interacting with networks for job opportunities, to keeping in touch with contacts.

It should be noted that the questionnaire used both the terms, 'race' and 'ethnicity', as I wanted to ensure all respondents understood the type of social relationship to which I referred. I observed in Chapter 2 that these terms are often used interchangeably by Malaysians. It would have been preferable to separate out friends and family as options in

my questionnaire, given the importance of family in Malaysian culture. The overlapping ways in which people are connected (for example, family are also likely to share 'ethnicity'; school peers might also be 'friends') complicates the task of determining how social networks are prioritised. The objective, however, was to keep the number of options as concise as possible to ensure the questionnaire was completed. Further, I used the term 'contacts' in my questionnaire, but refer to 'connections' in this thesis (based on existing literature, see definition by boyd and Ellison 2003). Ideally I would have kept these terms consistent; pilot testing did not however indicate any confusion with the term 'contacts'. One important limitation of my approach is a lack of comparison data on how social networks are valued offline. I am not able to say with certainty whether social networks on social media are valued differently from networks offline.

4.5 Findings I: The foundations of social media use

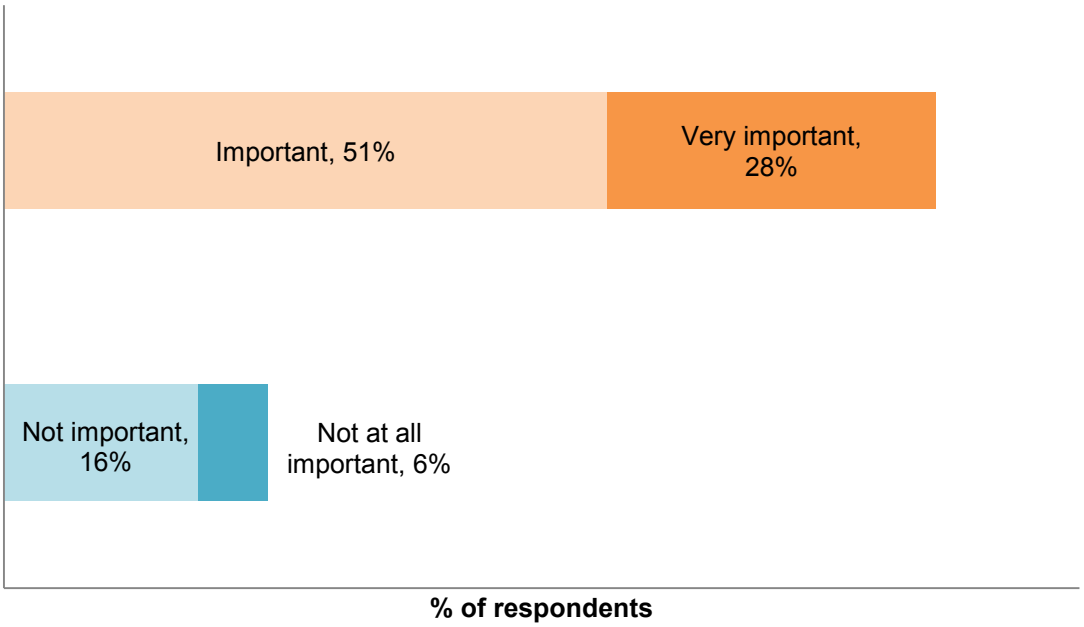
My results will show that social media are significant everyday information and communication technologies in Malaysian society. The majority of respondents said that they regard social media as important. Social media are not just occasionally used, or used solely for rare occasions; social media are used frequently for everyday activities, whether important or mundane. Both young and old Malaysian users regard social media as important in their everyday lives, signifying the wide appeal of social media. Malaysian users have daily activity rates that are particularly high compared to global usage. Furthermore, the ubiquity of social media in everyday use in Malaysia is reflected by social media being accessed in a range of networked settings, both fixed (home, work, school) and remote (mobile phone and cybercafé). Users with education and income advantages have increased access to social media through mobile use. Access to cybercafés by Malaysian users with education and employment disadvantages ensures a wide spectrum of social media participation.

4.5.1 The importance of social media use

The majority of Malaysian respondents (79 percent) said that social media said were either 'important' or 'very important' to them in their everyday life (Figure 4.1). Conversely, about one in five respondents (22 percent) said that social media were either 'not important', or 'not at all important'. In Chapter 1, I cited an MCMC (2009) report

which showed that 79 percent of Malaysian users said the internet was either 'important' or 'very important' in their daily lives. My results indicate that the importance of social media to Malaysian users is comparable to how the internet overall is valued.

Figure 4.1 How important is social media to you in your everyday life?



Percentages add up to 101% due to rounding
Source: Hanchard
October 2012
N=400

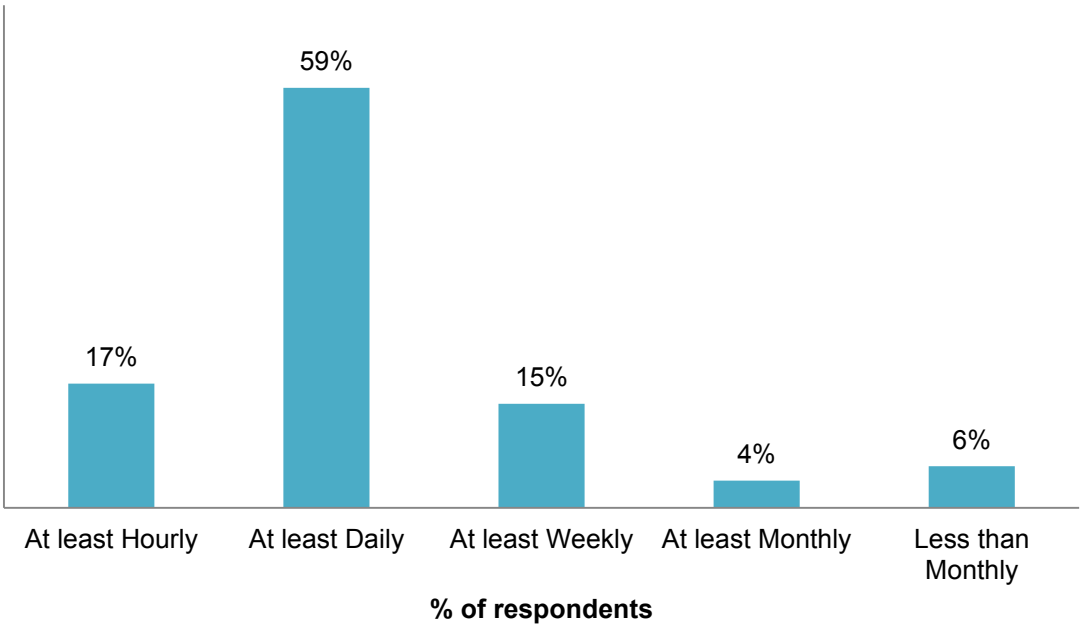
Malaysian users towards the younger and older ends of the age spectrum had the highest rates of reporting that social media are important in their everyday lives; 86 percent of 15-24 year olds (n=86) and 87 percent of users over 55 years (n=13) answered 'important' or 'very important' (A3.4.1). As young people grow up with social media as part of their media and technology environments, their importance in their everyday lives becomes more engrained. In December 2013, Facebook launched a tool for users to review the '20 biggest moments from the past year'. For young people, we can speculate that formative experiences from their early life experiences are being shared on social media. In turn, these experiences might be memorialised and recalled through social media, right through to digital traces of the dead, bringing in new practices of remembrance on social media (Leaver 2013). The high importance of social media to Malaysian users over 55 years

suggest that time availability could be a factor in the relative importance of social media when work and family commitments become less demanding. Further, offline contexts which provide opportunities for social interaction, such as school and work, may no longer be available for users nearing retirement age; thus, technology services which offer a means to connect with social networks increase in importance. Malaysian users in 'middle' age groups were less likely to value social media as important, possibly because of other priorities in their life; such as starting families or careers. Respondents in the 25-34 and 35-44 age groups were the most likely to say that social media were either 'not important' or 'not at all important'; 28 percent (n=37) and 26 percent (n=26) respectively. This was compared to 14 percent for both 15-24 year olds (n-14) and users over 55 (n=2).

4.5.2 The frequency of social media use

The results show that 59 percent of Malaysian respondents use social media daily (Figure 4.2). A further 17 percent of respondents use social media hourly, representing a total of 76 percent usage on a daily basis. This result suggests that social media are well-integrated in the daily life activities for at least three quarters of Malaysian users. The percentage of Malaysians who use social media on a daily basis is particularly high compared internationally. In Australia, 45 percent of users were on social media each day in 2013 (Sensis 2013). This compares with 43 percent of adults in the United States in 2011 (Madden and Zickuhr 2011). Although the time periods are different, it is fair to say that high Malaysian daily use of social media warrants attention, given international benchmarks (refer back to Chapter 1 which highlights that Malaysian social media take-up was 29 percent higher than the worldwide average in 2011).

Figure 4.2 How often do you use social media?



Percentages add up to 101% due to rounding
Source: Hanchard
October 2012
N=400

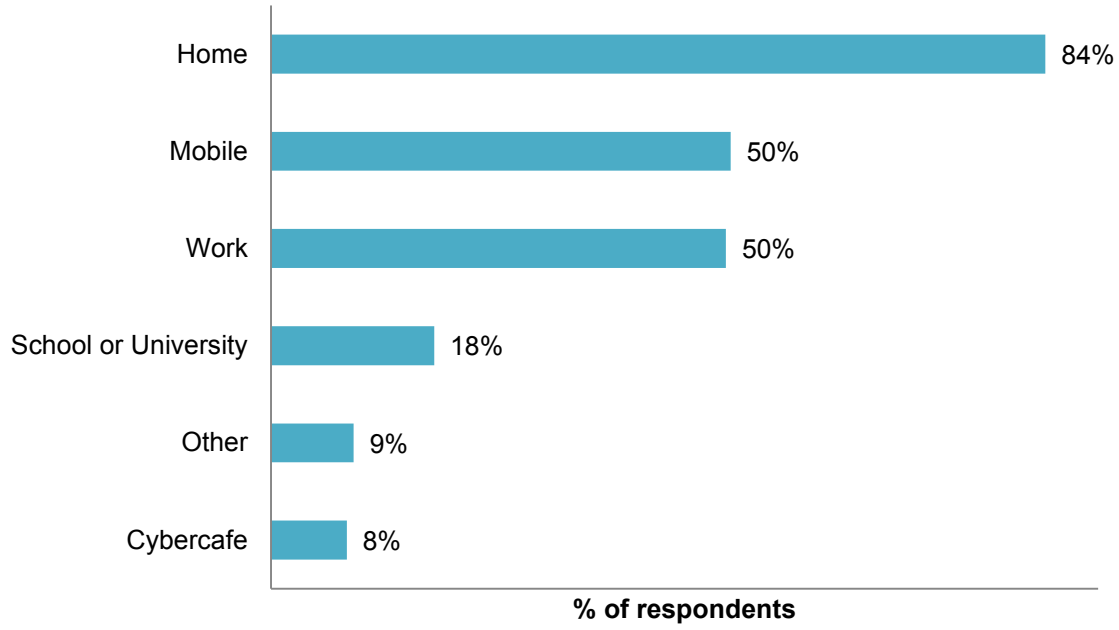
Young Malaysian users were the most active on social media; 81 percent (n=81) said they used social media either 'at least hourly' or 'at least daily' compared to an average across all age groups of 76 percent (A3.4.2). Only 67 percent of Malaysian users over 55 years old (n=10) reported using social media with that level of frequency. Urban users reported higher frequency rates of social media than rural users; 77 percent of urban (n=257) and 67 percent of rural users (n=46) used social media 'at least hourly' or 'at least daily' (A3.4.3). This finding (and the results below on access) suggests that population density could be related to increased social networking activity. There are potentially more opportunities for social interaction offline in urban centres, which translate into greater online sociality. Further research into the reasons why rural users in Malaysia are less active on social media would be of interest in determining digital divides based on residence.

4.5.3 The access points for social media use

The large majority of respondents (84 percent) said that they commonly access social

media at home (Figure 4.3). This finding suggests that social media participation is a domesticated routine (explored further in Chapter 7). In comparison, the reported share of Australian internet users who use social media at home is 96 percent (Sensis 2013). The home was followed by mobile device and work use, each 50 percent; school or university access, 18 percent; cybercafé, 8 percent. My results indicate that Malaysians use social media in multiple locations. Social media services are ubiquitous in everyday life and access is not restricted to specific contexts; networked technologies use spans from the home to work and beyond.

Figure 4.3 Where do you commonly access social media?



Respondents could select more than one option
Source: Hanchard
October 2012
N=400

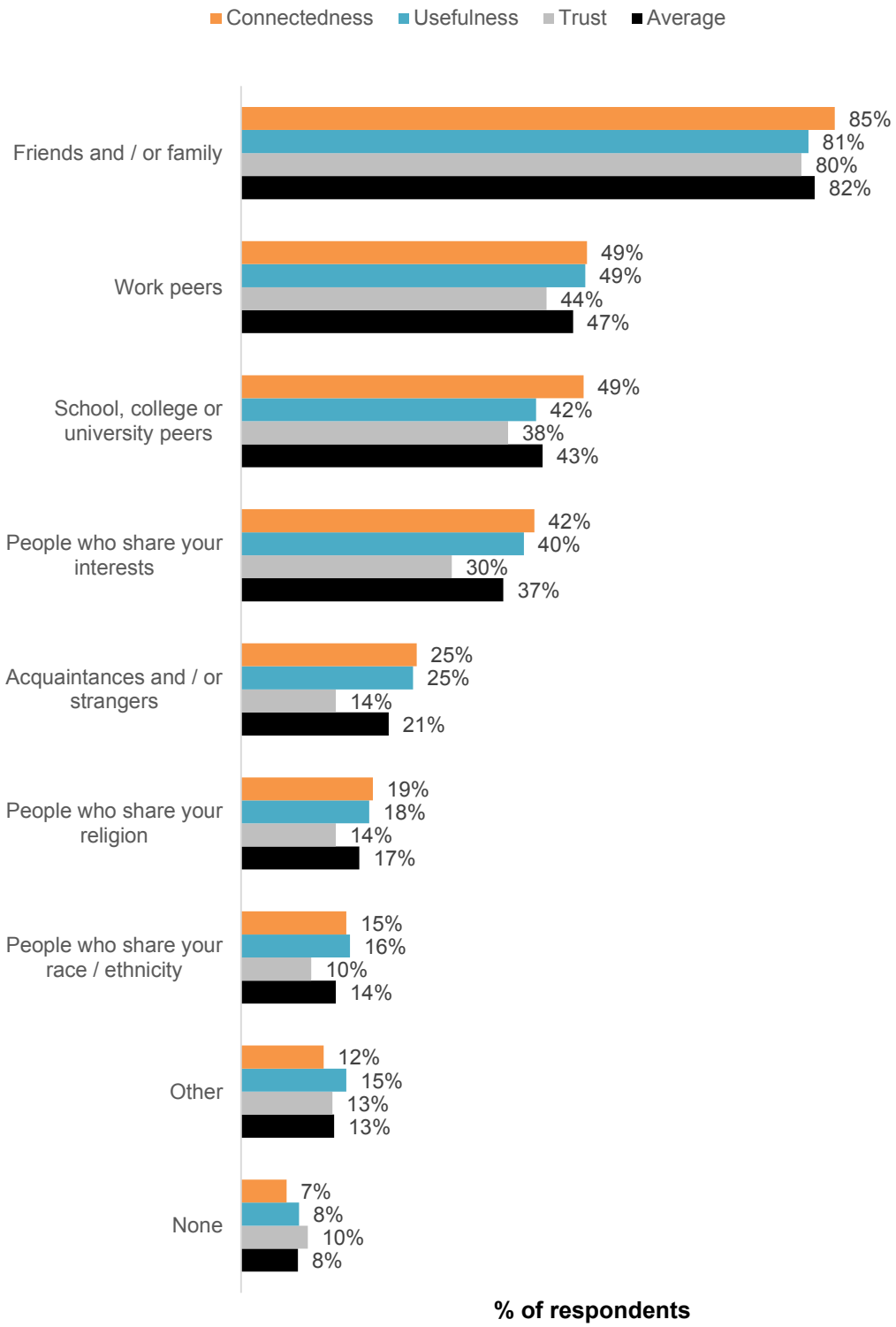
The fact that cybercafé use was the least common defined point of access suggests that most Malaysians can afford access to social media through their own means, through connections, institutions to which they are affiliated, or other types of access points. Low-income users were the most likely group to access social media through a cybercafé at 12 percent (n=9), while use at a cybercafé was negligible amongst higher income groups (A3.4.4). This finding is of interest given government programs to speed up the rate of

internet adoption through telecentres, *Internet Desa* (village internet centres), and the distribution of free netbooks to low income households (Salman and Hasim 2011). I reiterate that the data represents users rather than 'non-users', meaning that such government measures may still be required. Groups of socioeconomic advantage were more likely to access social media through mobile devices: 53 percent of tertiary (n=179) versus 34 percent of non-tertiary educated users (n=21) (A3.4.5); 61 percent of very high income (n=27) and 59 percent of high income users (n=47) compared to 45 percent of middle income (n=47) and 44 percent of low income users (n=33) (A3.4.6); and 52 percent of urban (n=173) versus 40 percent of rural users (n=27) (A3.4.7). There were no large differences in where the major ethnic groups accessed social media. Mobile devices were the second most commonly selected point of access to social media by Malaysians. Smart phones and tablets are important for access to social media in Asia generally. Nielsen (2012) reported that mobile and tablet devices were accessed for social media use by 59 percent and 28 percent of users in the Asia Pacific region, compared to 33 percent and 8 percent respectively in Europe.

4.6 Findings II: The value of social networks on social media

My results show that in terms of connectedness, sources of useful information, and sources of trusted information, Malaysian users were most likely (on average 82 percent of respondents) to prioritise friends and family on social media over other types of social networks (Figure 4.4). In stark comparison, social networks of shared religion were prioritised by 17 percent, and social networks of shared ethnicity by only 14 percent. The demographic results demonstrated nuances in groups and their preferences for social networks of greater social 'distance'. For example, Malaysian users with higher employment and education attainment were more likely to value information on social media from work or school peers, connections of shared interests, and acquaintances and strangers but not from religious or ethnic social networks. The prioritisation of types of social networks for useful and trusted information, was similar to how social networks were rated in terms of increased contact ('connectedness'). This suggests that users are more likely to increase their information seeking and sharing activity with social networks on social media which they also believe provide useful or trusted information. Overall, users were more likely to value social networks for useful information, than for trusted information.

Figure 4.4 Connectedness, usefulness and trust value of social networks on social media, ranked by average



Respondents could select more than one option
Source: Hanchard
October 2012
N=400

4.6.1 Connectedness through social networks

'Friends and / or family' were valued by 85 percent of respondents for connectedness; all other types of networks were chosen by less than 50 percent of respondents (Figure 4.4). It is of particular interest that religious and ethnic social networks were the least likely to be prioritised in terms of connectedness by Malaysian users. The finding that friends and family were highly prioritised for everyday information on social media, while connections of shared ethnicity or religion were not, might seem surprising, given that family members are likely to share ethnicity and religion. However, it would be wrong to assume that some or all members of an ethnic or religious group in a certain location 'know each other'. Rainie and Wellman (2012, p. 40) warn against assuming the membership and boundaries of social networks; for example, not all "Italian-Americans on the New Jersey Shore - know each other and belong to the same group". The authors highlight (p. 40) that ethnicity is a social category (which treats people as discrete individuals), not a bounded group (such as family or village). Peers were valued after friends and family, with 49 percent of respondents selecting work peers and school peers respectively, followed by 42 percent choosing 'people who share your interests'. Only one in four Malaysian users selected acquaintances and strangers as connections with whom they increased contact through their social media participation.

Tertiary-educated respondents were more likely to increase their connectedness with 'work peers', 'school peers' and 'acquaintances and / or strangers' through their use of social media (Table 4.1). Young users (15-24 year olds) were highly likely to increase their connectedness through social media with 'friends and / or family' at 94 percent (n=94) compared to the average across all groups of 85 percent. This is possibly due to a generational transition of young users' experiencing more of everyday life online. Intimate connections that are important to young users in offline contexts, such as family and friends, can be easily reached through their 'social graph' on social media. Frequency of use and high levels of access to social media means that opportunities to interact with connections that are familiar to the user are increased.

Table 4.1 Percentage of users who selected each social network for increased 'connectedness': major differences between demographic groups

Demographic	Social network	Category (higher)	%	n	Category (lower)	%	n
Age	Friends and / or Family	15-24	94	94	Average	85	n/a
Education	Work peers	Tertiary	53	180	Non-tertiary	26	16
	School peers	Tertiary	45	153	Non-tertiary	24	15
	Acquaintances and / or Strangers	Tertiary	27	90	Non-tertiary	16	10

See Appendix A3.4.8 to A3.4.11 for full cross-tabulations.
'Major difference' is 5 percent or greater between two categories, or between category and average.
Source: Hanchard; October 2012; N=400

4.6.2 Useful information on social networks

In terms of how Malaysians regard how 'useful' the information they get from their social networks, 'friends and / or family' was the most valued source at 81 percent of respondents (Figure 4.4). Only 8 percent of respondents selected 'none'. Again, the majority of respondents rated other types of social relationships ahead of ethnic and religious connections for sources which provided useful information. 'Work peers' were rated the second highest source of useful information by respondents ('work peers' were rated third after 'school peers' for connectedness). This could suggest that information shared by 'work peers' is more likely to be regarded as useful or functional. While 49 percent of respondents said that social media helped them to increase connectedness with 'school peers', only 42 percent said that they found information from school connections to be useful. The seven percent difference suggests that some users value 'school peers' for social and leisure-oriented, rather than collegial, relationships.

For useful everyday information, there was evidence that users with tertiary education were more likely to value 'work peers', 'school peers', 'people who share your interests' and 'acquaintances and / or strangers'; notable exceptions were connections of shared religion and ethnicity. See Table 4.2. Social networks consisting of 'peers who share your religion' were valued for useful information by groups of socioeconomic disadvantage. We can speculate that traditional social networks continue to have a role in providing social

support in a Malaysian setting for some users: religious social networks were selected by 25 percent of rural users (n=17) compared to 17 percent of urban users (n=56); 23 percent of non-tertiary (n=14) compared to 17 percent of tertiary educated users (n=59); 28 percent of low income users (n=21) compared to an average of 18 percent across all income groups; and 21 percent of 'low-skill white collar' (n=14) compared to 15 percent of 'high-skill white collar' users (n=31). The importance of religion to Malays (Stimpfl 2006) was somewhat reflected by the fact that religious networks were regarded as sources of useful information by 27 percent of Malay speaking respondents (n=27) compared to the average of 18 percent across all language groups.

Table 4.2 Percentage of users who selected each social network as useful source of information: major differences between demographic groups

Demographic	Social network	Category (higher)	%	n	Category (lower)	%	n
Language	Religion	Malay	27	27	All category average	18	n/a
Residence	Religion	Rural	25	17	Urban	17	56
Education	Work peers	Tertiary	53	180	Non-tertiary	26	16
	School peers	Tertiary	45	153	Non-tertiary	24	15
	Interests	Tertiary	41	139	Non-tertiary	35	22
	Acquaintances and / or strangers	Tertiary	27	90	Non-tertiary	13	8
	Religion	Non-tertiary	23	14	Tertiary	17	59
Income	Religion	Low	28	21	All category average	18	n/a
Occupation	Religion	Low-skill white collar	21	14	High-skill white collar	15	31

See Appendix A3.4.12 to A3.4.20 for full cross-tabulations.
Major difference' is 5 percent or greater between two categories, or between category and average.
Source: Hanchard; October 2012; N=400

4.6.3 Trusted information on social networks

The pattern of connections regarded as sources of trusted information was slightly different from the prioritisation of social networks in terms of connectedness and as sources of useful information. Ten percent of respondents indicated that they do not trust information from any type of tie on social media ('none'), compared to 7 percent for 'connectedness', and 8 percent for 'usefulness' (Figure 4.4). 'Trustworthiness' is a rarer attribute of information than 'usefulness' on social media; I will provide results in the next chapter demonstrating that this is true of new media in general. Rainie and Wellman (2012) suggest that "the turn toward networks will continue - barring the loss of flexible connectivity and the loss of trust over large spatial and social distances" (p. 57). Here Rainie and Wellman are suggesting that trust is a 'casualty' of connectivity across weak ties. Users might enjoy access to weak ties in new media environments, but the likelihood of receiving information that can be trusted diminishes. This possibly has adverse implications for the value and reliability of social media as information utilities for making choices in everyday life.

Tertiary-educated users were more likely to trust information on social media from 'work peers' and 'school peers'. See Table 4.3. Young users were the most likely group to value intimate connections for trusted information; 'friends and/or family' were regarded as sources of trusted information by 87 percent of 15-24 year olds (n=87), compared to an average across all age groups of 80 percent. We can speculate as to why young people are more likely to trust information from intimate connections on social media; firstly, their life experiences might not yet have exposed them to connections of greater social distance, such as work; and secondly they are more likely to be economically dependent, so intimate social networks could be more crucial for support.

Table 4.3 Percentage of users who selected each social network as trusted source of information: major differences between demographic groups

Demographic	Social network	Category (higher)	%	n	Category (lower)	%	n
Age	Friends and / or family	15-24	87	87	Average	80	n/a
Education	Work peers	Tertiary	46	155	Non-tertiary	31	19
	School peers	Tertiary	41	138	Non-tertiary	23	14

See Appendix A3.4.21 to A3.4.23 for full cross-tabulations.
Major difference' is 5 percent or greater between two categories,
or between category and average.
Source: Hanchard; October 2012; N=400

4.7 Discussion

Social media are important networked information and communication technologies in the everyday lives of Malaysian users. This is reflected by the perceived importance of social media, frequent use, wide access, and diverse social networks that users value on social media. Indeed, Malaysian social media users are able to seek and share information from a range of social networks because of widespread adoption. Social media are tools that increase connectedness between Malaysian social media users. Platforms help Malaysians source useful information from a broad range of social networks and, to a lesser degree, trusted information. Friends and family are the most highly prioritised types of social networks based on the criteria of connectedness (increased contact either online or offline), sources of useful information, and sources of trusted information. While friends and family connections are the most valued sources of useful and trusted information, there are no apparent preferences for everyday information from connections of shared religion or ethnicity by Malaysian users. Shamsul's (1996, 2001a) notion of a two-social reality is useful in exploring the argument that while deep racial polarisation characterises national media discourse and politics, information seeking on social media to meet everyday needs between ethnic groups may not be necessarily governed by the same dynamics. It would be of value in future studies to conduct comparative research as to whether Malaysians are more likely than global internet users to value traditional social networks, such as family, on social media. Social media could

have a greater role in social cohesion than expected through enabling information sharing across networks.

Malaysian users with education and income advantages have increased access to social media through mobile device use, but access to cybercafés for users with education and employment disadvantages ensures a wide spectrum of social media participation across socioeconomic groups. Users who have greater access to economic resources (through high-skilled employment and education attainment) are more likely to value information on social media from work and school peers, connections of shared interests and acquaintances / strangers; while Malaysians of lower socioeconomic means (rural, non-tertiary education, low-income and 'low-skill white collar') are more likely to value religious networks for useful information on social media. Users who have skills acquired through higher education are able to expand social distances through information seeking and sharing on social media with the types of ties they value. This potentially enables them to have greater access to opportunities such as job-seeking (Kavanaugh et al. 2005). Malaysian tertiary-educated users importantly value information from social networks within professional contexts, suggesting that the content they are seeking and sharing has relevance to professional objectives. We can speculate that users who already have socioeconomic advantages may participate on social media in ways that increase social capital; thereby increasing divides between users of lower socioeconomic attainment. My results in Chapter 8 will show that it is the curation of information based on the source that differentiates users of socioeconomic advantage.

Social media services are part of the network society; interactions with social networks are enabled and constrained on platforms. Castells' 'network society' describes co-evolving technological and social structures. While entrenched values of trust linger from collectivist social formations (for example, the family) cultural forces such as ethnicity or religion have less of a role than expected in how Malaysians evaluate information on social media. We can speculate that Malaysian users evaluate information for its own merit rather than relying on possible 'biases' passed on from their upbringing. This is not to say that a tenor of discussion and debate that is specific to Malaysia is absent in social media use; I will show in this thesis that shared information is coloured with references to local people, places and events. Networked individualism is useful for highlighting the fact that users can interact across different types of social networks; my results show diversity in the types of social networks that Malaysians connect with, and value for useful and trusted information. I am not, however, suggesting that collectivist social formations are being

weakened as might be expected from a networked individualism perspective; my data shows that intimate connections, in particular friends and family, remain important to Malaysians on social media. In fact, newer studies highlight the importance of strong ties on social media for personal and socioeconomic needs (Burke and Kraut 2013).

I do not claim that social media are devoid of racial polarisation or racist content; during politicised events, opinions are likely to become polarised, and users more divided along racial lines. For example, during the Malaysian General Election in May 2013, commentators observed that users were actively 'de-friending' over conflicting political viewpoints (Ding 2013). Connectedness on social media may be contingent on social cohesion in everyday life. The type of content that users choose to spread is a factor in whether social media contributes to social cohesiveness. It is possible that non-credible information or hate speech might be able to be circulate more quickly and widely given affordances of 'spreadability' on social media (discussed in the next chapter). Social media content is dynamic and is as much determined by evolving cultures as platform design. Leong's social imaginaries framework on the negotiation of public culture, reminds us that the etiquette of what is acceptable to share in social media environments will be determined by the consensus of users. As stated, I do not make wider claims for social media participation when racial polarisation might be elevated, although this is of great interest. For example, Lotan (2014) examined information silos and 'personal propaganda' during the Gaza and Israel conflict of August 2014.

While I have argued that social media are significant services in Malaysia, their relative importance should be put into perspective. It should not be assumed that social media participation is beneficial. For example, futurist Douglas Rushkoff (2013) writes about the detrimental effects of users being 'over-connected' with their real world networks. He describes this as part of a culture of over-obsession with being connected all day, every day, and an unhealthy concern with the 'present,' without any real long-term social benefit. Similarly, the social mobility (or lack thereof) of users who have diminished access to social media through circumstances of education and occupation should be considered, but not overhyped. The value of social media participation depends on the skills that users have already acquired, and how effectively they are able to apply social media information to build social capital. As stated, it is highly relevant to consider the socioeconomic divides between users who can tap into global networked information resources; in Malaysia, the lack of access to the internet by rural users is a concern (Salman 2009). An examination of 'non-users' of social media would be valuable as a comparative study.

The scope of this chapter is limited to analysing the value of social networks in the context of everyday information seeking in Malaysia. Determining measures of the 'value' of information on social media, is needless to say, a complex task also inviting qualitative studies. My examination of social networks on social media is highly simplified; I have not attempted to define strong and weak ties on social media as perceived by Malaysian users. I have used the criteria of connectedness, sources of useful information, and sources of trusted information as one approach to examining how social networks are prioritised by Malaysians; although there are certainly other relevant criteria, especially with respect to identifying how social capital is gained through interaction with ties on social media. My finding that friends and family are the most highly prioritised social networks on social media by Malaysian users would likely translate to a finding that strong ties are important in a Malaysian context. Questions on whether social media are weakening traditional social networks in Malaysia deserve further analysis through a formal social network analysis approach. The potential for social media to connect or polarise ethnic groups deserves ongoing analysis in cross-cultural new media scholarship. Given the fragile nature of social cohesion in local, national and global contexts, studies of how cultural and ethnic groups participate on social media are highly significant.

Chapter 5 Platforms as information media

Traffic jams are the bane of existence in Kuala Lumpur. As people commute to and from work each day in unpredictable conditions (flash floods are common), sitting in traffic is part of everyday life. At least one has access to the radio. BFM Malaysia, an independent business channel, cycles out slogans based on the station's acronymic name to keep its listeners amused ("Building First-World Mindsets", "Bribe-Free Malaysia", "Balming Frustrated Minds" and so forth). Talk back radio attracts all sorts to debate national concerns of the day. Alternatively, a stationary driver can use their smart phone. Complaining about traffic on social media instils feelings of camaraderie; solidarity through suffering. Why not use news feeds to see if your friends are similarly afflicted and get updates on congested areas before mainstream media scramble to bring coverage? Or perhaps just use the time to catch up on personal news. Malaysian media celebrity Niki Cheong recounts, "When a car doesn't move at traffic lights, mum used to say the driver must be on phone. Now, she says, must be 'playing' Twitter."[18] Each day Malaysians are exposed to different information sources and have choices as to which media they use and how to take action (perhaps choose a different traffic route based on feedback from drivers). Information media are pervasive in everyday life, even in traffic jams.

The objective of this chapter is to establish the value of social media platforms as information media, in the context of traditional and new media environments in Malaysia. There are two central propositions made here. The first is that social media platforms are a valued media option for Malaysians to seek and share useful, and to some degree trusted, information. Secondly, I make the distinction that social media enables information seeking and sharing, on top of communication and social affordances. In Chapter 2, I explained wider social and political forces shaping the media environment; these factors affect how and why Malaysians access different types of traditional and new media. While subject to sedition laws that govern traditional media, new media offers the possibility for Malaysians to gain information and news that has not been 'filtered' by authorities. Existing scholarship emphasises the relevance of traditional media in Malaysia (Salman et al. 2011). Here I provide data that supports the argument that social media are an important alternative information source for Malaysians. In the previous chapter, I compared types of social networks on social media as sources of useful and trusted

[18] https://twitter.com/nikicheong/status/443357273029476352 Viewed 11 March, 2014

information; now I compare types of media as sources of useful or trusted information. Social media has distinct properties from other information and communication channels including television, newspapers, radio and other forms of online media. Users, for example, have the ability on social media, unlike other media, to curate their 'news feed' (filtered algorithmically by the platform) based on relevant social networks. Here I ask, what are Malaysian users' perceptions of new and social media as valued information platforms in the wider media environment?

This chapter begins by distinguishing characteristics of new media from traditional media. I describe the features of social media using a networked media framework, influenced by the work of Zizi Papacharissi, danah boyd, Bernie Hogan and others. Terms such as 'architectures' and 'affordances' are adopted to describe how platforms enable and constrain the practices of users. This networked media approach provides a basis for analysing actual information practices using an everyday life information seeking model in the next chapter. I diverge from networked media scholarship that focuses on sociality and self-presentation on social media, to emphasise everyday information practices. Platforms enable more than just opportunities for social interaction and self-presentation; they allow users to seek and share valuable information that has wider purpose in their everyday lives. I present results that compare motivations for using social media, focusing on information, communication and social practices; each platform has distinct architectures that encourage particular types of participation. I consider Twitter's architecture when explaining information and media sharing practices by Malaysian users on the platform. Given a rapidly changing global media environment where users' news feeds on social media are comprised of different types of sources, the preferences for new and traditional media by Malaysians need to be re-examined.

5.1 Network metaphors of new media versus traditional media

What makes new media different from traditional media? Cubitt (2013) argues terms such as 'interactivity' and 'connectivity' in networked environments characterise new media (p. 19). Interactivity refers to the ability of users to interact with content producers (for example, readers can share their comments directly with a blog author) while connectivity refers to the ability of users to interact with other users (for example, members of a forum can share tips with each other). On new media, information flows in multiple directions, unlike traditional broadcast media. This changes the relationship between publisher and

reader (refer to Bruns' 2006 and 2008 work on user production and consumption, termed 'produsage'). The differences between new and traditional media are blurring. José Van Dijck and Thomas Poell in *Understanding social media logic* (2013, p.11) argue that "mass media and social platforms can hardly be seen as separate forces when it comes to controlling information and communication processes". The authors frame social media as 'mass media' through their logic of programmability, popularity, connectivity and datafication; these refer respectively to the ability of platform owners to enable content through design, measure and influence popularity, expedite connections between individuals and groups, and quantify audiences. Their argument is that social media are not specialised, niche media; they have broad appeal and influence in everyday life. What distinguishes social media are the affordances for social interaction. Marika Lüdders (2008, p. 685) contends that "personal media are distinguishable from mass media, if not always technically, then at least socially". Lüdders argues that mass media no longer has the monopoly on providing general information, as users access information through personal networks. Users make information choices that are mediated in social media environments by technical features.

Social media, as information media that are embedded in social relationships, can be described using the language of networks. In the previous chapter I highlighted Castell's notion that networked technologies are distinguishing features of the network society. The influence of Castells' framework can be found in recent new media terms, such as the 'networked self' and 'networked publics,' used by media scholars Zizi Papacharissi, danah boyd, Mizuko Itō, Axel Bruns and others. Papacharissi (2011) uses the metaphor of a 'networked self' to contextualise online individual activity in social groups. Another study by Papacharissi and Mendelson (2011) outlines interpersonal, media, information and professional advancement motives for using social media. They integrate a 'uses and gratifications' approach (social-psychology of the individual) with a social network 'structural' approach (networked features of social media websites). Their objective is to link motives of use with social outcomes, such as bridging social capital through weak ties. They argue that sociality is linked to 'sociability' where social acts and behaviours are 'normalised' through media. The second term 'networked publics', refers to discourse between connected individuals in public environments that is often political in content. boyd (2011) explains that 'networked publics' reconceptualises spaces for community communication, such as the town or village, as belonging to the online sphere. She describes social network sites as a 'genre' of networked publics, arguing that "Networked technologies reorganize how information flows and how people interact with information

and each other. In essence the architecture of networked publics differentiates them from more traditional notions of publics" (p. 41). Architecture and design mediates how information flows between users on social media.

My approach differs from a 'networked self' and 'networked publics' perspective by focusing on information practices in everyday contexts, beyond motives of sociality, self-presentation and political discourse. I emphasise that everyday information seeking on social media can serve utilitarian outcomes in everyday life; information is not always exchanged for the sake of socialisation, even while sociality is inherent in social network sites (Stutzman 2006). Users have the option of sharing information in public arenas (networked publics), such as comments on status updates, which may invite further participation from third-parties. I diverge from social media literature that adopts a uses and gratifications approach (for example, Papacharissi and Mendelson 2011) as I am concerned with identifying how social categories (such as ethnicity), rather than individuals, participate on social media. In the previous chapter I critiqued the application of a networked individualism approach in collectivist cultures, such as Malaysia. The notion of a 'networked self' is highly individualistic; how self-presentation translates to a Malaysian and Southeast Asian context deserves examination in future studies.

5.2 The architectures and affordances of platforms

Platforms are new media environments for user interactivity and connectivity. Communications scholar Tarleton Gillespie (2010) argues that while the term 'platform' has a vernacular connotation in commercial environments, platforms should be understood in similar terms to traditional media; that is, online platforms are 'media'. He writes that the term 'platform' has been loosened from its original computational etymologies, to reference new media forms such as user-generated content, streaming media, blogging, and social computing. The 'architectures' of platforms refer to the design features that enable and constrain user practices, and which distinguish new from traditional media. Examples on social media could include 'like' buttons (users acknowledge a post), user lists for curating content (only news feeds from certain social networks are consumed), and privacy options (news feeds are shared with certain social networks). Socio-technical elements are designed by platform owners, but users make their own choices as to how they interact within these architectures. The result of these interactions characterise the tone of the environment, which could be described for

example, as 'recreational' or 'professional.' Papacharissi (2009) argues that 'genres' of behaviour are suggested by architectural elements but she cautions that these are not 'limiting'; behavioural norms contribute to the culture and orientation of social network sites. Papacharissi and Easton (2013) describe the 'habitus' of a social media platform (influenced by French sociologist, Pierre Bourdieu) referring to the set of "dispositions that emerge out of the social architecture of social media" (p. 170). For my purposes, it is sufficient to say that social media environments are unique, depending on the practices that are encouraged through platform architectures. The balance between information, communication and social intentions of use are enabled and constrained by technical design and the culture that emerges through users' preferences.

Affordances are the architectural mechanisms through which social media can influence everyday life. New media scholar Bernie Hogan (2009) argues that technology affords social action and that social structures are afforded by networked media. Hogan writes that the language of affordances offers a way to work between a technological determinist and a cultural constructivist logic (p. 24). Social affordances are non-deterministic 'possibilities' for the ways in which technology and the internet can enable and constrain social action. Hogan and Quan-Hasse (2010, p. 310) further explain how 'perceptual cues' help users decide to take action from the opportunities presented in social media environments. On social media, a user may decide to accept a friend request based on the platform 'informing' the user there is a mutual acquaintance with the requester. Perceptual cues encompass subjectivity on the part of the user in how they choose to interact with various social networks. Possibilities for interaction within and across social worlds are described by Papacharissi (2011) as "architectural affordances". boyd (2011, p. 46) provides a breakdown of the affordances that networked technologies introduce; these are persistence (archiving of content), replicability (content can be duplicated), scalability (visibility of content) and searchability (content can be indexed). A fifth structural affordance, shareability, is suggested by Papacharissi and Gibson (2011), where networked technologies encourage sharing, rather than, withholding of information. These typologies are likely to require re-examination as platforms evolve.

The design features of 'open' versus 'closed' platforms, highlight new problems of audience, in terms of which social networks should be privy to shared information by users. Marwick and boyd (2011) identify the need to reconceptualise audiences on new media, in relation to the phenomenon of "context collapse" on micro-blogging websites. The authors describe how social media platforms collapse multiple audiences into single

contexts, giving users new challenges in managing their social worlds. They write about an imagined audience constructed by the user based on technological affordances and social cues. Users are faced with blurred formal and informal social contexts and are forced to present themselves to diverse audiences. The 'mums on Facebook' effect is one example, where young users may feel constricted in their online activity by the presence of a family member who might not have previously been aware of their activities. Facebook and Google Plus allow users to tailor content to specific types of connections, so that users can attempt to keep their social worlds separate. New problems in relevancy have been created as users juggle the balance between 'public' and 'private' content; in particular, how much of their private lives should be exposed to public audiences.

5.3 Modes of participation: information, communication and social

Users not only use social media to communicate and to be social; they use social media to seek and share information that might be useful in their everyday lives. Recent new media literature emphasises the importance of information sharing and communication on social network sites as a motivation for participation (Ellison and boyd 2013). In the previous chapter, I argued that social media were adopted widely because they facilitate information sharing with a range of social networks; here I emphasise that social media afford information seeking and sharing within and between these networks. Information sharing, as a social practice, is a critical component of networked technologies (Bouman et al. 2008; Brown and Duguid 2002; Wittel 2001). New modes of information and communication flow are accounted for in a network society framework. Castells' (2009, p. 54) defines communication as the "sharing of meaning through the exchange of information"; that is, communication is socially meaningful. In the context of social media, interaction with audiences helps us to understand information versus communication intent. Papacharissi and Easton (2013, p. 76) explain that "Without information flowing between individuals, the network becomes a static, asocial environment." The authors loosely describe sociality as the decision to share personal information. Sharing information across networks to find relevant answers raises the question of who is the audience of each piece of information.

The 'breadth' of information flow on platforms between users sharing content and their recipients (audience) provides cues as to users' information and communication

intentions. In terms of breadth, I refer to whether users share information broadly with their total audience on the platform – 'broadcast' – or direct information at a more limited audience – 'micro-broadcast'. Wohn et al. (2011) contend that a key affordance of social media is the broadcasting of information to general and specific audiences. They term the ability to select specific audiences for messages as 'micro-broadcasting'. Practices of sharing information and communication with broad and narrow audiences are being re-conceptualised on new media. Hogan and Quan-Hasse (2010) present a framework where "social media afford two-way interaction with an audience, beyond a specific recipient" (p. 310). Social media are 'many-to-many' communication platforms, where users may be addressing other single users, or a group of users. The content of the communication and the context of architectural design (for example, in a private message box, or on a public status update) provides clues as to the intended audience. Marwick and boyd (2011, p. 129) argue that in contrast to broadcast media, users have a clear path of communication to the 'speaker' on networked media. It should be noted that on platforms such as Twitter, communication might be between certain individual users but it is often a 'public' act (boyd, Golder and Lotan 2010; Marwick and boyd 2011; Richardson and Thomas 2012). Other users might choose to enter the conversation without direct invitation and contribute to a semi-public conversation (networked publics).

Affordances are not necessarily uniform across different platforms (Donath 2007; Papacharissi 2009; Stutzman 2006). Papacharissi (2009) in her comparative analysis of social network sites Facebook, LinkedIn and ASmallWorld, describes platforms in terms of private or public interaction, styles of self-presentation, cultivation of 'taste performances' and the formation of 'tight' or 'loose' social settings (p. 199). LinkedIn for example enables "professional related questions, answers and conversation" (p. 209). The mode of information exchange is related to the professional nature of the website. Facebook, according to Papacharissi, has a publicly open structure, looser behavioural norms, and many tools that users adopt to leave social cues for each other. In contrast, LinkedIn and ASmallWorld have produced 'tighter' spaces offering less room for "spontaneous interaction and network generation" (p. 215). Since the publication of Papacharissi's study, Facebook's structure has become more 'closed' over time. Internet research institution Pew reports that only 14 percent of American teens in 2012 had completely open Facebook accounts (Madden et al. 2013). Twitter tends to be more of an open network, as users are not socially or technically obliged to follow back users (Marwick and boyd 2011, p. 116). Users can reply publicly to other users through the '@' convention or

privately through a 'direct message'. Further, relevant information can be filtered from 'noise' through the curation of content on lists; while each user has their own group of 'followers' who can 'opt-in' to their content. Twitter's architecture is relatively simple where users can post links to different types of media. The public and private architectures of Facebook and Twitter mean that content and etiquette for each network can differ. For example, the hashtag convention is more common on Twitter and is used to create topics around tweets (boyd, Golder and Lotan 2010) or signify quirky or cynical observations. The information practices that I observed on Twitter for this thesis can be regarded as particular to both the platform architecture and local Malaysian setting.

5.4 Approaches and methods

This chapter addresses my primary research question by establishing social media as media that support everyday information seeking and sharing. As with the previous chapter, the dimension of social media participation I focus on is the 'source' of information. I ask which types of traditional or new media offer the most useful or trusted source of information. I establish social media as information utilities, in reference to social and communication motivations for use. Furthermore, I illustrate specific information and communication practices on Twitter. This chapter contributes to Malaysian media studies by offering comparison data of attitudes towards traditional versus new media. According to Salman et al. (2011, pp. 3-7) Malaysians still prefer to get their news through print newspapers, radio and television, even while traditional news outlets are perceived as "too government friendly and serve as the propaganda tools". The authors argue that while traditional media are subjected to global trends and financial pressures by audiences and advertisers shifting to online media, new media has yet to improve its credibility to Malaysians (p. 8). I present findings that reassess these perceptions of new media. The networked media approach I take differs from Malaysian new media scholarship where a 'uses and gratification' approach is common (for example, Hasim and Salman 2010; Salman et al. 2010; Salman and Rahim 2012; Wok, Idid and Misman 2012). My framework allows me instead to ask how the architectures and affordances of platforms enable and constrain information practices on social media. Further, I extend social media scholarship on Malaysia which focuses on social affordances. Mustaffa et al. (2011) in their study of Facebook adoption by Malaysian youths, for example, investigates social motivations for use; in particular, 'communicating with friends', 'reconnecting with old friends,' 'establishing networking' and factors such as

peer pressure. While the authors touch on general everyday use (one option they measure is 'makes routine life easier') their focus is on social rather than information practices. I examine whether there are differences in perception between socioeconomic and ethnic groups towards the value of traditional versus new media, and the implications of those differences. The two main areas of investigation in this chapter are:

How important are social media as information media to users when comparing traditional and new media?

How important is information seeking and sharing as a motivation for social media use in relation to communication and social practices?

5.4.1 Measuring the information value on new and traditional media

I use my questionnaire results to compare whether information on social media is regarded as useful or trusted compared to other new and traditional media. I extend on themes of 'usefulness' and 'trust' introduced in Chapter 3, as criteria for how users can interpret and evaluate information. This approach allows me to establish the 'value' of social media information, although my approach is not exhaustive. I am able to assess the relative importance of different media types with regard to the quality of information they offer. The comparison serves to explain why social media has an important role in the Malaysian information and media environment. It also prompts wider questions on the consequences of the effect of censorship and authority mediation on the appeal of certain media types to Malaysian users. In my analysis, I categorised social media, search engines, online news websites and blogs as new media; and television, radio and newspapers (print) as traditional media. The following two questions were used for this analysis:

From which of the following do you get useful information for your everyday life?

From which of the following do you get information that you generally trust?

Respondents could choose multiple answers from the following:

- Social media
- Search engines
- Online news websites
- Blogs
- Television
- Radio
- Newspapers (print)
- Other
- None

I have identified 'new media' using Cubitt's (2013) definition which encompasses interactive and networked technologies. Each medium has different affordances for networking; for example, social network sites encourage interactions with different types of connections while blog content is often one-directional. While blogs allow users to interact through posting comments and feedback to articles, the primary focus is to distribute long-form content by the user-as-publisher. My approach offers a contribution to understanding the changing media environment in Malaysia, particularly evolving attitudes towards new media. The types of media options I provided to respondents were not exhaustive; I do not discuss important media forms such as advertising, filmmaking, music, festivals and so on. Other scholars in Malaysia have covered the cultural and national importance of these types of media (Yeoh 2010; Hopkins and Lee 2012). Rather I focus on establishing social media as types of information media. Given that my thesis concerns information practices, I examine criteria for evaluating the value of information, rather than on 'perceptual cues' on social media (see Hogan and Quan-Hasse 2010). Specifically, I examine usefulness and trust as criteria that influence whether users decide to take action based on the information that is shared with them. The analysis offers a basic indication of attitudes towards traditional and new media, but does not provide more detailed insights into users' reasons for the types of media they adopt.

5.4.2 Measuring modes of participation

As stated, I am interested in referencing information 'modes' of participation in relation to communication and social practices. While I have acknowledged these practices are intertwined on social media, I attempt to determine the balance between users'

motivations of use. This approach serves to demonstrate that social media are complex environments serving multiple information, communication and social needs, underscoring their importance as domestic utilities in everyday life. I attempt to explain why social media participation accounts for a significant proportion of internet activity; indeed, social media can be considered a microcosm of the wider internet because of the wide range of needs they serve. I asked respondents in my questionnaire:

What is your usual reason for using social media?

Respondents could choose multiple answers from the following:

- Getting and sharing information
- Updates on what your contacts are doing
- Communication with contacts

I loosely map the options above to information, social and communication modes respectively. My approach is limited as users' may have multiple intentions as they post and consume content; for example, getting and sharing information is embedded in communication with contacts. Furthermore, getting and sharing information might be largely viewed as a social activity. I examine intentions of use in more detail in the next chapter when I measure information topics. Here I am attempting to provide a general measure of the value of social media as information media, leading to the next chapter where I discuss the efficiency of social media as information environments. My approach makes a contribution towards understanding social media as platforms that support diverse forms of participation; there other motivations that are outside the scope of my approach, such as organisational engagement with users. The balance between information, communication and social media modes will be different across social media platforms; accordingly, I inspect Twitter and its architecture for supporting everyday information practices. I provide an analysis of Twitter media formats; this is to indicate the breakdown of text-based content compared to other media types, such as photos, articles, links to content and video. My objective is to illustrate that Twitter is largely a text-based information medium that can serve information seeking and sharing and communication needs.

I compare information and communication practices on Twitter by using the terms 'broadcast' and 'micro-broadcast'. For my purposes, I distinguish between 'getting and sharing information' and 'communication with contacts' on social media in the following way; 'getting and sharing information' on social media refers to content that is shared with the users' total audience (broadcast); 'communication with contacts' on social media refers to the exchange of content between a user and a sub-set of the users' total audience (micro-broadcast). For example, the tweet "I am hungry" fits the description of 'getting and sharing information' (broadcast) because it is directed at the users' total audience of contacts; while the tweet "@xperson I am hungry" fits the description of 'communication with contacts' (micro-broadcast) because the content is directed at @xperson. Similarly, "@xperson @yperson I am hungry" is directed at @xperson and @yperson. This definition focuses on the breadth of information and communication flow and avoids subjective measures of content value. It addresses the high volumes of 'small-talk' on social media, which I explore in the next chapter. Information on social media is not guaranteed to be factual, verified or highly technical; their value for knowledge creation is even more nascent. I focus on the everyday nature of information that is sought and shared on social media. This could relate to information conveying details about the users' everyday life experiences, and information they find interesting or noteworthy about others or the world around them. Users who seek specific information might hope that one of their curated connections will have the relevant knowledge (through common interests), or that someone on the wider social media platform (in the case of Twitter, called the 'Twittersphere') will proffer an answer. My approach is limited by the possible ambiguity of the content breadth; for example, users may have a very limited number of followers (especially if they have a private account), so all forms of broadcast tweets are in fact directed at a specific set of connections. In the next chapter, the lifestyle values and information preferences of Malaysian users will be more evident in my content analysis.

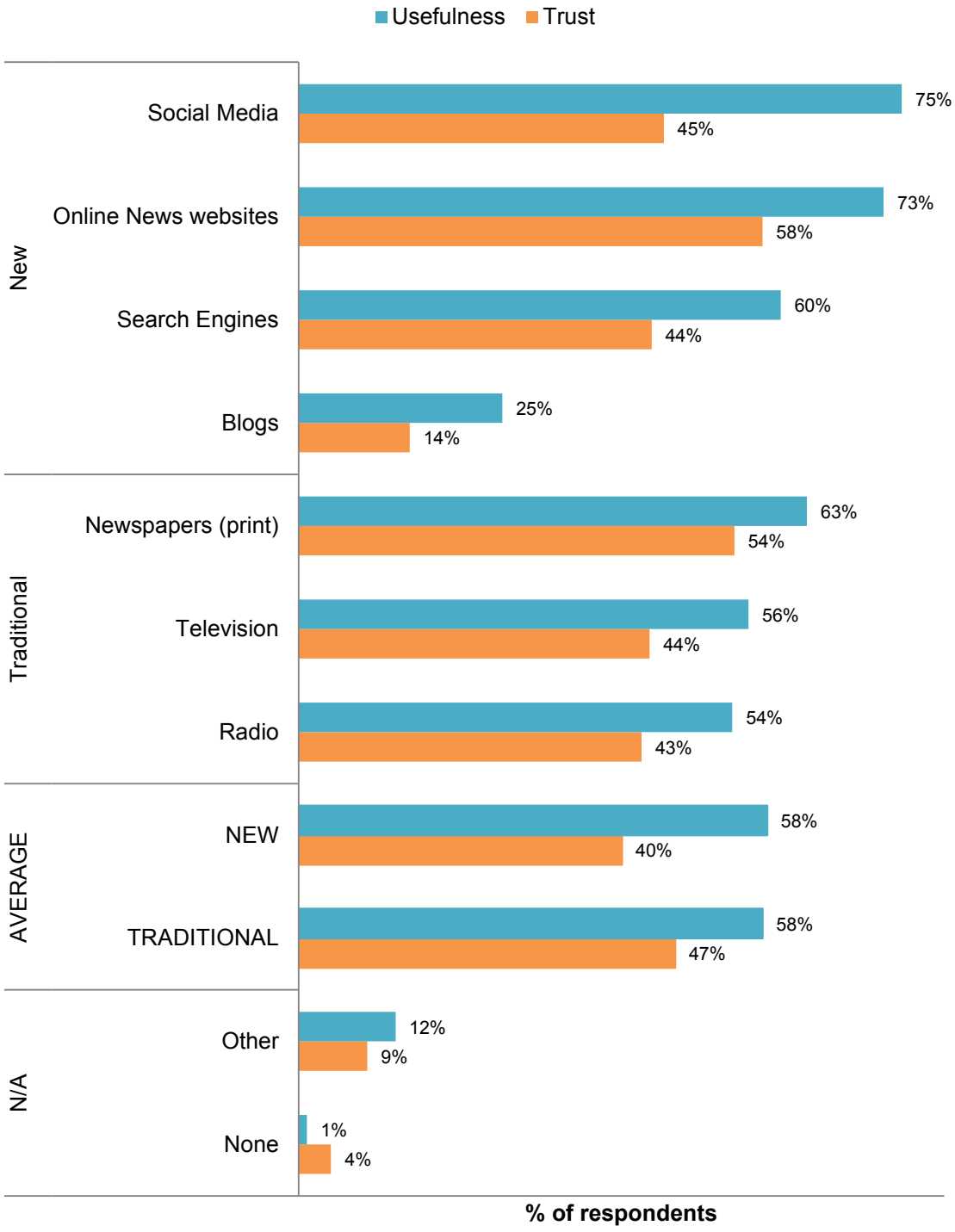
5.5 Findings I: The information value of new and traditional media

My results will show that social media are important information utilities in the Malaysian media environment; they can be regarded as information media. Alongside online news websites, social media are regarded by Malaysian users as the most useful type of media for information in everyday life (Figure 5.1). Young users in particular find social media information useful. In contrast, social media are not the most trusted media source of

information; online and printed news are appreciably more likely to be trusted. Overall, information on traditional media is more commonly trusted over new media by Malaysian users. This could be because users value the editorial processes provided by news outlets, while social media information is regarded as relevant, but unverified. Attitudes of trust towards social media were fairly uniform across demographic categories.

Traditional and new media overall are both regarded as useful by an equal number of Malaysian users (58 percent); however, more Malaysian users trust traditional media over new media (47 percent and 40 percent, respectively). The lower perception of trust for new media overall was due to a lack of trust in blogs (only 14 percent of respondents). Across all media sources, respondents were less likely to say they trusted information but more likely to find it useful in everyday life. The media types which had the biggest difference in terms of being regarded as useful versus trusted were social media (difference of 30 percent), search engines (difference of 16 percent) and online news websites (difference of 15 percent). It is worth noting that 42 percent of Malaysian users do not perceive any media, whether traditional or new, as providing useful information in their everyday lives. The proportion of users who do not perceive media as providing trusted information is even higher: 53 percent for traditional media and 60 percent for new media. More research is warranted on the background and perceptions of these users.

Figure 5.1 Comparison between usefulness versus trust worthiness of media sources



Respondents could select more than one option
Source: Hanchard
October 2012
N=400

5.5.1 Useful types of media

Social media and online news websites were the most commonly selected media for useful information for everyday life by Malaysian users at 75 percent and 73 percent respectively (Figure 5.1). It is of interest that more respondents selected social media over search engines (60 percent) as a source of useful information; particularly as search engines are primarily tools for information seeking. There could be a number of reasons why social media was more commonly selected. Firstly, information is being 'pushed' to users from personal sources through the architectures of social media platforms. Secondly, social media are used most often at home (Chapter 4), affording domestic and quotidian use (see Chapter 7). More respondents selected online news websites (73 percent) versus newspapers - print (63 percent) for useful information, suggesting that online content has more relevance to their everyday lives. This could reflect different editorial priorities by online versus traditional content producers; or the fact that users have more control over what content they look at online (Sunstein's notion of polarisation). In traditional media, respondents were more likely to select newspapers - print over television and radio for useful everyday information. The list of media provided to respondents was not exhaustive, demonstrated by the fact that 12 percent of respondents selected 'Other'.

Social media information was more likely to be considered useful among young Malaysian users, while online news websites were more likely to be useful sources of information for users over the age of 45 (Table 5.1). The reasons for this are unclear; we can speculate younger users are more likely to value information received from social sources. Older users could prefer information from sources that have been accredited through formal editorial processes. Urban users were more likely to value online news websites, while rural users favoured traditional media forms for useful information (newspaper- print, television and radio). Television, notably, was likely to be valued by Malay speakers as a source of useful information; this possibly reflects how national networks' tailor content that is most relevant to Malay speakers. Tertiary-educated users were more likely to value search engines and online news websites as sources of useful information. Low income users were the most likely to value all traditional media forms. 'High-skill white collar' users were more likely to find search engines useful, while 'low-skill white collar' users were more likely to find television and newspaper – print useful. These data point to socioeconomic divides in the preferences for traditional and new media, which I explore further in Chapter 8.

Table 5.1 Percentage of users who selected each media type as 'useful' source of information: major differences between demographic groups

Demographic	Media	Category (higher)	%	n	Category (lower)	%	n
Age	Social media	15-24	86	86	45-54	62	32
	Online news websites	45-54	87	45	15-24	61	61
		55+	93	14			
Residence	Online news websites	Urban	74	247	Rural	63	43
	Newspapers - print	Rural	71	48	Urban	61	204
	Television	Rural	72	49	Urban	52	174
	Radio	Rural	66	45	Urban	51	170
Language	Television	Malay	67	67	Average All	56	400
Education	Search engines	Tertiary	62	210	Non-tertiary	47	29
	Online news websites	Tertiary	75	255	Non-tertiary	56	35
Income	Newspapers – print	Low	75	56	Average all	61	341*
	Television	Low	72	54	Average all	53	341*
	Radio	Low	69	52	Average all	53	341*
Occupation	Search engines	High-skill white collar	66	135	Low-skill white collar	52	35
	Newspapers – print	Low-skill white collar	75	50	High-skill white collar	59	122
	Television	Low-skill white collar	63	42	High-skill white collar	51	104

* See A2.1 for explanation on why n=341 for income

See Appendix A3.5.1 to A3.5.15 for full cross-tabulations
Major difference' is 5 percent or greater between two categories, or between category and average.
Source: Hanchard; October 2012; N=400

5.5.2 Trusted types of media

Online news websites were the most trusted media source (58 percent of respondents). For trusted media, social media (45 percent) ranked below online news websites (58 percent). See Figure 5.1. The absence of verification processes could be the reason why

social media are viewed less favourably in terms of trust as opposed to their usefulness as everyday information tools. As stated earlier, blogs (14 percent) were noticeably less trusted than other types of media; this could be due to the lack of editorial review procedures on blogs. While formal verification processes are generally also absent from social media content, users 'know' on what level they are intimate with the connection providing information, so can make better informed value judgements. It is notable that respondents were slightly more likely to trust online news websites than newspapers – print (58 percent compared to 54 percent). This could be attributed to the perceived editorial independence of online media outlets in Malaysia. This finding challenges earlier assertions in Malaysian literature that Malaysians still prefer to get their news through print newspapers, radio and television (for example, Salman et al. 2011). It should be noted that some newspapers have both online and print version, such as *The Star*, which enjoys a national daily readership. There are some major news outlets – *Malaysiakini* is an example – which only exist online. Any preference for online rather than print newspapers could be influenced by access, affordability, and content orientation.

Online news websites were more likely to be sources of trusted information for tertiary-educated and urban users, as well as English and Chinese speakers (Table 5.2). This data suggests that there may be digital divides between socioeconomic and ethnic groups in Malaysia in valuing information through new media sources that is independent from government mediation. As discussed in the results on usefulness above, traditional content such as television might be better tailored to Malay speaking audiences; Rahim (2010) discusses issues of programming in the national language and cultural identity in Malaysia and advocates language diversity. For access to content in languages that are less widely spoken, online media might suit minority groups. The difference between urban and rural users in their trust of new media provides further evidence of a digital divide. Low income users were more likely than high income groups to trust traditional media overall. Similar trends were found across occupation categories, 'low-skill white collar' users being more likely to trust information from all forms of traditional media.

Table 5.2 Perception of users who selected each media type as 'trusted' source of information: major differences between demographic groups

Demographic	Media	Category (higher)	%	n	Category (lower)	%	n
Residence	Online news websites	Urban	60	198	Rural	47	32
Language	Online news websites	English	72	72	Indian	48	48
		Chinese	59	59	Malay	51	51
Education	Online news websites	Tertiary	60	202	Non-tertiary	45	28
Income	Newspapers – print	Low	64	48	All category average	52	341
	Television	Low	57	43	All category average	41	341
	Radio	Low	52	39	All category average	42	341
Occupation	Newspapers – print	Low-skill white collar	67	45	High-skill white collar	49	100
	Television	Low-skill white collar	55	37	High-skill white collar	38	78
	Radio	Low-skill white collar	46	31	High-skill white collar	39	80

* See A2.1 for explanation on why n=341 for income

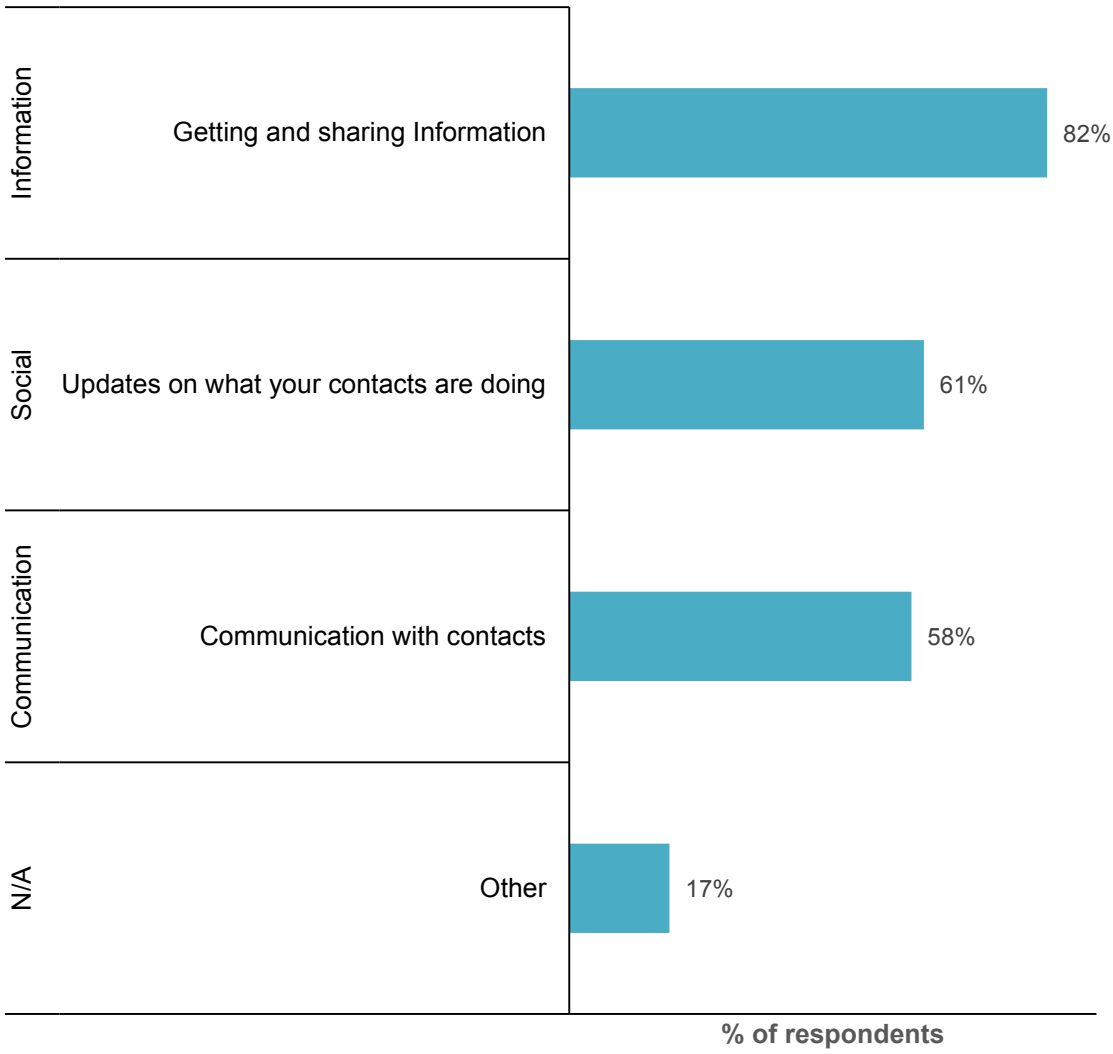
See Appendix A3.5.16 to A3.5.24 for full cross-tabulations
Major difference' is 5 percent or greater between two categories, or between category and average.
Source: Hanchard; October 2012; N=400

5.6 Findings II: Modes of participation

My results will show that getting information is as important as communication and social motivations for social media use. Social media platforms and architectures enable information seeking and sharing practices. The mode of participation on social media depends on the platform and users. The majority of content shared on Twitter is text-based; Malaysian users are more likely to seek and share information between limited sets of connections (micro-broadcast) rather than their potential or maximum audience

(broadcast). The questionnaire results indicate social media use is strongly orientated around getting and sharing information, while the content analysis reflected strong communication content on Twitter. Figure 5.2 below compares reasons for using social media.

Figure 5.2 What is your usual reason for using social media?



Respondents could select more than one option
Source: Hanchard
October 2012
N=400

The most common reason cited by Malaysian users for using social media is 'getting and sharing information' (selected by 82 percent of users), followed by 'updates on what your

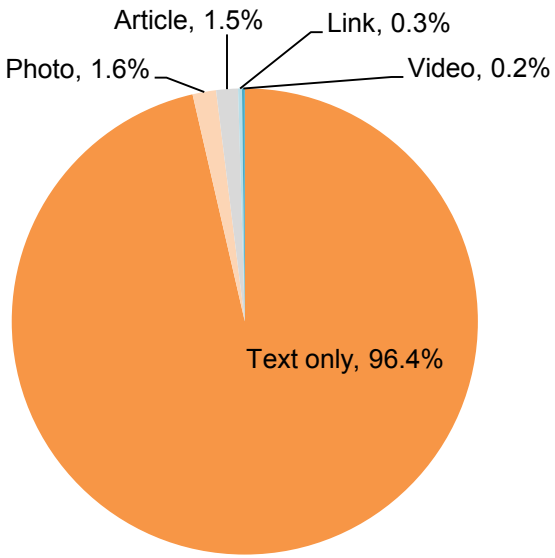
contacts are going' (61 percent) and 'communication with contacts' (58 percent). 'Updates on what your contacts are doing' might have been expected to be the first choice; the fact that 'getting and sharing information' was the most common response supports my argument that social media platforms are as important for information seeking as communication and social practices. Communication might have been the least selected option because email services (for example, Gmail, Hotmail, Yahoo! Mail) remain the predominant channel in Malaysia for one-to-one communication (comScore 2011a). Papacharissi and Gibson's (2011) fifth structural affordance, 'shareability', helps to explain why one-to-one communication was less likely to be selected as a mode of social media use; Malaysian users possibly prefer to take advantage of their 'personal broadcasting' capabilities. The limitation of this question in accounting for all purposes of social media is indicated by the fact that 17 percent of respondents answered 'other'; these uses of social media might include political, organisational or entertainment activities, and so forth.

Young users (15-24 year olds) were the most likely to select 'updates on what your contacts are doing' while 45-54 year olds were the least likely; 71 percent (n=71) and 48 percent respectively (n=25) (A3.5.25). This finding is likely to be true of young users on social media globally. Antin and Itō (2010) use the metaphor of 'hanging out' online, which suggests affordances for 'bumping into' connections; social media platforms are places where users are likely to find their friends. 'Hanging out' online in order to remain connected appears to be important to younger generations; while for older users who have not yet reached retirement age, other venues might provide better social opportunities. English speakers were the most likely group to use social media for 'communication with contacts'; 71 percent (n=71) compared to the average of 61 percent (n=400) (A3.5.26). Malay speakers were the most likely to use social media for 'getting and sharing information'; 86 percent (n=86) compared to the average of 78 percent (n=400) (A3.5.27). Tertiary-educated users were more likely than non-tertiary educated users to use social media for 'communication with contacts'; 62 percent (n=210) and 55 percent (n=34) respectively (A3.5.28). This suggests that educated users value social media more as communication media than as tools for information seeking and sharing. I will explore this further in Chapter 8.

5.6.1 Twitter media formats

The architecture of Twitter encourages text sharing more than other media-rich formats. The content measured on Twitter was predominantly text-based (without links to external media), accounting for 96 percent (Figure 5.3). Photos were the most popular form of non-text media but were only present in 1.6 percent of overall tweets. The low result could be due to the popularity of alternative photo-sharing websites, such as Instagram.

Figure 5.3 Media analysis of tweets



Period: 21 Sep 2012 – 11 Oct 2012
Source: Hanchard
Total tweets = 4,108

In contrast to Twitter, Facebook encourages sharing of media-rich content. There is a strong visual culture on Facebook, where 300 million photos are uploaded daily (Tam 2012). The architecture of Facebook is more likely to encourage users to share links, photos, videos, locations and text content through design features; for example, a photo option appears on the status update input box. Whether Twitter does become increasingly media-rich, with users embedding photos and videos in tweets, is a topic for longitudinal research. There is increasing interest in visual social media, such as Instagram, and cultural patterns in the context of big data (Highfield and Leaver 2014; Hochman and

Manovich 2013; McCosker and Wilken 2014). Future research would be valuable on the 'everyday information content' that is embedded within media-rich formats, such as photos, in networked environments.

5.6.2 Twitter modes of participation

Malaysian users were more likely to share content with a specific subset of connections on Twitter, than they were to share with their total audience; micro-broadcast content accounted for 55 percent of tweets, while broadcast content accounted for 45 percent. My findings suggest that use of Twitter in Malaysia can be characterised as being oriented towards communication; that is, sharing information directed at specific connections is part of everyday practice. The following examples around 'everyday' content illustrate differences in broadcast and micro-broadcast tweets:

Broadcast:

- "Lets go have a dinner!" (29/9/2012)
- "Waide awake" (10/8/2012)

Micro-broadcast:

- "@XX want LENAK rice! Must be delicious. : P" (10/4/2012)
- "@ XX @YY hahaha. Misss you both so much!!!" (29/9/2012)

These examples demonstrate how the audiences of information and communication content become quite blurred. In the example, "Lets go have a dinner", it is not clear to whom this user is directing this tweet. He or she could mean anyone who happens to be listening; or the user might have a small set of 'followers' in which case the audience is more clear. Twitter's 'loose' architecture means that it encourages both open communication and information sharing. The fact that Malaysians conduct everyday conversations with their connections in public could be culturally influenced (Budiman and Abidin 2011). Twitter can be used as a substitute for short messaging services (SMS), which incur a financial cost by users. Other free social messaging tools such as Whatsapp are also popular in Malaysia (Free Malaysia Today 2014). Twitter is a public arena for communication (unless users protect their account from users who are not connected),

but that does not appear to deter Malaysians from sharing messages with family and friends in 'the open'.

Based on my own personal use in Malaysia, openly visible information seeking and sharing also occurs on closed platforms, such as Facebook. The visibility of conversation threads on Facebook, however, might have a limiting effect on intimate discussions with users preferring to take extended conversations into private messaging (this requires further research to substantiate). On Twitter, conversation threads are less easy to follow. In terms of affordances, Facebook encourages two people to accept each other as 'friends' (this was before the 'following' feature was added) which means Facebook typically contains synchronous relationships. The architecture enables connections to visit the platform for updates on intimate events in their families' and friends' lives in a private setting. Significant events, such as birthday and relationship announcements, can be stored on the user's timeline with anniversary reminders visible each year. This affords a 'peek' into the private, domestic lives of users that were not previously broadcast. The authentication and privacy structures of Facebook allow users to expose their strong ties; on Twitter conversations may be public, yet users' personal connections are less visible compared to Facebook.

5.7 Discussion

Social media have value as useful and trusted information media in Malaysia because the architectures of platforms afford information seeking and sharing within social networks that have relevance to users' everyday lives. Malaysian users regard social media as the most valued media for useful everyday information. However, social media lacks the verification processes of traditional media, so information circulated is less likely to be trusted compared to other types of media, despite government interference and issues of independence surrounding traditional media in Malaysia. Indeed, Malaysian scholars expect that traditional and new media will continue to coexist (Salman et al. 2011). Getting and sharing information is an important reason for using social media for Malaysian users, but these practices should be understood as being closely intertwined with communication and social motivations. The architectures of social media platforms both enable and constrain information, communication and social practices; each platform having its own tone and culture of interaction. Furthermore, users bring their own cultural

preferences and values from wider societal contexts. Twitter use by Malaysians is particularly conversational, with users seeking and sharing information with specific connections; we can speculate that this tendency is reflective of communal values in Malaysia.

There are clear differences between groups of socioeconomic advantage and disadvantage in their preferences for new or traditional media in Malaysia. Traditional media is regarded as more useful and trusted by users of lower education and occupation attainment. Notably, urban users in Malaysia were more likely to value online news websites as useful and trusted sources of information; rural users were likely to value traditional media forms for useful information, suggesting divides in political participation. The fact that rural voters supported the ruling Barisan Nasional coalition during the 2013 General Election was attributed to rural users' lack of access to online newspapers that were critical of the government (Malott 2013). My results confirm that traditional media has greater appeal for the majority Malay ethnic group, while English and Chinese speakers were more likely to trust online news websites. I will examine the implications of these preference differences in terms of development in Chapter 8.

In this chapter I focused on social media as information utilities; information on social media platforms is networked, which makes it different from other types of media. Information is curated by and for the user; Papacharissi (2011, p. 306) argues the individual is the 'locus' of interaction on each platform. The architecture 'predicts' what the individual will find relevant and interesting based on 'social information' and will accordingly present tailored stories. To illustrate, news feeds are calculated based on past behaviours of the user and feedback mechanisms. New media allows information to flow not just from publisher to reader, but reader to reader and publisher to publisher. Architectural affordances not only allow fluid social connectivity to occur, but they 'push' and encourage certain social practices. For example, the friend-suggestion feature on Facebook – 'Do you know this person?' – prompts users to make connections that they might not have automatically sought. This is not just chance or serendipity. Algorithms make predictions based on known information about the user and their 'social graph', derived from inputs by the user and their networks.

Social media affords information seeking for Malaysian users in ways that are limited or even impossible through traditional media in Malaysia. The influence of social media participation on social worlds has potential outcomes that benefit Malaysian society. Malaysian users may be more likely to be exposed to the religious and cultural festivities

of other ethnic groups through photos and traditional greetings that are shared on social media. I have observed how Malaysians will express goodwill in the traditional terms of 'other' cultures at appropriate times of the year on Facebook and Twitter. Examples of cultural and religious expressions include, '*Gong Xi Fa Cai'* during Chinese New Year; *'Selamat Hari Raya'* at the end of Ramadhan; 'Happy Deepavali 'during the Hindu Festival of Lights; 'Merry Christmas', and so forth. The opportunity to share information between social networks affords awareness of other cultural traditions. Furthermore, the architecture of social media platforms could allow users to reduce social distances by exchanging information with weak ties. In traditional media, there is no network link between connections; readers have to exert greater effort to communicate with publishers. In addition, new media and social media in Malaysia allow minority groups to express themselves and receive news relevant to their specific communities; traditional media may be dominated by the cultural values of the majority ethnic group. It should not be assumed that all affordances of social media have social benefit. For example, affordances for amplifying, recording and spreading information (boyd 2011) could mean that harmful ideas, including hate speech, can spread more quickly.

Affordances of seeking and sharing information on social media may have consequences for grassroots cultural movements. The propensity to share is a cultural manifestation of new media use. The participatory nature of contemporary media has far-reaching implications for everyday life in terms of how users actively interact across levels of organisations and society (Jenkins, Ford and Green 2012). Global values might be transmitted to diverse local contexts through participation on social media. Social media may have a role in changing public values through the dispersal of information; Ahmad et al. (2012) highlight Malaysian cultural values, influenced by global use, shifting towards democratisation and greater accountability from the Malaysian government. Changing political values in Malaysia can be understood in relation to the Arab Spring and democratic movements in the Middle East, as reflected by activism on social media. Social media does not cause social change, but it can enable it to occur more quickly and widely. Meanwhile, traditional media in Malaysia are limited in their ability to instigate change because of government controls and censorship constraints. There are, however, increasing concerns that Malaysian users on social media are being monitored by government agencies (The Star Online 2013), where users have been targeted for 'seditious' content (Malaysian Social Science Association 2014; I. Lim 2014).

This chapter has offered a very preliminary comparison between traditional and new media in Malaysia. My approach is limited by examining modes of information, communication and social intentions of use separately, rather than as overlapping practices. Trust is a particularly important area for future research in social media information environments, where platforms might evolve to include more features for authentication, possibly leading to greater trust in information shared by connections. As platforms develop, typologies for affordances will need to be reassessed, as well as the particular information, communication and social practices unique to types of social media. Standardisation and guidelines of use by platform owners, influenced by monetisation concerns (Puschmann and Burgess 2013), will be a factor in how design features are adapted to enable and constrain user practices. While new media scholars have focused on the broadcast affordances of social media, more attention could be paid to users' decisions on the types of social networks that are privy to certain types of information (micro-broadcasting). Social media platforms are rapidly evolving environments requiring ongoing analysis of information, communication and social practices.

Chapter 6 Information practices on social media

In the absence of established networks, getting tips, advice and recommendations for the smallest of everyday hurdles can be a challenge. There is the option of broadcasting a question on social media, but what is too intimate to share? In need of an orthopaedic surgeon, and not wanting to do a Google search on a matter where I didn't want bad advice, I posted a status update on Facebook, micro-broadcast to friends in Kuala Lumpur, asking if anyone could recommend one. Within hours, I'd received several referrals to clinics, thus giving me, a foreigner, useful cues on reputable institutions in the city. Here, I was looking for a 'word of mouth' recommendation from known connections that a search engine could not provide. Never mind that this was a fairly personal query to share, it did not feel socially or culturally inappropriate. My Malaysian friends on social media are often surprisingly revealing of their personal circumstances in the questions they ask and information they share. They also tend to be highly responsive in answering questions that others broadcast. Sometimes it's quicker and more reliable to get advice that is qualified from a peer on social media than from another media source.

I have established that Malaysians have the intention of going to social media to seek and share everyday information. In this chapter, I examine information practices on social media in more detail using an information ecology framework. The rationale of shifting terminology is to emphasise that platforms are types of information ecologies, distinct from other types of media and technology or other offline information settings. My objective is to establish that social media are environments that afford diverse information practices across heterogeneous socioeconomic and ethnic groups in Malaysia. I argue that social media can be efficient ecologies for distributing and receiving everyday information, influenced by the architecture and affordances of each platform. Social media are embedded in the everyday lives of users through the active and passive consumption of content that users are exposed to on a daily basis. My approach serves to provide context for how information is sought and shared by Malaysian users applying social media for everyday use contexts, which I discuss in the next chapter. Here I examine whether Malaysian users perceive social media as environments for efficient information practices, and how exhaustive are users' information activities on social media.

I integrate three major themes across literatures in this chapter. Firstly, the efficiency of social media information ecologies; secondly, everyday life information seeking practices on social media; and thirdly, the temporary nature of information that is sought and shared on evolving platforms. Building on the work of information scholars Bonnie Nardi and Vicki O'Day (1999), I set out to describe social media as information ecologies consisting of dynamic social relationships. I adopt everyday life information seeking studies (ELIS) as a framework for interpreting the purposes of information practices. I contribute to emerging literature that focuses on social media platforms as information environments, including work by Wohn et al. (2011) and Lampe et al. (2012). Pamela McKenzie's (2003) model of active and passive information seeking practices is introduced as a basis for characterising styles of information seeking on social media. The nature of information on social media is discussed, referencing the work of information scholar Jannis Kallinikos (2006) and his distinction between data, information and knowledge. His work can be used to help explain how information practices afford opportunities for everyday action. I link these literatures to describe systems of information exchange, the relevance of information on platforms to offline worlds, and limitations in the value of social media information. In my analysis of actual information practices on Twitter, I examine how information is shared, its practical content in terms of embedded tips, advice and recommendations, and the perceived value of information reflected by how often it is re-shared by users within the ecology. My contribution to each of the literatures lies in contextualising information practices, firstly within a new media environment; and secondly within a Malaysian cultural setting.

6.1 Information ecologies and information efficiency

Conceptualising social media as information ecologies is useful for describing heterogeneous practices amongst users of different backgrounds. Nardi and O'Day (1999), in the context of information practices, use the term 'ecology' to connote diversity, complexity and changing relationships. They define an information ecology as a "system of people, practices, values, and technologies in a particular local environment" (p. 49). The authors emphasise the activity of individuals – their practices, goals, values and influence – to adopt technology appropriately in their everyday lives. Nardi and O'Day avoid the term 'community' which they argue suggests homogeneity. In Chapter 2, I highlighted Postill's (2011, p. 13) similar concerns with the "boundedness and homogeneity at work"

in the notion of community. Given my description in the previous chapter of social media as rapidly evolving platforms, 'ecology' is a useful term for comparing practices between dynamic formations of groups. Nardi and O'Day argue that in a healthy ecology, different kinds of people and different kinds of tools work together in complementary ways. This idea fits in with my discussion of social cohesion, and users seeking information across ethnic and religious groups on social media platforms. Nardi and O'Day contend that "the habitation of a technology is its location within a network of relationships" (p. 55). The idea of 'local habitations' situates the user and their everyday social and technology interactions. They further argue that information received from users who share a location has greater influence in an information ecology; a similar line of argument used in Postill's (2011) localisation approach. Postill also uses the metaphors of 'location', 'field site' and 'habitat'. Each social media platform can be considered a habitat for localised information. Nardi and O'Day, writing in 1999, observe that in the vastness of the internet local habitation appears to be a counterintuitive concept. Yet the emergence of social media as a local habitation where information can be shared amongst social networks, somewhat validates their early conceptualisation of information ecologies.

An information ecologies approach has been used in more recent social media scholarship to describe acts of information seeking and sharing. Wohn et al. (2011) examine the information ecologies of SNS and define information use as "how people employ their social networks to satisfy a range of information-related goals" (p. 340). They identify three types of social information use on Facebook; information seeking behaviours, event coordination and establishing common ground (creating or participating in an online group with people who have similar interests). I instead focus on social media information topics as proxies for the range of uses for which information is employed in everyday life. Another notable study is by Lampe et al. (2012) *Perceptions of Facebook's value as an information source*. They demonstrate that the more "people feel they are exposed to a broader world-view through their Facebook networks, the more they feel the site is able to provide useful information" (p. 3199). This observation has relevance to my examination in Chapter 4 of how users regard information shared by different types of social networks. Further research would be of value in comparing whether this viewpoint was held across all ethnic groups in Malaysia. Lampe et al. (2012) also show that friends of users were less likely to be perceived as able to provide access to novel information. This echoes an argument by Kavanaugh et al. (2005) that weak ties are more instrumental in providing informational resources. Further, Lampe et al. (2012) demonstrated that the amount of time spent on Facebook and engagement levels was related to how useful Facebook was

perceived as an information source. This will be a relevant idea later in demonstrating that useful information is gained from social media participation, even when that might not be the original intention of use.

Social media platforms are information environments; what is less clear is the value and types of information practices on social media, as compared to other new media and technologies. Information scholar Vivienne Waller (2013) argues that while there are numerous studies that focus on the internet and information seeking practices, there is a need for studies that focus on specific technologies, such as search engines, video search, online encyclopaedias (Wikipedia) and social media. Waller points out that as ICTs are changing rapidly, information studies should account for new trends in information seeking. There is a need for studies that compare information practices on new media across demographic groups, rather than focus on single types of users. Thus, I focus on social media as sites of everyday information practices, and measure these across a range of demographic groups in Malaysia. I focus my attention on social media as efficient ecologies for information sharing compared to other types of media and technology. Information seeking on search engines which provide algorithmic results is different from information seeking on social media, for example. On some social media platforms, such as Facebook, users know (in varying degrees) the source of information. This changes how the information is perceived and possibly increases efficiencies of validation processes. For comparison purposes, it is worth highlighting 'social QandA' websites such as Yahoo! Answers or Quora. One successful example is Knowledge iN, a social QandA website that was central to the rise of leading South Korean portal, Naver (Chae and Lee 2005; The Economist 2014). Naver offers a more comprehensive information experience to meet each user's search intention, by providing quality search results from a variety of sources, including crowdsourced questions and answers (Bonfils 2011). Further research might examine whether there is an Asian, and specifically Malaysian, cultural influence to users' valuing information from people or algorithms generated from social data.

6.2 An everyday life information seeking framework for social media

Information seeking, including practices on social media, are integrated with everyday life activities. Reijo Savolainen (1995), an early figure in the everyday life information seeking (ELIS) field, provides a comprehensive framework for analysing information seeking in everyday life. He describes the 'way of life' as the 'order of things', manifesting itself, for example in the relationship between work and leisure time, models of consumption, and recreational activities. Implicit in the interaction between information seeking and 'way of life' is the notion of 'keeping things in order'. Savolainen contends that information seeking is inherently an orderly activity, or way for people to bring structure to their everyday lives by prioritising activities. He refers to 'things' as the various activities that take place in the 'daily life world' related not only to employment but to 'reproductive tasks' (suggesting routine) in the home. Everyday information seeking is defined as the informational elements which people employ to "orient themselves in daily life or to solve problems not directly connected with the performance of occupational tasks" (p. 267). Savolainen's allusion to solving problems emphasises that there is purpose and direction in information seeking; there needs to be some kind of outcome, presumably beneficial or useful to the seeker. Indeed, Savolainen argues the relevance of information sources is determined by their effectiveness in 'information-use' situations. Later work by Savolainen (1999) focuses on the internet as a legitimate information source, advancing the argument that users choose the internet specifically for information seeking in everyday life, as opposed to other activities, such as entertainment. Further work by Savolainen and Kari (2004) describes the internet as a place, or information habitat (recall Nardi and O'Day 1999). Savolainen and Kari argue that users are able to 'concretize' their conception of the internet through use-experiences. Meaning is attached to information seeking on social media through applications in everyday life.

I will make the argument in this chapter that users absorb useful information in non-active ways, given daily and widespread immersion in social media information ecologies. Pamela McKenzie (2003) provides a detailed model for describing active and passive information seeking. McKenzie's approach is derived from Savolainen in that she emphasises everyday life information seeking as a social, rather than cognitive activity. The richness of information ecologies is determined by their socio-cultural contexts, according to McKenzie. In *A model of information practices in accounts of everyday-life*

information seeking (2003) she provides a qualitative study of information seeking accounts by pregnant Canadian women. While the study is focused on a specific health context, it offers a transferable model that can be adopted for information-practices in more general settings, and to a certain extent in social media information ecologies. McKenzie critiques existing models that emphasise active information seeking to the neglect of less direct practices. Her emphasis on passive practices is relevant to social media, where users are exposed to increasing volumes of social data. Everyday life information seeking, according to McKenzie, can include active seeking, active browsing, non-directed monitoring and by proxy. These can be summarised as (pp. 26-27):

Active seeking: Actively seeking contact with an identified source in a specific information ground. Asking a pre-planned question; active questioning strategies, for example, list-making.

Active scanning: Identifying a likely source; browsing in a likely information ground. Identifying an opportunity to ask a question; actively observing or listening.

Non-directed monitoring: Serendipitous encounters in unexpected places. Observing or overhearing in unexpected settings, chatting with acquaintances.

By proxy: Being identified as an information seeker; being referred to a source through a gatekeeper. Being told.

McKenzie distinguishes between 'connecting and interacting' activity in information seeking as a two-step process, which she analyses in each scenario above. Information seekers must first find suitable sources before interaction. In social media ecologies, connecting and interacting activity becomes blurred. On Twitter for example, users can pose questions to the 'Twittersphere' and can be given answers by complete strangers through the "@" reply convention. Users are not required to sustain a connection for any longer than the information exchange. McKenzie's distinction between interacting and connecting is nevertheless important in understanding how people employ techniques to gain information, through sources of varying degrees of accessibility, to serve particular ends. This is applicable to a discussion of the strength of weak ties. Hypothetically, social media affords 'connecting and interacting' across segments in society that previously could not occur because of social or geographical barriers. It should be noted that McKenzie's model does not encompass processes of evaluation and verification of

information. While I addressed this in a preliminary manner in Chapter 4 by examining which social networks provide useful or trusted information, further work on evaluation processes on social media is needed.

6.3 The value of temporal information

Social media information ecologies are suited to certain types of information content. I consider now the nature and qualities of information that is shared on social media by users. My objective is to examine information seeking as a practical activity that transforms information into action and utility. A discussion of the nature of information shared on social media (whether it is short-lived or long-lasting) can shed light on their value to users and society. Kallinikos (2006) has written extensively on the distinction between data, information and knowledge. Information, according to Kallinikos, is 'disposable' in character. He writes that, "In contrast to knowledge, information is not concerned with the essence and durability of things but rather with the shifting and surface amalgamations which things (and states) enter and dissolve" (p. 71). This is an apt description for social media information where content is fleeting, as it is constrained by the architectures of platforms. Information on social media is typically short in format (for example, 140 characters on a Twitter update) and temporal in nature (for example, users can search updates only for a limited time period on Twitter). Short 'status updates' are often encouraged through design, rather than extended, discursive texts; although these are possible on some platforms, such as Facebook. Information on social media is 'immediate' and exists in temporal ecologies. Kallinikos discusses how information, bearing the quality of 'news', has immediate relevance that may afford action. While information is tied to contingencies and events, information "dilutes and evaporates along with the very events it tries to capture" (p. 71). In social media, there is clearly value in the information that is shared in the context of users' everyday lives, but effectively archiving this information is not necessarily enabled by the architecture. Rather than focusing on 'events', I examine use contexts in which social media information is applied by users. Information on social media platforms has temporal value to immediate situations.

Time is a key factor in differentiating between information and knowledge, which is highly relevant when analysing the transmission of information on social media. Kallinikos (2006) argues that knowledge differs from information in resisting the inescapable depreciation that time normally confers upon information. He writes that information that

"transcends its short-lived character, retaining its value over time, undergoes a significant change in status, for it is no longer defined by its novelty" (p. 70). There are some social media properties where 'knowledge' sharing practices are encouraged, such as social QandA websites described above. Facebook's timeline feature is a rudimentary step in historicising social media information. The speed with which users can interact and interpret the world through social connections is accelerated by social media. Hassan (2008) refers to the notion of 'time-space compression' on new media (see also Castells 1997). Given that information can be spread quickly on social media without verification processes, its quality may decrease. However, there is still value in temporal information; the fragmentation of information on social media allows it to be 'digested' and integrated with everyday practices. The architecture of social media platforms on ubiquitous devices, especially mobile, is designed to function in everyday, domestic settings. Users can post content without extended explanations or without validation processes. Curation processes exist through filtering content in news feeds to specific connections and in the re-distribution of information to other users.

The value of social media information is partially expressed by how often users choose to re-share content within information ecologies. On social media platforms, affordances of the platform allow users to re-share information that others have posted on top of broadcasting original content. On Twitter for example, when users find a piece of content they find interesting or noteworthy, they have the option of copying and distributing the content verbatim, with the attribution to the original poster. This is in the form of a 'retweet,' using 'RT' as shorthand. The user who is retweeting could be 'agreeing' with the original tweet, although some users are careful to point out in their Twitter profiles that retweets are not equivalent to endorsements. boyd, Golder and Lotan (2010, p. 6) provide a list of reasons why users might retweet, including amplifying or spreading content to new audiences, as an act of curation, to begin a conversation, demonstrate listening, publicly agree with someone, validate others' thoughts, as an act of friendship or loyalty, amongst other reasons. These can all be interpreted as signals the information is worthy of further attention. There are other forms of expressing endorsements, such as the 'like' button on Facebook. Platforms are likely to develop more features that help users express how they rate information. User feedback is vital in how social media platforms will develop architectures that support 'information longevity'. The usefulness and trust of information on social media partly relies on tools for validation; the credibility of social media may increase as processes for information curation are improved.

6.4 Approaches and methods

The remainder of this chapter addresses my primary research question by building on the argument that social media are information utilities. For now, I use the metaphor of an information ecology to illustrate a system of information flow on social media before I examine 'utility' in the next chapter. I ask whether everyday information seeking and sharing is efficient on social media. Do users search actively for information or do they absorb it passively? I examine the re-distribution of content on Twitter as a reflection of how information is valued and prioritised by users. Further, I address my secondary research question by determining whether there are differences between socioeconomic and ethnic groups in their information practices on social media. In Malaysia there are emerging studies on social media information, notably *Social media use for information-sharing activities among youth in Malaysia* by Wok, Idid and Misman (2012). The authors identify various types of information sharing related to recent life activities, posting photos, chatting, expressing feelings, sharing videos and music, and posting new links. These uses extend beyond everyday life information seeking; including the propensity to share demographic information (for example, gender, relationship status and educational institution affiliations) and content preferences (for example, favourite TV shows and political leaders). The authors focus on the 'multiracial' differences in social media use, arguing that the "culture of each race influences the way social media sites is used" (p. 27). The authors highlight the preferences for different ethnic groups to use their own 'mother-tongue' on social media. Similarly, Din et al. (2012) argue social media increases the quality of life for youths since it serves a variety of information and knowledge objectives. My study diverges from these examples of Malaysian social media literature by focusing on quotidian information practices across a range of groups that serve temporal needs in everyday life. The two key questions I investigate are:

Are social media efficient ecologies by Malaysian users for everyday information seeking?

What are the dominant information practices by Malaysian users on social media?

6.4.1 Measuring the efficiency of social media information ecologies

In the previous chapter I demonstrated that there is a strong orientation of information-use on social media by Malaysians, in addition to communication and social motivations.

What I am interested in determining now is whether social media enables efficient information seeking by Malaysian users. Given that everyday life information seeking is a daily activity, gaining information efficiently is important. Several internet studies measure the efficiency of information use on the internet generally (Ewing 2011; Ewing and Thomas 2010). I use this approach to provide further insight on why Malaysian users might prefer social media as a strategy for gaining useful information in everyday life. In my questionnaire, I tested whether respondents agree or disagree that social media constitute efficient ecologies for information seeking in everyday life. The following question was posed:

Agree or disagree: Social Media is an efficient means for me to get useful everyday information.

Respondents could select, 'Strongly agree', 'Agree', 'Neither agree nor disagree', 'Disagree' and 'Strongly Disagree'.

My question is limited in that I am not testing how and in what circumstances information seeking on social media is regarded as efficient. Further research might examine scenarios of where and when it is more efficient to seek information on social media compared to other new media and technology sources. Efficiency is obviously not the only measure of the value of an information ecology. Other valued attributes that I have raised earlier in this chapter included the ability to search for information longitudinally (historical content) and the ability to source verified information (defined by the consensus of users). My approach prompts further questions on the specific platform architectures that afford an efficient information ecology.

6.4.2 Measuring types of information practices on social media

The next set of questions are designed to provide more insight into how users search within social media information ecologies. I build on McKenzie's definition of four types of information seeking – namely, active seeking, active scanning, non-directed monitoring, and by proxy – to describe types of information seeking on social media. It should be remembered that information seeking on social media might be part of a wider process, and that complementary activities could be used to validate information derived from

social media. I examined information practices that are related to 'practical' outcomes, defined as information that advocates a course of action (refer to Savolainen 1995). I asked respondents to consider 'tips, advice and recommendations' as the types of information they might seek out; 'tips' refer to information suggesting a course of action based on previous experience; by 'advice' I mean a piece of information advocating a course of action based on exercised judgement; 'recommendations' refer to endorsements of a person, service, or course of action. These are simplified definitions and merely used as a guide to identify practical information. Shenton and Dixon (2004) refer to 'advice' in terms of information that teens need for interpersonal support while Agosto and Hughes-Hassell (2005) devise a typology with a range of information needs related to personal development. I am more interested in 'practical' information seeking. The following four questions were asked:

Do you ever use Social Media with the intent of finding the answer to a specific question? For example, Recommendations, tips or advice

Do you ever browse Social Media for information that might be useful in your everyday life? For example, Recommendations, tips or advice

Do you ever get information on Social Media that is useful in your everyday life, even when you were not looking for it? For example, Recommendations, tips or advice

Do you ever get information on Social Media which you could not obtain elsewhere? For example, Recommendations, tips or advice

Respondents could choose one of the following; 'Very Often', 'Often', 'Not Often' or 'Never'.

These questions were designed to map respectively to active seeking, active scanning, non-directed monitoring and by proxy practices. McKenzie refers to active seeking as being related to a specific and premeditated question or goal. My objective is to understand if Malaysians use social media with the active intent of seeking out information. I examine whether there is order and planning in how Malaysians adopt social media in their everyday life information seeking. In the next question that tests active scanning, I focus on information as an activity in itself. Do Malaysians go on social media for useful information without a specific question in mind? McKenzie describes active scanning as when users do not necessarily have specific questions, but have broad

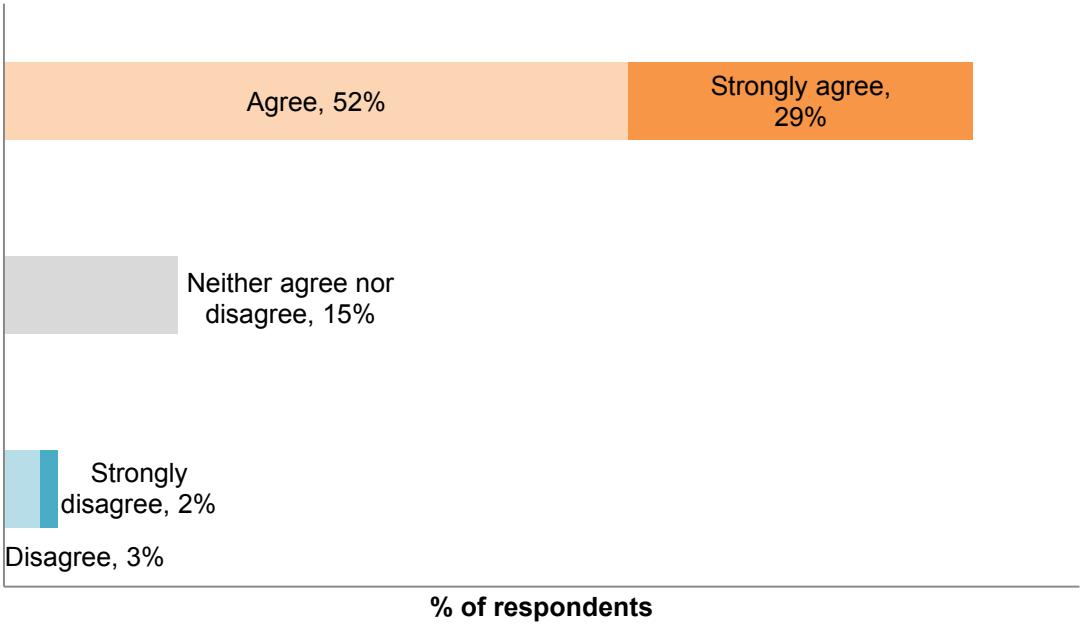
information goals on certain topics. I use 'browse' as the operative word in my questionnaire. In the third question on non-directed monitoring, I focus on how users might receive useful information on social media by chance or serendipity. Applied to social media, this practice presumes that if users spend enough time on these platforms, they will receive useful information, whether or not that was their intention for participating. In the final question on 'by proxy' practices, I ask respondents if they can access information on social media that they cannot gain from other sources. This is when information is refereed through 'gatekeepers' outside normal social circles. I focus on the 'exclusive' dimension of this information practice, and refer to information that can only be gained when a user has privileged access to inside sources or connections that are not generally available. For example, certain information about a job opportunity might only be available to a company's existing employees. I am interested in whether social media, through their architectures, allows users to gain information from weak ties.

In the second part of the analysis of information practices, I examine actual content flow on Twitter as a particular information ecology. As I observed in the previous chapter, Twitter is ideal for information exchange given its 'light' architecture. I am interested in the proportion of information seeking versus sharing that occurs, and examine whether users actively seek out information on social media through 'pull' type content. This denotes updates or tweets where the user actively seeks out information from their connections through questions and general enquires. Conversely, I ask if Twitter can be characterised as a medium for sharing information to users' audiences; this is defined as 'push' type information which could be embedded in broadcast and micro-broadcast content. Further, I examine how much content on Twitter is practical using the definitions of 'tips', 'advice' and 'recommendations' outlined already. Given that Twitter has a very limited text format, I aggregated together counts of each type of advocacy content. Finally, I analyse the value of information on Twitter, expressed by how often Malaysians retweet content. McKenzie's framework is not applied to my content analysis of Twitter because it is difficult to determine active versus passive information seeking intent by solely examining the content of tweets. That is, it cannot be ascertained how much content is 'quietly' consumed and valued by users through a content analysis. Internal 'viewing' metrics owned by Twitter would be one method of measuring how users view or passively consume content. This is an interesting future area of research; building on 'listening' and 'sharing' work on social media (Crawford 2009; Papacharissi and Easton 2013).

6.5 Findings I: The efficiency of social media information ecologies

My results will show that social media are regarded as efficient information seeking ecologies by most Malaysian users. This perception supports the objective of this thesis to explain the significance of social media as everyday information utilities in Malaysia. Results were similar across all major demographic groups, suggesting that social media has broad appeal as information ecologies. Figure 6.1 below compares responses to whether social media are regarded as efficient information tools.

Figure 6.1 Agree or disagree: social media is an efficient means for me to get useful everyday information



Percentages add up to 101% due to rounding
Source: Hanchard
October 2012
N=400
Percentages rounded up

The majority of respondents (81 percent) said that they either 'agree' or 'strongly agree' that social media are an efficient means to gain useful everyday information (Figure 6.1). This was compared to 5 percent who selected 'disagree' or 'strongly disagree'. A number of respondents (15 percent) were ambivalent ('neither agree nor disagree'). We can

speculate on the reasons why social media are regarded as efficient information sources by so many users. Firstly, users are able to interact directly in information ecologies that allow seeking and sharing within social networks from various contexts (see Rainie and Wellman 2012). Users have immediate and dynamic access to sources on social media which they have already selected through a process of curation. The context in which they know the tie (for example, school or work) might give them clues as to who is most likely to give them relevant information for specific questions. This could be based on a connection's privileged access to information through strong or weak ties. Information seeking on social media is also interactive; users can pose direct questions and expect that someone will provide a quick answer, while on a search engine the user has to sift through information that may not be tailored to their individual request. Search engine results are based on rankings devised by a third-party, while social media results are based on the user's curation, albeit mediated by algorithmic filtering on the platform. Secondly, there may be cultural factors explaining why the majority of Malaysian respondents regard social media as efficient information ecologies. In Chapter 2, I emphasised the communal aspect of Malaysian culture (Tong 2006) which places a high value on social relationships. In a collectivist culture it may be perceived as much quicker, easier and safer to ask someone whom a user knows than to search through unknown information sources. I have already highlighted the pre-eminence of Naver in South Korea (Chae and Lee 2005); further study on the appeal of social QandA websites across the wider Asia region is warranted.

6.6 Findings II: Types of information practices on social media

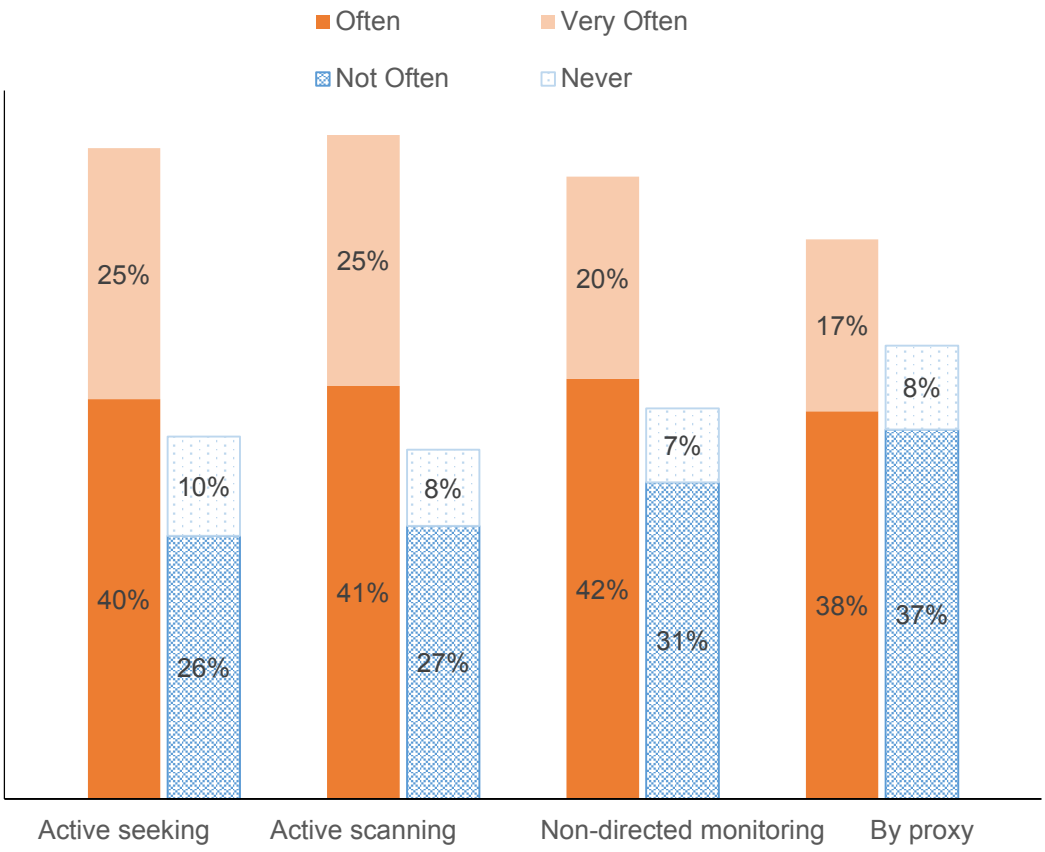
Malaysian users engage in different types of information practices on social media, including active and passive information seeking; the most common practices are active seeking and active scanning. Finding information serendipitously (non-directed monitoring) is slightly less common, and the least common practice is to use social media to gain information from sources that could not be accessed elsewhere (by proxy). Information practices that involve active seeking and scanning (browsing) and receiving information in a serendipitous manner are common to about two thirds of Malaysian social media users (Figure 6.2). Just over half of Malaysians use social media to get information they could not obtain elsewhere. Young users are the most likely to receive useful information from social media, even when they are not looking for it, suggesting

high engagement and browsing habits, and more extensive social networks. Twitter can be characterised more as an environment for sharing rather than procuring information; Malaysians are more likely to broadcast information than to ask questions on Twitter. There could be a Malaysian cultural element in a disposition by some users to not ask questions in a public environment. Practical information related to tips, advice and recommendations does not appear to be a substantial type of content in the everyday use of Twitter. Malaysian users re-share a very small percentage of content through retweets.

6.6.1 Active, passive and by proxy information practices

This section provides questionnaire results for active, passive and by proxy information practices, followed by a demographic summary. Figure 6.2 compares information practices using the McKenzie model, including active seeking, active scanning, non-directed monitoring and by proxy.

Figure 6.2 Comparison between information practices



Percentages add up to 101% due to rounding
Source: Hanchard
October 2012
N=400

6.6.1.1 Active seeking

Nearly two in three Malaysian users said that they use social media with the intention of finding the answer to a specific question (Figure 6.2). Respondents who said they do this 'often' accounted for 40 percent, while respondents who said they do this 'very often' accounted for a further 25 percent. Conversely, 36 percent of respondents answered 'not often' or 'never.' Malaysians not only find social media to be efficient resources for information seeking, they say they specifically turn to social media intending to find answers to particular questions. Through experience, users know how social media can be of benefit for their information needs. Information-seekers are systematic in going directly to the sources on social media they know will likely have the relevant answer. Information

seeking through active seeking involves planning and strategising.

6.6.1.2 Active scanning

About two in three Malaysian users said that they use social media to browse for information that might be useful in their everyday life (Figure 6.2), the same proportion as active seeking. Respondents who said they browse 'often' accounted for 41 percent and a further 25 percent who said 'very often'. Conversely, 35 percent of respondents answered 'not often' or 'never'. Malaysians not only turn to social media to answer specific questions; they browse social media for information as a general everyday activity. The practice of scanning for useful information on social media is common. Information-seekers have already determined where they can find relevant sources, and generally have their 'ears to the ground' for further information. Similarly with picking up a newspaper for daily news on the world, scanning through social media for information is part of Malaysian users' everyday routines. This type of information seeking heightens the value of social media as information ecologies. Users are loyal to a source which they know will repeatedly provide useful information.

6.6.1.3 Non-directed monitoring

More than three in five Malaysian users said they could get useful information on social media, even when they are not looking for it, a result not dissimilar to active seeking and active scanning (Figure 6.2). Respondents who answered 'often' accounted for 42 percent, while respondents who answered 'very often' made up a further 20 percent. Conversely, 38 percent of users respond answered 'not often' or 'never'. Even while Malaysian users are not necessarily looking for useful information, the platform 'pushes' information from users' connections which turns out to be useful. The considerable volumes of information and data that users are exposed to through everyday use mean it is likely they will receive information that is useful to them; there is an element of serendipity. The results outlined here support my finding that Malaysians regard social media as efficient information seeking ecologies. The architectures of platforms enable useful information seeking and is not merely dependent on user intent.

6.6.1.4 By proxy

Just over half of Malaysian users said they could get useful information on social media which they could not obtain elsewhere (Figure 6.2). Respondents who answered 'often' accounted for 38 percent, while respondents who answered 'very often' made up a further 17 percent. Conversely, 45 percent of users respond answered 'not often' or 'never'. The results are appreciably different from questions about active seeking, active scanning and non-directed monitoring practices. Users interact across a range of social networks on social media (see Chapter 4), and are not necessarily motivated by gaining information that is inaccessible through other sources. Everyday information of a temporal nature is valued (Kallinikos 2006); users are happy to receive updates on what their connections are doing. By comparison, technical information received via 'gatekeepers' might be more suitable or helpful when obtained from other information sources. For example, medical information from certified professionals might only be available through personal consultations, or in 'gated' websites where a user needs a membership and password to access content. Further analysis is warranted on the types of information and opportunities to which social media opens novel access.

6.6.1.5 Demographic comparison

Young users were the most likely to receive useful information from social media even when they were not looking for it (non-directed monitoring). See Table 6.1 below. This echoes a finding by Lampe et al. (2012, p. 3202) that showed that information seekers tended to be younger (as well as female, and with more Facebook friends). In the previous chapter, my results showed that young users were the most likely to use social media for social purposes; here, my results indicate that even when young users do not have active information practices on social media, they still receive useful information on account of their social participation. Urban users were more likely than rural users to be active across all information practices. We can speculate that population density offers more networked 'use contexts' for everyday information seeking (for example, festivals, events, food and dining experiences). City living could increase opportunities for gaining information serendipitously; for example, friends might post jobs for certain city areas. Malay and Indian speakers had more active information seeking practices on social media than Chinese and English speakers. My demographic profiles in Chapter 3 indicated that there were some slight socioeconomic advantages amongst Chinese and English speakers.

Higher education levels amongst these latter groups could mean that information on social media is not as highly valued because it lacks verification processes or is non-technical. I explore this theme further in Chapter 8. Tertiary educated users were more likely than non-tertiary educated users to browse social media for useful information (active scanning), the only information practice where there was an appreciable difference in the results. This could be related to the fact that tertiary-educated users were more likely to access social media through mobile devices (Chapter 4), which could increase opportunities for recreational browsing (see work by Waller 2011a on leisure search).

Table 6.1 Percentage of users who selected 'Very often' or 'Often' for information practice on social media: major differences between demographic groups

Demographic	Info Practice	Category (higher)	%	n	Category (lower)	%	n
Age	ND-Monitoring	15-24	70	70	All average	59	400
Residence	Active Seeking	Urban	66	218	Rural	57	39
	Active Scanning	Urban	66**	220	Rural	62**	42
	ND-Monitoring	Urban	63	209	Rural	55	37
	By Proxy	Urban	57	188	Rural	49	33
Language	Active Seeking	Malay	71	71	Chinese	60	60
		Indian	69	69	English	57	57
	Active Scanning	Malay	70	70	Chinese	62	62
		Indian	70	70	English	60	60
	ND-Monitoring	Malay	68	68	Chinese	59	59
		Indian	62	62	English	57	57
	By Proxy	Malay	61	61	Chinese	52	52
		Indian	61	61	English	47	47
Education	Active Scanning	Tertiary	67	226	Non-tertiary	58	36

** Not a major difference; included for comparison purposes.

See Appendix A3.6.1-A3.6.10 for full cross-tabulations
'Major difference' is 5 percent or greater between two categories, or between category and average.
Source: Hanchard; October 2012; N=400

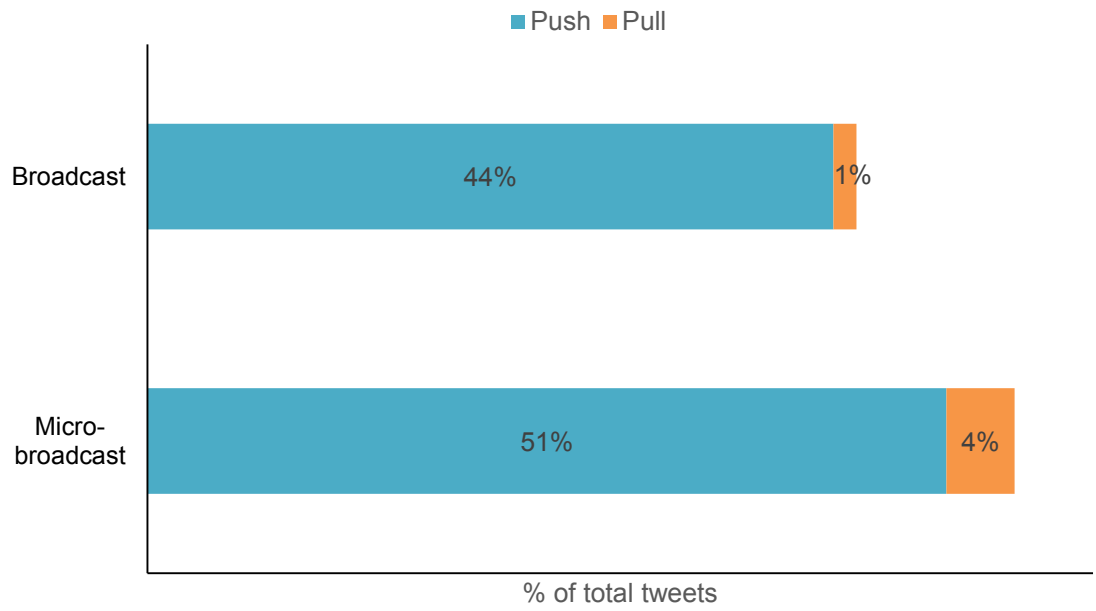
6.6.2 Twitter information practices

In this section I present questionnaire results for Twitter practices regarding pull versus push information, the proportion of tips, advice and recommendation, the type of content, and the proportion of information that is re-distributed.

6.6.2.1 Push versus pull tweets

I reported in the previous chapter that broadcast tweets accounted for 45 percent of tweets, compared to 55 percent that were micro-broadcast tweets. Of all Twitter content, only 5 percent constituted 'pull' type of information; 4 to 1 for micro-broadcast and broadcast tweets respectively. Figure 6.3 breaks down broadcast and micro-broadcast tweets into push versus pull content.

Figure 6.3 Percentage of push versus pull compared to broadcast versus micro-broadcast tweets



Period: 21 Sep 2012 – 11 Oct 2012
Source: Hanchard
Total tweets = 4,108

The majority of 'pull' type content occurs in micro-broadcast tweets; that is, in conversations. Users are asking specific connections for information they might find useful in their everyday lives. Again, there may be a cultural factor at work here, whereby Malaysian users prefer to ask people they know for everyday information, rather than asking connections that are socially distant. The small percentage of pull tweets demonstrates that asking connections direct questions has limited appeal for Malaysians on Twitter; it is uncertain if this is because of the nature of the platform or a cultural trend. Questions and answers are constrained by the platform limit of 140 characters per tweet. Here are examples of pull tweets (push tweets were similar to broadcast tweets, examples in Chapter 5):

Broadcast (Pull):

- "who knows the taxi number for Shah Alam area?" (21/9/2012)
- "In a voltaic cell, how to know Selatan is the anode and cathode?" (8/10/2012)

Micro-broadcast (Pull):

- "@XX want chicken rice.?" (11/10/2012)
- "@XX there this morning? What paper this evening?" (11/10/2012)

Questions that are asked typically relate to everyday life experiences which can be answered with lay knowledge. For example, in the tweet "who knows the taxi number for Shah Alam" the user is broadcasting a general question that might be answered by someone in the suburb of Shah Alam. The information that is exchanged has temporal value; it serves an immediate purpose (Kallinikos 2006). As users attempt to create order in their everyday lives (Savolainen 1995), information on social media can assist them in meeting short-term needs; the information is not necessarily technical nor requiring deep expertise. The information that is shared on Twitter in everyday practice might not have long-term value; what is relevant in current, local contexts may no longer be of interest in a year's time, for example. Social media information is typically 'immediate' in nature. My content analysis suggests that questions asked are likely to be conversational; that is, contained within micro-broadcast tweets. Harper, Moy and Konstan (2009) found that on social QandA websites informational questions are asked with the intent of getting information for factual or advice-oriented answers, while conversational questions are

intended to start discussion, get opinions, or may be intended as acts of self-expression. The authors offer evidence that conversational questions have lower 'archival value' than informational questions. My results suggest that is also true of conversational information queries on Twitter.

6.6.2.2 Tips, advice and recommendations

Content that was categorised as a tip, piece of advice or recommendation accounted for 2 percent of all tweets. These were embedded in both broadcast and micro-broadcast tweets split into 53 percent and 47 percent respectively.

Broadcast:

- "Going back home for awhile. To save money's sake, they asked mom for sambal fried anchovies. Can keep it for 2months without fridge! "(10/10/2012)
- "Back it up!"(3/10/2012)
- "Curry laksa - my all time favorite hawker food. Here's Tenggara to get the best in PJ - http://t.co/UR3lUPWC" (26/9/2012)

Micro-broadcast:

- "@ XX Please clear your cache and refrest or try another internet browser :)" (25/9/2012)
- "@XX just go to school, there's someone there that can help cheer you up, trust me." (3/10/2012)

This type of content was likely to be short and simple, in the form of tips rather than complicated pieces of advice or recommendations. Again, it is uncertain whether this is due to the nature of the platform, or whether there are cultural dynamics at play. These examples reflect content that relates to everyday living; in the first tweet, the user offers a tip on storing food; in the last tweet, the user is offering advice to provide social support to their friend. Recommendations are also reflected in suggestions for favourite food vendors (for example, where to get the best curry laksa). My results may suggest that Twitter is not a platform commonly used for seeking or sharing tips, advice and recommendations. As discussed in the previous chapter, content has a strong communication orientation by Malaysians on Twitter. However, my own experiences on Facebook suggest that tips,

advice and recommendations are actively sought out and given. In a more intimate setting, users may feel they have greater liberty to reveal personal circumstances with people they know; Facebook's architecture supports the ability to curate audiences for specific questions. Information seeking patterns on Twitter could also change in time as users' experience grows. As users emulate others asking questions, it may become standard practice on the platform.

6.6.2.3 The re-distribution of information

Retweets accounted for 5 percent of tweets, indicating that overwhelmingly the majority of tweets have original content. Retweets included content that was originally posted as broadcast and micro-broadcast tweets; that is, users were re-sharing general information they thought notable for some reason, as well as conversations they wished to share with a wider audience. Here are some examples of retweets:

- "RT @XX Temperature affects your appetite. A person in a colder room is likely to eat more." (10/10/2012)

- "Rich lah RT @XX: @XX I MIGHT be going down to Korea or Bali or Lingo afterwards my exams. So I MIGHT not be going down to kl. XD" (21/9/2012)

In the first example, the user re-shares a useful piece of information that their connection has posted, whether it is true or not ("Temperature affects your appetite"). The familiarity of the source may influence how trusted the information is, and the likelihood of it being further distributed. In the second example the user is re-sharing a conversation, and adding their 'two cents'; for example, the user's friends are travelling, and the user says they are "rich" for being able to do so ('lah' is used by Malaysians to emphasise a point). There is a 'performative' aspect in the re-sharing of the conversation, rather than just replying. Waller (2001) has written about the 'performative' nature of internet use in regards to the self and family, which has relevance to presentation of the self in the age of social media. Communication on social media may often be a public and performative act. The user who is re-sharing the content wishes their wider set of connections to know the context of the conversation.

6.7 Discussion

Social media are efficient information ecologies for consuming and distributing everyday information. Malaysian users actively seek and scan social media for useful information; they find information even when they are not looking for it and they can sometimes access information on social media that they cannot gain from other sources. Information sharing practices depend on the platform. On Twitter, Malaysians are more likely to share information than to ask for help, and much of their information sharing activity occurs within conversations. As stated in the previous chapter, Malaysian cultural traits of sharing information openly (Budiman and Abidin 2011) is somewhat reflected by broadcast information on Twitter; at the same time there appears to be some tendency not to ask questions in public. A small proportion of content on Twitter is re-shared, suggesting that the platform is still immature in terms of high-value information content, although this is not necessarily true of all platforms.

The nature of social media information is temporal and more likely to serve immediate needs around ordering the everyday lives of users. The flow of information on Twitter by Malaysian users is typically in a push direction, or bidirectional when embedded in conversation; rather than being used as a medium for asking questions. This does not mean that Twitter is not a tool for information seeking practices. As my questionnaire data indicates, a significant proportion of Malaysians actively scan social media for useful information, which could also be largely true for Twitter use. Christel Quek, regional content lead for Twitter, commented in March 2014 that the majority of users in Southeast Asia are 'stalkers'; that is, they 'listen' rather than post content.[19] There are possibly cultural dimensions in listening versus asking questions. There do not appear to be clear instrumental differences in types of information practice (active, passive and by proxy) between users of socioeconomic advantage and disadvantage. Further qualitative research is required to explain why Malay and Indian speakers have more active information seeking practices on social media. In Chapter 8, I will discuss whether differential social media information practices between ethnic groups have implications for social inequality.

Social media are efficient information ecologies because they are networked; depending on the platform, users can source information quickly from a range of social networks. Users have control over whom they send information requests to and may curate the connections from which they can browse content. As I highlighted in Chapter 4, educated

[19] Market Research in the Mobile World conference, Ramada Singapore At Zhongshan Park, March 2014

Malaysian users were more likely to value information from work and school peers. Their ability to leverage information seeking through these social networks could further increase their socioeconomic advantages. In the next chapter, I examine whether social media makes everyday life 'easier' for users, to shed further light on the impact of social media as information utilities. There is opportunity for further work on social media using the information ecologies and ELIS frameworks. Given that social media can be characterised as networked information ecologies, modelling approaches in ELIS could examine the types of social networks with whom users interact to gain information.

It is worth asking whether Malaysians could be using social media more effectively by actively asking more questions of their peers, as demonstrated by my Twitter results. Does the open architecture of Twitter constrain Malaysian users in asking questions? Are other platforms such as Facebook, or social QandA websites, more suitable? Or are public social media environments not regarded as suitable ecologies for informational questions while conversational questions are deemed appropriate? The wider implications of everyday information practices on social media from a literacy and productivity perspective invite further research. Increased posting of informational questions, for example, could indirectly improve the innovation outcomes of a society; as users actively gain information that allows them to achieve more with productive tasks. Users can potentially get more accurate information quickly through connections that are likely to know what they are talking about; for example, through localised knowledge.

Knowledge practices are outside the boundaries of current socio-technical practices of social media. For example, it is difficult to imagine knowledge being created and stored on Twitter given the constraints of disseminating information in 140 characters. Social media are useful partly because they can connect people and institutions that are sources of knowledge with users who can provide feedback. For example, Nassim Taleb, the author of *The Black Swan* (2010), which critiques humans' understanding of the probabilities of rare and unexpected events, engages his readers on social media as a testing ground for new hypotheses. Merely accumulating more everyday information does not mean social media information will ever constitute a 'body of knowledge', as the creation of knowledge encompasses a process of analysis and peer evaluation. The cultural value in information on social media does not appear to be strongly connected yet to societal repositories of knowledge. Nevertheless, Kallinikos (2006) points towards a process of acculturation where information becomes absorbed into the heritage of a society. The body of 'information events' on social media are shared between users who have similar cultural

values may similarly contribute to this process. As discussed in Chapter 2, consensus on important everyday events (signified by information sharing) contributes to how the social imaginaries of a country are envisioned by its netizens. This cultural value is distinct from an economic or production value in the form of a private or public good (Benkler 2006). My focus is on the value of social media as information ecologies in connecting users in everyday cultural contexts.

Participation on social media is likely to be part of a wider process of information seeking and sharing by users. Extra steps in verification, for example, may occur through in-person conversations in addition to social media participation. For future research, qualitative interviews would be useful in determining complementary activities and the full cycle of information seeking. There are limitations in applying McKenzie's model to social media information seeking practices. Averaged across the information practices I measured, about 40 percent of users indicated that the type of information seeking was not relevant to them. If my sample had been larger, it would have been useful to compare the overlap across the four types of information practices between users who responded 'not often' or 'never': were these the same people or very different groups of people? I offer a preliminary approach to understanding the perceptions and practices of social media as information ecologies building on previous studies that have focused more widely on the internet. There is further scope for work that examines information contained in different new media formats. Information that is shared by text, for example, is different from information embedded in media rich content such as video and photos. A comparison of private and public information ecologies in everyday life information seeking would also make a valuable addition to the field. This chapter makes a contribution by establishing information practices as styles of active and passive participation on social media across socioeconomic and ethnic groups in Malaysia.

Chapter 7 Embedding social media through utility

Visit any hipster café, mamak or hawker food stall, chances are you will see a Malaysian family communed for a meal accompanied with multiple smart phones or phablets (large smart phones). Eating out in Malaysia with family and friends is common (it's a humid climate) and the rise of networked devices amplifies the sociality of activity; pictures of food are shared with even more family and friends who are connected online. Everyday domestic activities are conducted and shared on social media platforms, inside and outside the traditional home. Whether at home, work, school, or out and about, Malaysians are on their devices. Not only does online activity reflect what users do offline, social media participation is an activity that is part of everyday routines. What is familiar and intimate to each user in multiple locations can be shared, contributing to a collective pool of quotidian information.

In this chapter, I illustrate the information utility of social media by outlining the breadth of uses that they can serve. In particular, I examine the information topics on social media that are relevant for both functional and recreational purposes in domestic settings. By framing social media use as a domestic activity, I seek to couple information practice with everyday contexts. Information that is shared on social media increases in value when users are able to use this information in their daily activities. Social media information has temporal value. I have discussed platforms firstly in terms of their networked affordances, and secondly the everyday life information seeking practices of users; the purpose was to establish social media as efficient information ecologies that allow diverse practices amongst heterogeneous Malaysian groups. Now I shift from an 'ecology' to 'utility' metaphor to connect information practices with online and offline worlds outside social media platforms; that is, information practices are integrated with uses and purposes in the 'outside' world. I ask which information topics characterise social media use in Malaysia. What do these topics say about how Malaysian users culturally value social media for functional or recreational applications? Are social media simply tools that encourage small-talk?

I conceptualise how social media 'integrates' with everyday life drawing on internet in everyday life studies, referencing scholars such as Barry Wellman and Caroline Haythornthwaite (2002). I present findings on whether Malaysians view social media as

tools that make their everyday lives easier. Domestication theory is important in this chapter for framing social media as utilities. Having established that social media are used frequently and widely (Chapter 4), I explore social media as tools of convenience in domestic ecologies. Internet scholar Maria Bakardjieva (2005) emphasises the user in the relationship between technology creators and the people who use these tools. I adopt the term 'use-contexts' which refers to the situations where social media information has utility. Bakardjieva's focus on technology use and its relevance to the 'situation at hand' is a means of setting boundaries for evaluating technology use in everyday life. Notions of the home ('mobile domesticity') are extended with networked technologies, as users adopt mobile social technologies to share and consume content of a familiar nature. I present a typology of social media information uses based on questionnaire results and content analysis. These topics are further analysed in terms of tips, advice and recommendations, as well as location data and functional and recreational orientation. A key assumption I make is that the topics of information that users value on social media provide insight into the applications of social media as utilities in everyday life. This approach ties into the localisation framework I have adopted; local content, preferences and cultural values are reflected in the prioritisation of information topics by Malaysian users. Topics of everyday importance in the social imaginary can be shared and reflected upon in social media information ecologies.

7.1 Integrating social media and everyday life

Users and their 'situations' in everyday life shape patterns of technology adoption. Bakardjieva (2005, p. 47) defines situation as "the unit of time and space that the subject inhabits and defines on the basis of the prioritized plan-determined interest at any given time". She builds on the work of sociologist Alfred Schutz and his notion of the 'everyday life-world' of each person. The situation at hand is the immediate context, or 'micro' zone of operation, in which the user exists and acts. This is distinct from the user's 'social-biographical situation' which relates to how the individual acts in a wider societal context. My objective is to set a realistic boundary on determining the outcomes of social media uses. Linking social media information to use contexts is a preliminary step in understanding how social media information makes everyday life easier for users. I established in Chapter 4 that Malaysian users regard social media as important in their

everyday lives; here I will propose that social media are important because of their utility in everyday settings.

The adoption of social media by users should not be viewed as a separate and isolated activity in their everyday lives. Social media use cannot be understood separately from the social worlds which users inhabit. Internet researchers have contested an artificial separation in understanding technology use and everyday life. Wellman and Haythornthwaite (2002) in *The Internet in everyday life* present a collection of studies that re-conceptualise the relationships between technology, user, use and everyday life. The authors advocate an integrative approach to understanding how time spent online and everyday life fit together. They are particularly critical of a 'dichotomized' view of human behaviour in internet research, citing artificial distinctions between "computer-mediated versus face-to-face, online versus offline, and virtual versus real" (p. 8). The authors argue that the internet has become integrated into everyday activities, rather than a separate place or entity. The term 'mediation' has been used to overcome an artificial distinction between technology and everyday life. Bakardjieva (2005) observes that technology provides a point of mediation between the user and the social world. This is a dynamic process, where the everyday worlds of the user can be changed by communication and mediation. Similarly, information and communication practices on social media are shaped by the everyday worlds which users inhabit; conversely, the everyday worlds of users are influenced by social media participation.

There is a need for scholarship that discusses how social media integrates with everyday life in terms of purposeful utility. While scholarship on the internet in everyday life is well-established, there is scope for literature that extends the range of this analysis to social media, particularly studies that analyse the use of social media information in a generic, exhaustive manner. In Chapter 5, I referred to the study by Van Dijck and Poell (2013), where the authors coin the term 'social media logic' to describe the ubiquity of social media in everyday media environments. They primarily frame social media as media; whereas I focus on social media as information utilities. I demonstrated in Chapter 5 that social media was regarded as the most useful source of information in everyday life by Malaysian users. Here I illustrate the everyday contexts in which useful information on social media becomes meaningful; that is, the personal and immediate contexts in which users are situated. I suggest that the uses of social media are the most compelling when they help facilitate activities that are comfortable, familiar and functional to users in

domestic settings; on top of being 'media', social media as utilities may become embedded in the everyday lives of users through effective participation.

7.2 The domestication and utility of social media

Social media participation is domesticated in terms of both where and how it is used and in articulating social relationships. In Chapter 4, I demonstrated that the home was the most common location for accessing social media by Malaysians. The origin of the word domestic relates to the 'running of a home or to family relations' (Oxford English Dictionary).[20] In this thesis, 'domestic' refers to the practicalities of ordering familiar everyday activities of the user, not just limited to the home. Domestication theory focuses on the 'ordinary' users of technologies in domestic settings (Bakardjieva 2005). It offers a framework for analysing how social media use integrates with everyday life. Domestication theory is appealing because it encompasses both media and sociology of technology concepts (Berker et al. 2006), and can be used to support the argument that social media are not just media, but utilities. Domestication theory attempts to account for "structures, daily routines and values of users and their environments" (Berker et al. 2006, p. 2). This perspective is compatible with an everyday life information seeking approach which emphasises routine information activities. Berker et al. (2006, p. 3) argue that the process of domestication of technologies is successful when technologies are regarded by users as "comfortable, useful tools - functional and/or symbolic - that are reliable and trustworthy". Similarly, everyday information seeking practices on domestic technologies can be deemed successful when they meet quotidian needs. The strength of domestication theory is in encapsulating contemporary life and social change on a micro-level (Schroeder 2002). In this thesis, I attempt to capture everyday life in Malaysia through 'small' everyday acts of information seeking and sharing on social media.

The domestic can be understood in terms of what is familiar to the user on an everyday basis rather than any notions of fixed physical place. Social media has been widely adopted in Malaysia for use in non-fixed domestic locations. In addition to being used in the home, social media are commonly accessed on mobile devices by Malaysian users (see Chapter 4). Notions of fixed access may become obsolete with ubiquitous technologies such as

[20] http://www.oed.com Viewed 6 November, 2014

mobile devices and their related practices. The user is the locus for social media use; the mutability of their location does not affect their access to media and technology. The domestic relates more to what users do with technologies, rather than where technology use is enacted. Bakardjieva (2006) argues the home is a starting point but it is not the only site or place where everyday life happens. The fragmentation of the domestic realm is influenced by mobile technology use whereby the home is no longer the centre of the user's world. While access to media and technology is not contingent on 'place' (formerly the home, work, school or cybercafé environment) it does not necessarily mean that 'place' is a redundant concept for social media content. Mobile media scholar Rowan Wilken (2005) argues that place persists through 'networked mobility'. The domestic is not necessarily fixed, but can be mobile; he uses the term "mobile domesticity". Mobile domesticity is an elastic notion that forces us to reconsider the concept of the household as a physical entity. Bakardjieva substitutes the notion of household for the home, which is defined as a "feeling of safety, trust, freedom and control over one's own affairs" and "not necessarily a real-estate unit" (2006, p. 68). For Bakardjieva the domestic is about intimacy. I take a different approach by defining the 'domestic' as uses that are of an everyday, routine nature. Information sharing on social media can illustrate domestic uses that are commonly appreciated by users.

Domestication theory allows scholars to link personal media and technology consumption with users' participation in wider social, political and economic structures. An important metaphor in domestication theory is the 'moral economy of the household' which examines the consequences of domesticated media use. Silverstone, Hirsch and Morley (1994) associate media consumption with the cultural values and economic activities of a household. The moral economy metaphor further links internal household relationships with external relationships in the outside world. The authors highlight four processes of appropriation, objectification, incorporation and conversion in their framework (pp. 18 – 23). The first two processes frame technology as objects that are bought and consumed as status symbols. The ideas of appropriation and objectification are relevant to social media in a political economy framework with regard to how users access social media services for free in exchange for the data they share about themselves and their connections; and how they make their social relationships visible through participation. For this chapter the processes of incorporation and conversion are more relevant for framing how social media are used functionally for 'internal' temporal purposes and how users are measured in terms of their competencies against others in their 'external' relations. Conversion relates to measures of competency in media and technology use, such as how a user might

be judged as savvy in their use by various peer groups. An example of conversion in social media participation could be the effective use of information seeking and sharing for education assignments or for finding employment. The authors point out that processes of incorporation may be articulated differently across demographic groups; for example, technology use may be 'gendered'. These demographic distinctions could also be applied to conversion processes in comparing the skills of groups; in this chapter, I examine whether there are links between socioeconomic and ethnic groups and the effectiveness of their conversion of social media information to make their everyday lives easier.

7.3 Use contexts in functional or recreational settings

As utilities, social media can be used in a range of contexts. I introduce the term 'use contexts' to refer to the situations where social media information has relevancy and utility. Social media can be a tool for sharing and getting relevant information in each situation in which a user operates. A 'lever' metaphor is apt in describing how technology may enable users to increase their influence on their everyday worlds. When Facebook was first launched its founder, Mark Zuckerberg, described it as a 'social utility' rather than as a social network or social media (Locke 2007). As social utilities, social media possibly enable users to connect with each other faster, more often, across wider networks, such as weak ties. Social media allows users to gain more relevant and helpful information to certain situations through their social networks. Users can more easily source information that is relevant in micro contexts, allowing them to solve problems that have temporal meaning at particular places and times. Walther et al. (2011, pp. 23-23 citing Chaffee 1986) argue that "we seek information from media or interpersonal channels largely based on topic, timing, and immediate accessibility". Users are afforded immediate access to functional and recreational information topics on social media through interaction with their various social networks.

My approach in examining the use contexts of social media is in determining the information topics that users find of value in their participation. For example, if a user posts a question related to health and medical issues, then the use context is health. The information topic provides cues as to the user's intents and actions, although there is no guarantee that the user will act on this information in their everyday lives. While there is a body of 'genre' approaches in media studies (see Chapter 4 in Rayner, Kruger and Wall 2004) I am more interested in utility versus entertainment content. Bakardjieva (2006, pp.

73-74) explains that her term ‘use genres’ accounts for both the influence of users and design features of a technology. She writes that use genres refer to the “concrete practical situation as experienced and defined by a user”. Bakardjieva argues that “by inventing use genres, meaningful and effective in the context of their local situations, users influence the source of technological and media development”. Her examples of use genres are very general, such as participation in online support groups and research for everyday activities. I am more focused on use genres from an information perspective. Moreover, I prefer the term ‘use context’ as genre has implicit notions of content ‘style’ that are not always appropriate to a functional information setting; for example, it makes less sense to discuss a banking genre of use than a banking context of use. I refer to dynamic and granular use contexts of social media that are not pre-defined by the platform, but which arise out of everyday settings.

I characterise social media information use contexts as functional or recreational. I define functional use as being of a practical, instrumental and useful nature. Recreational use, in contrast, is distinguished as being related to general enjoyment, entertainment or leisure. A comparison of approaches to measuring dimensions of internet use is provided by Blank and Groselj (2014). They further identify 10 distinctive types of internet activities; namely, email, information seeking, classic mass media, socializing, commerce, school and work, entertainment, blogging, production, and 'vice' content (such as gambling and visiting sex-related websites). There is a need in the literature to similarly examine the diversity of everyday information uses on social media. Other scholars in internet studies have taken the step of framing uses as functional or recreational. For example, Chen, Boase and Wellman (2002, p. 96) illustrate ‘instrumental’ uses, such as sending and receiving email, participating in mailing lists, using online libraries and other sources of information, taking online courses, online shopping, surfing websites, and participating in usenet newsgroups. I use the term ‘functional’ over ‘instrumental’ as functional is more commonly understood in Malaysia (this was tested in my pilot survey). Chen et al. outline ‘recreational’ activities as; chatting, collecting, role-playing, and playing multi-user online games. Social media platforms similarly can be conceptualised as either ‘utility-driven’ or recreational ‘play-driven’ spaces, depending on the user, their networks, and the platform ‘culture’. Arora (2012) analyses the cultural typologies of new media spaces, in terms of utility-driven, aesthetic-driven, context-driven, play-driven and value-driven spaces. There is a similarity between this work and taking an architectural approach which defines the orientation for each platform. These typologies are shaped by the users themselves and their activities in everyday life.

7.4 Approaches and methods

My primary research question refers to the 'everyday contexts' in which social media are used as information utilities. Here I establish the 'socially meaningful' ends of social media by examining the range of use contexts in which information is applied. My primary research question also alludes to the 'networked' contexts of use; social relationships on social media may determine the types of use contexts in which shared information is relevant. I address my secondary question by examining differences between ethnic and socioeconomic groups in adopting social media utilities. Does social media make life easier for certain groups through their skilled participation ('conversion')? Are some groups more likely to appropriate social media for functional or recreational ends? The dimension of participation this chapter addresses is 'purpose', which refers to how information on social media is applied in everyday life. In Malaysian scholarship, there is a substantial amount of literature related to general uses of the internet (Hasim and Salman 2010; Salman and Hasim 2011; Salman et al. 2010; Salman and Rahim 2011a). These studies similarly treat uses of the internet in terms of activities spent online. There are emerging studies that focus on how social media are used, but often these identify social gratifications. Salman and Rahim (2011a) cover social aspects of social media, such as interacting with old and new friends, interacting with politicians and NGOs, chatting, and giving comments and opinions on current issues. Their analysis does not encompass an account of general utilitarian applications and related use contexts through information topics. In my literature review, I have set up a framework for describing social media use in the 'real world'; social media participation is an integrated activity in everyday life. The specific questions I investigate in this chapter are:

How integrated are social media as information utilities in users' everyday lives; that is, does use of social media information make everyday life easier?

As information utilities, do social media get used in a broad range of everyday contexts, serving both functional and recreational uses?

7.4.1 Measuring the information utility of social media

Firstly, I examine whether social media make life easier for users and build on existing internet studies (Ewing 2011; Ewing and Thomas 2010). This question tests social media as tools that help facilitate everyday living. This approach helps to explain the outcomes of social media and their relevance to wider aspects of users' lives; information that is sought and shared within social media ecologies has utilitarian functionality. Information seeking and sharing occurs between connections of meaningful social relationships, and this information may be converted to an effective purpose by each user. I use the term 'easier' to suggest leverage and the convenience of social media as utilities:

Agree or disagree: social media makes everyday life easier for me?

Options from 'Strongly agree' to 'Strongly disagree' were given.

This measure is limited in that I am not able to determine how and in what circumstances social media makes everyday life easier. As with my measure of efficiency (see previous chapter) further research might examine scenarios of how social media information makes everyday life easier, especially compared to other information sources. The term 'easier' also suggests short-term value; I do not examine whether social media adds value for a user on a long-term basis in their everyday life. Further research might also ask in what circumstances social media does not make life easier. For example, does the nature of social relationships on social media complicate the types of information users feel at liberty to ask or share? Do users become less effective in their everyday lives because their information sources are narrowly restricted to connections with whom they are most comfortable (Sunstein's notion of polarisation)? The preliminary step I take here is a measure of whether most Malaysian users perceive social media as being helpful.

7.4.2 Measuring the use contexts of social media

I measure the contexts in which information is used, references to location (mobile domesticity), and functional and recreational motivations for use. In my questionnaire, I asked respondents to select topics for which they use social media. In devising a topic list,

I draw on the work of Chen et al. (2002) and Blank and Groselj (2014). I also am informed by industry based metrics for typologies of internet use (refer to Chapter 3 for a discussion of commercial internet measurement approaches). I take a grounded approach for determining topics and the multiple contexts in which social media information might be used in everyday life. My topic scheme resulted in 30 categories (see questionnaire in Appendix 1.1). A narrower typology might have focused on specific activities related to fewer information topics (for example, topics related to 'government' could include searching for local versus national government services). As stated, my objective was to demonstrate the breadth of information content on social media as a proxy for the breadth of applications of social media in everyday life. This approach prompts questions as to whether there might be architectural factors inherent in platforms resulting in certain types of information topics being more prevalent than they are in general internet content. Given the diverse spread of information topics, I did not conduct a demographic cross-tabulation analysis; if I had a much larger sample, it may have been feasible to segment each topic by demographic groups.

In my content analysis of Twitter, I examined the actual content topics that emerge in tweets. Firstly, this was to compare how respondents reported on their content choices versus their actual practices (acknowledging that my questionnaire and content analysis sample sets are different); and secondly to examine how the architecture of Twitter enables and constrains the diversity of information topics. There are other studies that provide a more specialised analysis of social media information topics. For example, in *What is Twitter, a social network or a news media?* Kwak et al. (2010) 'crawled' (a software term for pulling in data) the entire Twittersphere through an automated approach and obtained 4,262 trending topics focused on news. My interest is in broader information content. In the previous chapter, information seeking topics were discussed in terms of tips, advice and recommendation to determine the practical value of information seeking on social media; here I analyse the same categories in relation to use contexts. I also examine references to 'location' in tweets. I have alluded to the notion of mobile domesticity, which argues that domestication is not necessarily fixed to the home but relates to what is familiar to the user in everyday contexts. My interest in reviewing content for location references is towards an understanding of whether users have a strong awareness of where they are physically located when they view and post content; or whether location is irrelevant to how users broadcast their everyday activities. My analysis offers only a cursory treatment of location and mobile domesticity.

Finally, I examined functional versus recreational content on social media. In my questionnaire I asked respondents to identify content on social media as being 'functional' or 'recreational'. I also asked users to distinguish between viewing and posting these two categories of content. Users were asked the following questions:

'Do you view items on social media for mostly functional or mostly recreational purposes?'

'Do you post/share items on social media for mostly functional or mostly recreational purposes?'

The response options were 'mostly functional', 'mostly recreational', 'half and half' or 'can't say'.

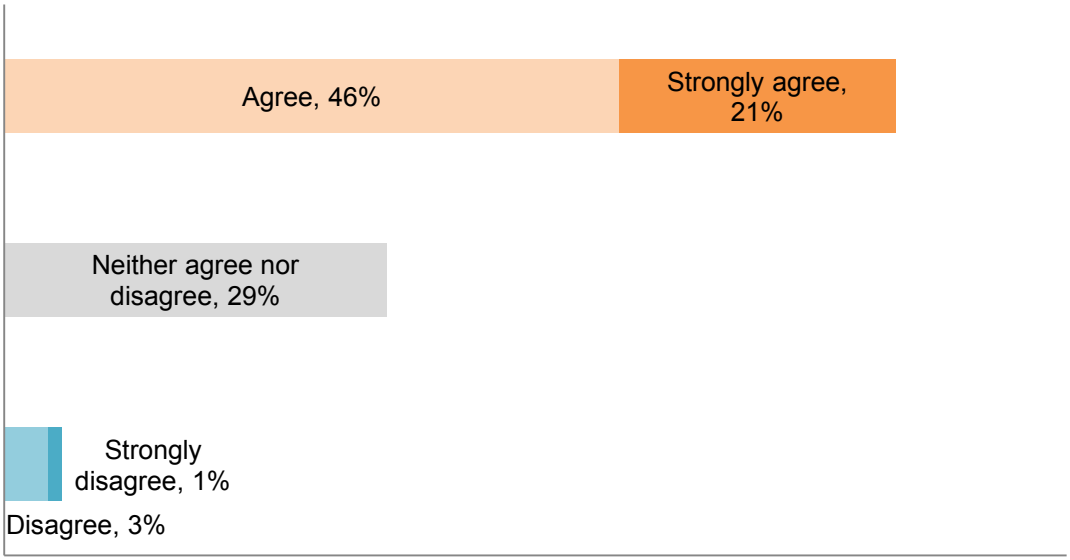
In my content analysis of Twitter, functional tweets were distinguished as relating to a purpose of a practical nature. Recreational tweets were distinguished as related to activities done for enjoyment and not of a work or practical nature. Functional and recreational content could be embedded in either broadcast or micro-broadcast tweets. Qualitative interviews would have been beneficial to determine the effective application of information. Further, multiple coders would have been desirable in my study to ensure the reliability of the categorisations.

7.5 Findings I: The information utility of social media

My results show that the majority of Malaysian users agree that social media are information tools that make everyday life easier for them (Figure 7.1). Of the respondents, 67 percent either said they 'strongly agree' or 'agree' that social media makes everyday life easier for them. This was compared to 4 percent who said they either 'strongly disagree' or 'disagree'. The remaining 29 percent of respondents were ambivalent, selecting 'neither agree nor disagree'; for these users, the effects of how social media function as utilities in their everyday lives might simply be unknown. Given the large exposure to daily information on social media and their sometimes serendipitous relevance or usefulness, it may be hard to gauge the effectiveness of social media in everyday life. This might also be a problem related to 'conversion' as described by the moral economy metaphor (Silverstone, Hirsch and Morley 1994); users are exposed to relevant information, but do not necessarily have the competencies or desire to translate this information into tangible

outcomes in their everyday lives.

Figure 7.1 Agree or disagree: social media makes everyday life easier for me?



Source: Hanchard
October 2012
N=400
Percentages rounded up

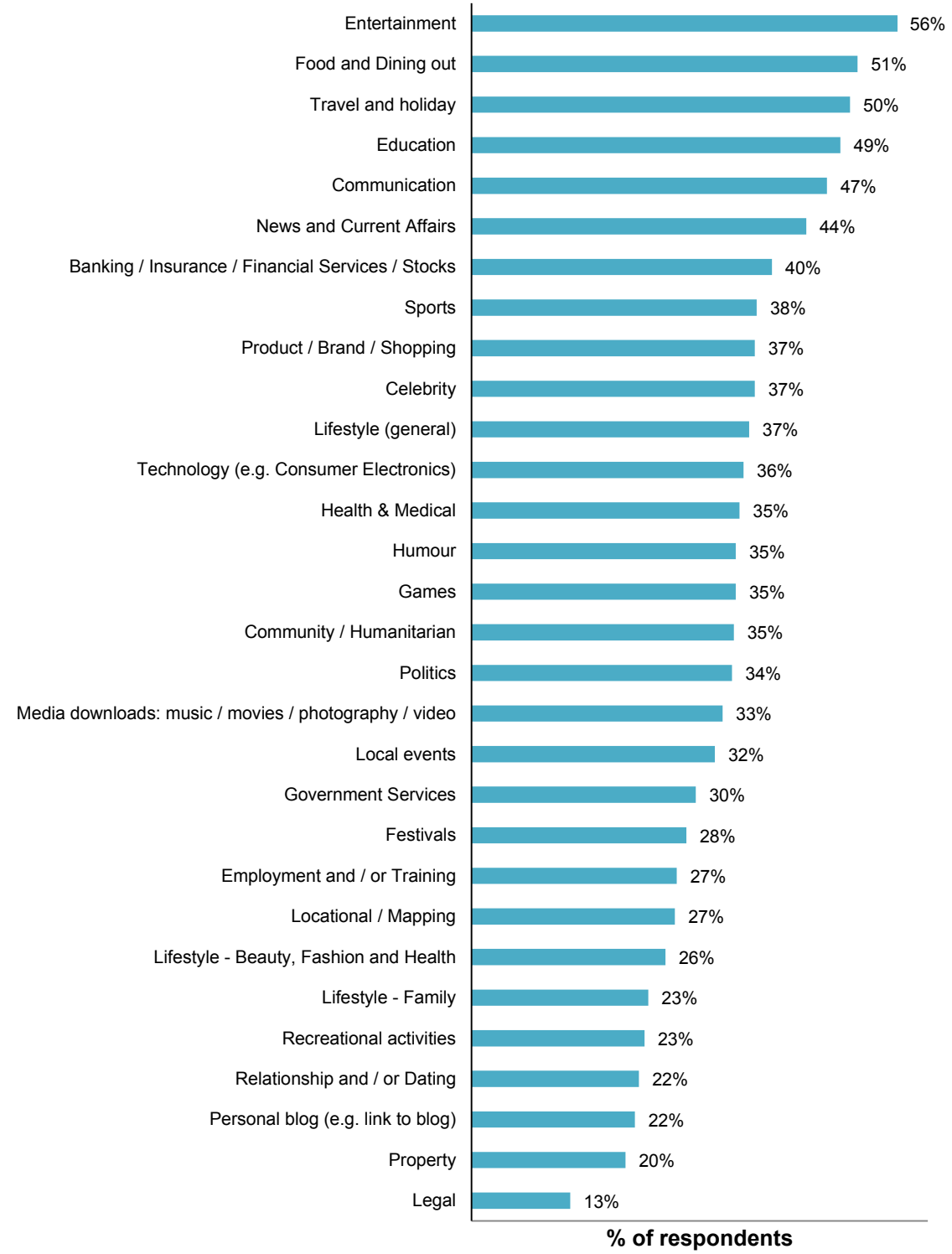
Young social media users in the 15-24 bracket were very likely to report that social media made their everyday lives easier, with 75 percent (n=75) answering 'agree' or 'strongly agree' (A3.7.1), compared to an average of 66 percent (n=400) across all groups. In the previous chapter, I described how 'getting updates on what your contacts are doing' was an important motive for young Malaysians in using social media. Connecting with prioritised social networks allows young users to access relevant information that can make their everyday lives easier. Non-tertiary educated users were more likely than tertiary-educated users to say that social media makes everyday life easier for them: 76 percent (n=47) and 65 percent (n=221) respectively (A3.7.2). This could be because educated users are not as likely to value social media as instrumental tools in their lives for achieving education and employment outcomes. Malay and Indian speakers were more likely than Chinese and English speakers to report that social media makes everyday life easier for them: 72 percent (n=72) of Malay and 70 percent (n=70) of Indian, compared to 64 percent (n=64) of Chinese and 62 percent (n=62) of English speakers (A3.7.3). These differences between language groups could be related to my finding in the previous

chapter that Malay and Indian speakers had more active information seeking practices on social media than Chinese and English speakers. As mentioned previously, there could be a link between the socioeconomic advantages of Chinese and English speakers and their lesser propensity to value social media as tools for making everyday life easier; for example, these users may feel they have gained the necessary skills in everyday life from formal information sources, such as educational institutions. In Chapter 8, I will examine the relationship between active functional information seeking practices and the likelihood of regarding social media as valuable utilities in everyday life.

7.6 Findings II: The use contexts of social media

My results will show that Malaysian users value a diversity of information topics on social media, indicating a range of use contexts in which social media are used. In social media use overall, themes that dominated included entertainment, food and dining out, travel and holidays, education, communication and current affairs. On Twitter, 'small-talk' or conversational chat strongly characterised Malaysian use. The prevalence of small-talk points to the everyday use of social media; information of everyday importance is exchanged frequently and may or may not help users to make their everyday lives easier. I describe Twitter's platform as 'information agnostic' given the large diversity of information topics for which it is used. Other common topics on Twitter included lifestyle, education, food, relationships, entertainment and technology. Only a very small percentage of tweets contained location information. Social media information has both functional and recreational value to users. Figure 7.2 ranks information topics on social media as valued by Malaysian users, based on my questionnaire results:

Figure 7.2 Which of the following topics have you found information on using social media in the past month?



Respondents could select more than one option
Source: Hanchard
October 2012
N=400

Responses across the information topics were fairly evenly spread and not concentrated; 56 percent of respondents selected the most popular topic (entertainment) ranging to 13 percent for the least popular topic (legal). It is not surprising that entertainment was the top selection, given findings from a comScore (2011a) study indicating that entertainment websites are visited by 97 percent of Malaysian users, compared to a worldwide average of 88 percent. Similarly, the finding that Malaysian users value social media information on food makes sense, given the cultural appreciation of food in Malaysia and Southeast Asia (Van Esterik 2008). The highly common selection of 'travel and holiday' as a topic suggests an outward looking focus; Malaysian social media users are curious about locations beyond their immediate realm of everyday experience. This possibly reflects the social and economic advantages of social media users in Malaysia, as pointed out in Chapter 3. The popularity of education information reflects the activity of young people and students on social media; further, it suggests that they are using it to support their studies, and that social media use has some educational value at least in an informal capacity. Communication as a topic was selected by a high number of respondents, as was news and current affairs, reflecting the temporal nature of information on social media. There was possibly some overlap in communication as an information topic and as an activity on social media; a limitation of my questionnaire design.

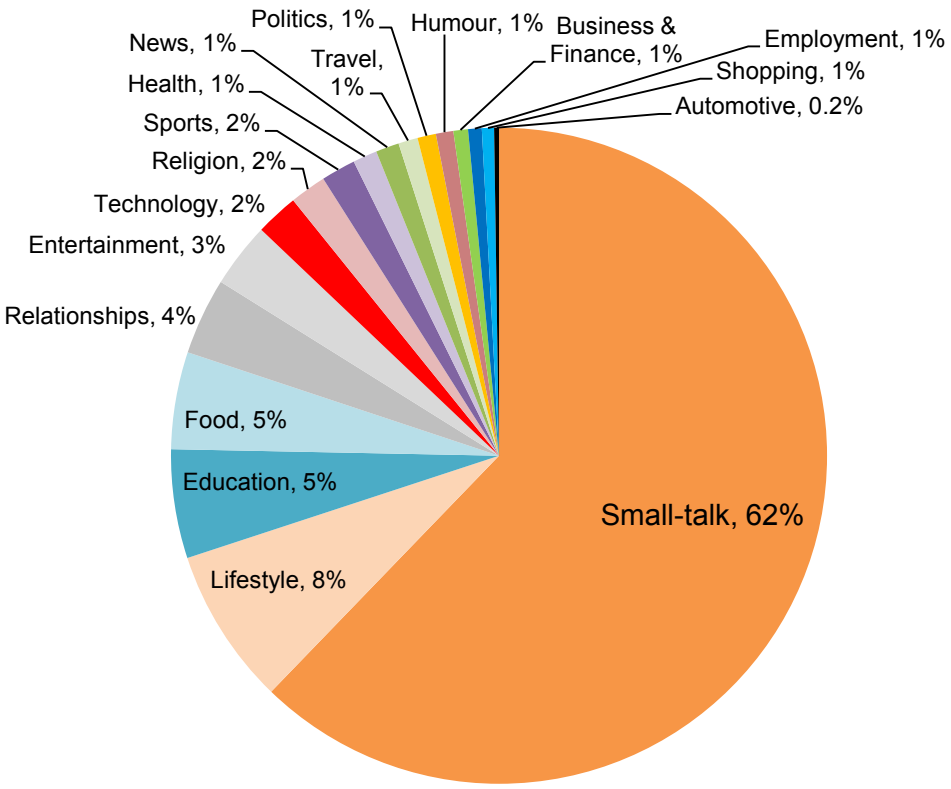
Information topics that were the least likely to be selected included, legal, property, personal blog, relationship and / or dating and recreational activities. The low ranking of legal and property reflects that social media are not considered appropriate places to get information that requires extended verification processes. It was surprising that relationship and /or dating ranked quite low; this may be because the enactment of important social relationships is implicit in social media participation, and is less important as an information topic. The low ranking of the employment and / or training information topic is of interest in in relation to my discussion in Chapter 4 regarding the affordances of networking through weak ties to find opportunities. There is potentially a need by educators to encourage Malaysian users to seek and share information on social media with their networks to help improve their employment opportunities.

7.6.1 Twitter use contexts

Small-talk accounted for a large portion of content on Twitter, at 62 percent (Figure 7.3). I define small-talk as: banal chit-chat, gossip, communication without a particular focus; for

example, "Good morning all!" Overall, I identified 18 'parent' categories. Other common topics on Twitter included lifestyle, education, food, relationships, entertainment and technology, some of which are similar to the self-reported results in my questionnaire (See A4.1 for the full list of topics identified and descriptions). A more fine-grained analysis of Twitter topics (excluding small-talk and lifestyle general) resulted in 48 subcategories tagged, indicating a high diversity of topics (see A4.2). The most common topics aside from small-talk were food-general, education–studies, relationships–general, lifestyle–inspirational, lifestyle–family and religion–general.

Figure 7.3 Content analysis of Twitter topics



Period: 21 Sep 2012 – 11 Oct 2012
Source: Hanchard
Total tweets = 4,108

The small-talk of Twitter reflects its use as a communication platform in Malaysia, as I identified in previous chapters. The everyday nature of content is reflected by the fact that, in general, lifestyle information topics ranked highly. I defined lifestyle content as 'of a

general recreational and leisure nature'. Twitter can be characterised as an information tool for recreational and leisure activities. These findings are similar to those in a study by Riana and Boer (2011) in Indonesia, where leisure was identified as the predominant motivation for use on Twitter. Indonesian respondents used Twitter to "relax, spend leisure time and get pleasure" (p. 1). The prevalence of content related to lifestyle–inspirational and lifestyle–family are reflected in my content analysis of Twitter, but not in my questionnaire results ('Lifestyle' ranked #11). This suggests that Twitter is more of a recreational platform than other social media platforms. Furthermore, my use of the term 'lifestyle' might not be consistent with how users categorise their content. Tweets related to relationships, inspirational and family content were also high, in contradiction to my questionnaire results. This could mean that users value content related to the domestic sphere (relationships, family) more than they realise. It is particularly interesting that religion ranked relatively highly at #8, alongside sports and technology, although only accounting for 2 percent of tweets. Religion is an important aspect of everyday life in Malaysia, as I discussed in Chapter 2. For some users, media use reflects and is integrated with the expression of religious life.

Categories that accounted for 1 percent or less of content included automotive, shopping, employment, business and finance, humour, politics, travel, news and health; although some of them were ranked reasonably highly in my questionnaire. For example, banking / insurance / financial services stocks ranked seventh out of 30 topic categories selected by questionnaire respondents. The dominance of recreational and conversational content on Twitter suggests that there are architectural rather than cultural reasons as to why Twitter is more likely to be used for recreational information by Malaysians. The limitations placed on each update encourage lightweight communication and simple information, rather than detailed information-querying. It could also be because Malaysian users are more likely to allow acquaintances and strangers to follow them on Twitter, so are less likely to ask questions of an intimate nature. As I discussed in Chapter 4, one study demonstrated that job-seekers on Facebook were more likely to receive successful help from strong ties with whom they shared their personal employment circumstances (Burke and Kraut 2013). Users possibly require additional skills to leverage weak ties on social media for functional uses.

In order to illustrate how information topics and use contexts might be particular to a platform, I provide some comparative examples based on my use of Facebook in Malaysia. I referred earlier to Facebook's self-described origins as a 'social utility'. The everyday

information that my Malaysian friends share on Facebook includes both functional and recreational content and spans diverse use contexts. Informed by the typology of social media uses I have already established, the following are some examples of information-sharing topics on Facebook derived from my observation of Malaysian users:

Comparison of observed Facebook use contexts

Education – Updates on completed tertiary courses.
Employment – Specific queries about opportunities for themselves or friends.
Family – Significant milestones, such as a baby's first birthday.
Food - Recommendations of restaurants (through pictures of food).
Health – Questions on remedies for personal health problems; recommendations on procedures.
Politics – Frustrations about corruption; organisation of protest activity.
Religion – Quotes and advice on relationships with friends and family.
Retail – Asking for recommendations on cheap products or services in specific areas; for example, where to get cheap printing in KLCC.
Technology – Questions on which phone model to buy; for example, iPhone versus Samsung.
Transport – Traffic updates on accidents and congested areas.
Travel – Sharing cheap airfares and promotions; for example, through Air Asia links.

These topics could be applicable to users in any country; what differentiates information topics preferred by Malaysian users are the references to local events or situations. For example, there were frequent reminders shared by Malaysian social media users about being safe following an outbreak of street muggings and gang murders in 2013 (Fuller 2013b). When users ask questions of their connections, examples of language observed include: "If anyone knows someone…"; "Please help…"; "Any recommendations for…"; "I'm looking for suggestions on…"; "Folks, I am looking for contributions…"; "Can anybody recommend decent yet cheap…" and more. Again, this language does not appear to be particularly distinct to Malaysian use. Budiman and Abidin (2011) conducted a privacy study of Malaysian users on Facebook, comparing different Asian and Western perspectives on information sharing. They cite a study by Nosko, Wood and Molema (2010), claiming that in Western society it is respectful not to ask others for personal information. Budiman and Abidin contend that "the situation might be different for the people in Asian countries including Malaysia" (pp. 7-8), suggesting that privacy is less of a

concern. Future comparative studies on cultural reasons for 'open' information seeking and sharing practices is warranted.

7.6.1.1 Topics versus tips, advice and recommendations

The small-talk and lifestyle categories, due to their size, had the highest number (but small proportion) of tweets which contained embedded tips, advice or recommendation content. See Table 7.1. In the previous chapter, I demonstrated that tips, advice and recommendations accounted for 2 percent of all tweets by Malaysian users. Shopping and employment tweets, as utilitarian topics, had the highest composition of tips, advice or recommendation content.

Table 7.1 Analysis of tweets based on topics with tips/advice/recommendation (TAR) content

Category	TAR tweets	Total tweets	Row %
Small-talk	24	2599	1%
Lifestyle	10	314	3%
Relationships	7	158	4%
Shopping	6	23	26%
Employment	5	28	18%
Technology	5	85	6%
Education	5	221	2%

Min cell count = 5
Period: 21 Sep 2012 – 11 Oct 2012
Source: Hanchard
Total tweets = 4,108

Examples of TAR tweets:

- *Small-talk:* "@ XXWell that's better than doing nothing and Being envious Hahaha" (28/8/2012)
- *Lifestyle:* "Look busy even if you are not." (24/9/2012)
- *Relationships:* "Ex-boyfriend has MOVED on, blame the ex-boyfriend's bestfriend for changing the attitude. # Exgirlfriendprobs" (26/9/2012)
- *Shopping: "*@ XX you sure you want it? The leather sleeve is expensive. Australian leather, AUD200." (24/9/2012)
- *Employment:* http://t.co/E0QCG3I8: Get Feedback, Even If You're the Boss http://t.co/GewSkItm (25/9/2012)
- *Technology:* "Because I love Dropbox dropbox are very useful and easy to use.http://t.co/3cHVqlNP" (21/9/2012)
- *Education:* "@ XX hhaa plague.Dpt difficult Biochem already know just pass pass okay la tu no need to repeat. : P gudlak yes pris: *" (24/9/2012)

The examples I have cited demonstrate that tips, advice and recommendations shared on Twitter are often fairly simple pieces of information. A large amount of the tweets I measured could be classified as lifestyle–inspirational, which related to spiritual, motivational advice and tips. Content that was classified as 'relationships' (defined as relating to intimate personal and familial relations, including dating, partnerships, marriage) also contained advice on interpersonal relations. These are related more to social support content than utilitarian objectives. The shopping example I cite offers a price comparison that may help a friend save money. The tweet related to employment shares an article on how to perform one's job more effectively. In the technology example, a user is giving a recommendation on a service that may help another person with their use of software. In the relationships and education tweets, advice is given to motivate others. I have illustrated a culture of information sharing on Twitter with a view to helping others. An 'economy' of receiving and sharing useful information is likely to make the platform compelling to Malaysian users.

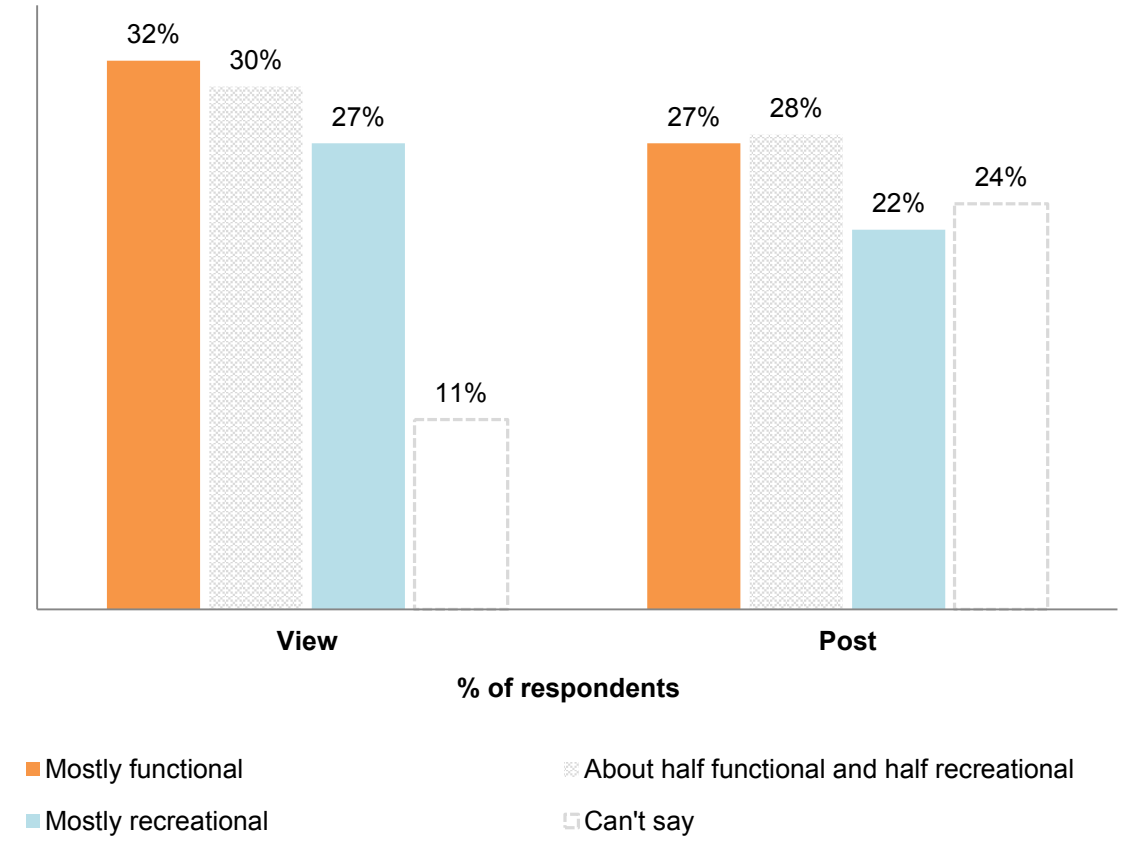
7.6.1.2 Locational content

Content with location data on Twitter was minimal, accounting for 1.6 percent of tweets. Tweets related to food and dining out had the highest composition of locational information at 10 percent. There are some broad interpretations that can be made here. The first is that location is not at the forefront in the minds of users when they post on Twitter. As I highlighted above, domestication is no longer confined to the home nor fixed to a particular location; there is nothing novel in revealing where you are when you post on social media. Another explanation is that different platforms encourage users to share different types of information. For example, mobile applications such as Foursquare and Foodspotting, are social tools for 'checking into' locations and providing associated comments (for example, restaurant recommendations). Twitter, while allowing users to identify their location through a map feature, does not necessarily encourage users to do so. A recent Pew report (Zickuhr 2013) found that 30 percent of adult social media users in North America have enabled their accounts to be able to include location data, compared to 14 percent in 2011. The report observes an ascent of 'location awareness' in technology use coupled with the daily life of users. Weidemann and Swift (2013, p. 25) found that location data is embedded in 3.5 percent of content by Twitter users in the United States. International comparison data on locational content on Twitter is very difficult to obtain, given the immense task of identifying location information that users share in their content. Cultural attitudes towards privacy, location-sharing on social media and safety issues is also a promising area for future research.

7.6.2 Functional and recreational uses

Malaysian users reported that they share and consume both functional and recreational content on social media in equal proportions. Users in high-skilled occupations are more likely to consume information on social media for recreational content. Twitter is largely used recreationally, with the majority of re-shared tweets being of a recreational nature. Figure 7.4 below compares viewing and posting preferences for functional and recreational content respectively.

Figure 7.4 Viewing and posting functional versus recreational items



Source: Hanchard
October 2012
N=400

There is an even balance of Malaysian users viewing and posting either functional or recreational content on social media. For viewing content, 32 percent of users responded they view for 'mostly functional' purposes, 27 percent 'mostly recreational', 30 percent 'half and half', while 11 percent responded 'can't say' (Figure 7.4). For posting content, 27 percent said 'mostly functional', 22 percent 'mostly recreational', 28 percent 'half and half', and 24 percent 'can't say'. Surprisingly, about double the number of respondents (24 percent) didn't know if the content they viewed, or posted (11 percent), was functional or recreational. This could be because of issues in user recall; or because users do not know whether the content they share is perceived as being useful or recreational by their social networks.

The differences between occupation groups in viewing and posting content suggest uneven information ecologies of publishers and readers, shaped by levels of expertise. High-skill white collar users were more likely to view recreational content and post functional content, while low-skill white collar users were more likely to view functional content; posting recreational content was about the same for both groups (Table 7.2). Users with high levels of employment skill were more likely to consume information on social media for its recreational value; conversely they were more likely to share information they regarded as functional, and possibly more useful, to their audience. Users with low levels of employment skill were more likely to seek functional information posted on social media. On nearly all dimensions of social media participation measured, male and female users demonstrated similar patterns of participation; the only appreciable difference was in viewing and posting recreational and functional content. Male users had a clearer sense of whether they were posting or viewing content for mostly functional or mostly recreational purposes (a greater percentage of females responded 'can't say' for each of these questions). These findings suggest that male users could have stronger intentions of use for social media information, inviting more data collection on possible reasons.

Table 7.2 Percentage of users who selected information use: major differences between demographic groups

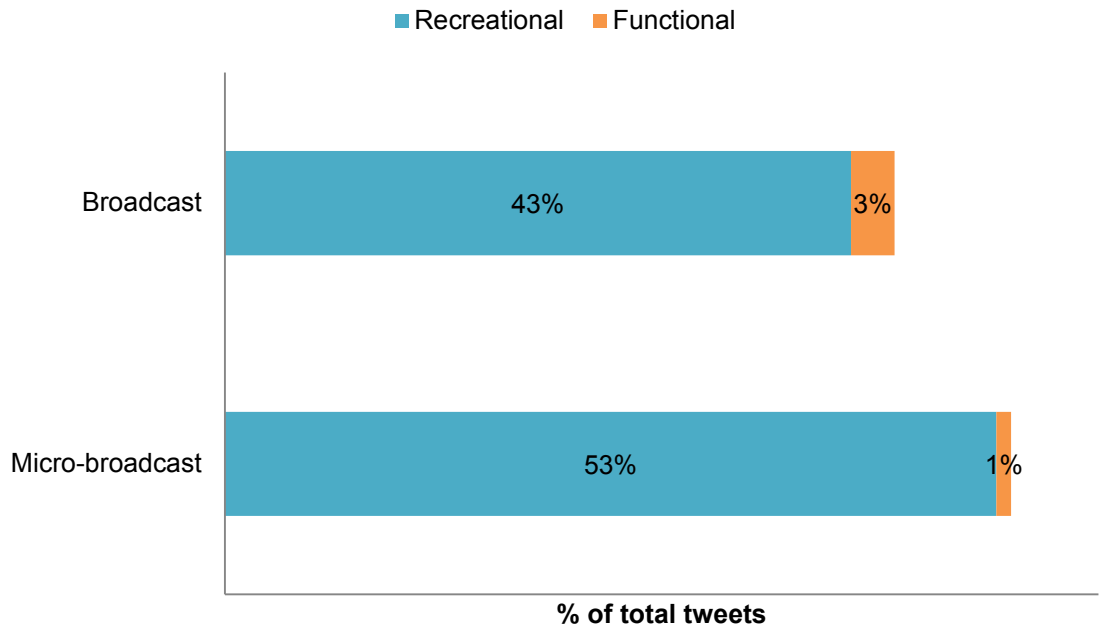
Demographic	Use	Category (higher)	%	n	Category (lower)	%	n
Gender	View Recreational	Male	31	67	Female	23	41
	View Functional	Male	34	74	Female	29	53
	Post Recreational	Male	25	55	Female	18	33
	Post Functional	Male	30	65	Female	24	43
Occupation	View Recreational	High-skill white collar	31	63	Low-skill white collar	18	12
	View Functional	Low-skill white collar	39	26	High-skill white collar	28	58
	Post Recreational	High-skill white collar	22**	45	Low-skill white collar	19**	13
	Post Functional	High-skill white collar	29	60	Low-skill white collar	21	14

See Appendix A3.7.4-A.3.7.11 for full cross-tabulations
** Not a major difference, but included for illustrative purposes
'Major difference' is 5 percent or greater between two categories, or between category and average.
Source: Hanchard; October 2012; N= 400

7.6.2.1 Twitter functional and recreational uses

Recreational tweets accounted for 96 percent of information content on Twitter. See Figure 7.5. Micro-broadcast–recreation tweets outnumbered broadcast–recreation tweets; accounting for 53 percent and 43 percent of total tweets respectively. My analysis of retweets indicated that 94 percent were recreational. Further, the sharing of tips, advice and recommendations was more likely to occur in conversational (micro-broadcast) content, rather than in broadcast information by Malaysian users. Tweets categorised as micro-broadcast–functional were three times more likely than tweets categorised as broadcast–functional to have tips, advice or recommendations embedded.

Figure 7.5 Functional versus recreational compared to broadcast and micro-broadcast tweets



Period: 21 Sep 2012 – 11 Oct 2012
Source: Hanchard and Datasift
Total tweets = 4,108

The following are examples of tweets by Malaysian users based on the above categories:

Broadcast (Functional):

- "Read ACCA four years, and then work out a salary of only 2800 + + out least 5 years of work experience before they can take a test. Finished the test, there are 10,000 salary + +. A good number of zero-$ _ $" (25/9/2012)
- "Did the PRICES of property in Klang Valley go up by 3.4%? What about your Milo Ice? Wantan mere? Baby formula? Asadi sandals?3.4% too?" (22/10/2102)

Broadcast (Recreational):

- "James Bond film is celebrating 50years of Their running .. nice one eh .. # James # Bond # 007" (5/10/2012)

- "Oppa Gangnam Style? Blacky delirious eh? dy ~ "http://t.co/ZN71TX0a" (2/10/2012)

Micro-broadcast (Functional):

- "@XX am not sure about the current market price. fudging so high and why is That so? # LawyersAintLiars" (27/9/2012)
- "@XX courier do not know whether the goods already delivered and not in the house to or have not been sent." (06/10/2012)

Micro-broadcast (Recreational):

- "@XX hi. XD" (1/10/2012)
- "@XX Yes. Hahahaha. Can not stand the heat." (22/10/2012)

All of these examples are highly quotidian in nature: they relate to functional and recreational aspects of everyday living, concerning issues that have relevance to the present lives of users. Users are able to compare aspects of everyday living with the experiences of others, such as income and the cost of living. Users can share complaints with users who have the same problems, often based on shared location, such as the weather or transport. Temporal experiences of everyday life, in functional and recreational contexts, are shared through information practices on Twitter.

7.7 Discussion

My findings show that Malaysian users regard social media as utilities that make life easier in a diverse array of everyday contexts. Malaysians appreciate social media information for both recreational and functional purposes. Information content that is of value to Malaysians relate to entertainment, food and dining out, travel and holidays, and education. Twitter use in Malaysia is particularly chatty and recreational; small-talk characterises the majority of content. The prevalence of small-talk supports my proposition that social media are everyday, domestic tools; information seeking and sharing occurs in informal settings. This does not mean the information exchanged on social media is unimportant; it does mean that social media are everyday life tools in which information and communication are equally inherent. The localised content of

social media use in Malaysia is reflected by the presence of some religious content on Twitter, alongside sport and technology. Social media are effective information utilities because users can apply the information they gain to use contexts in their daily lives for different objectives.

The finding that Twitter is being used primarily as a recreational media is consistent with the finding that Twitter is highly oriented toward communication use in Malaysia. This does not detract from my argument about the value of social media as information tools. The questionnaire results demonstrate that Malaysians use social media for a range of topics beyond communicating. The differences between the content analysis of Twitter and the questionnaire results (for example, banking ranked highly in my questionnaire, but not on Twitter) suggest that there are architectural rather than cultural reasons why Twitter is more likely to be used for recreational information by Malaysians. Twitter is a particularly 'chatty' platform, where design features have an influence on user participation. Information shared on Twitter relates to activities that occur on a daily basis, such as eating and, for some, going to school. Twitter is a domestic social information tool; there is nothing 'extraordinary' about how it is used. Malaysian users do not reserve posting on Twitter for information only about special events (such as political, environmental and historical events, and so forth); 'small' occurrences are still considered worthy of being recorded and shared in a public capacity. Twitter's loose and light architecture enables a wide array of discussion topics which does not necessarily lead to information specialisation, as might be found on LinkedIn.

Social media information practices are coupled with networked everyday contexts; they are domestic services that are not limited by location or context. Domestication, as a theory of technology embeddedness, is a highly compelling framework in analysing use-contexts of social media. Domestic activities can occur wherever the user is, at any place, at any time. I have explored the perceived trust and usefulness of information from different types of connections on social media. These 'filters' help users determine how social media information can be applied in everyday use contexts. That is why social media information might be more relevant than information received from search engines. Information relevancy might be amplified through social relationships on social media that can make everyday life easier for users in diverse use contexts. Further, users in highly-skilled occupations are not more likely to value social media for functional information that might serve pragmatic objectives. While social media services might be 'inclusive', they do not necessarily guarantee socioeconomic advantages. The ability for

social media information to be 'leveraged' for social mobility, depends on the querying and networking skills of how the technology is adopted ('conversion').

In a Southeast Asian context, it is worth considering the implications of new media used as recreational tools versus being embedded in the everyday lives of users through economic necessity. Technology advocate Esther Dyson speculated in an interview (Bloomberg 2013) that mobile devices are bought as 'capital expenditure' in developing Asian countries; specifically, users rely on feature phones to fulfil small business functions for their livelihoods. In the context of developing countries in Asia, Dyson argues that social media are more likely to be functional, whereas in the United States use is more likely to be recreational and entertainment oriented. Dyson's generalisation depends on the specific country. Media and technology adoption in Malaysia is different from other developing nations in Southeast Asia, such as Cambodia, Burma and Bangladesh. Malaysia is a middle-income country with widespread adoption of ICTs; this could help to explain my findings which show that information content is equally likely to be characterised by both recreational and functional use. The consumption of both functional and recreational content in social media in Malaysia bodes well for the sustainability of social media as integrated information tools in the everyday lives of users.

As users participate in multiple contexts on social media for utilitarian purposes, they leave a trail of domestic use data, especially as smart mobile adoption increases. Technologies such as Google Glass (wearable eyewear that is a human-computer interface) may amplify the generation of use data, as wearers' record information about their everyday lives while they experience it. Ubiquitous computing accordingly has become of interest to domestication scholars (Berker et al. 2006). Serendipitous information practices might be enhanced by greater volumes of use data being generated, but filtering and interpreting that data for meaningful ends remains a challenge for users. Moreover, users are faced with the increasing fragmentation of information sources which they may apply in everyday use settings. Walther et al. (2011, p. 23) observe that in the context of convergence of mass and interpersonal channels, users have choices between "mass media sources on the one hand, and synchronous or asynchronous discussion with peers, family, and / or friends on the other". Processes of evaluating different media and social networks for useful or trusted information is therefore crucial to distinguish 'signal' from 'noise' in the content.

Given the difficulty in capturing what everyday uses might mean for most users, I have inferred use contexts from information topics on social media. It is important to highlight

that content measured on Twitter was based on an external categorisation process, while the questionnaire results were selected by the respondents. Without using a qualitative approach, it is not possible to determine the extent to which social media information plays a role in the everyday life of each user. There is scope for developing measures of 'real world impacts' of social media information. In the next chapter, I connect social media use to wider life outcomes for Malaysians, such as employment, education and quality of life. I compare participation styles on social media to identify differences between demographic groups in Malaysia. I do not assume that all Malaysians are using social media information to achieve wider objectives in their lives. The usefulness of social media depends on the conversion skills, preferences and perceptions of their users. This chapter has served to illustrate that the embeddedness of social media in networked contexts is reflected by their range of functional and recreational uses.

Chapter 8 Consequences of social media participation

A ride in an old taxi around Kuala Lumpur will open up vignettes of paradox to the passenger. An abundance of highways circumvents monolithic shopping malls. Yet dotted in back streets are pockets of slum housing. Those who can't afford highly-taxed cars are forced to walk dangerously on highways; those who are marginally better-off elect to transport their families, including children, on scooters. The rise of contemporary, East-West fusion cafés reflects the experiences of Malaysian expats abroad and a sophisticated urban elite. Yet an excursion to a village less than 20 kilometres from the Kuala Lumpur city centre will reveal crumbling, blackened tenements. This picture of street life is a reflection of both the aspirations and realities of development in Malaysia. ICTs and development are linked in Malaysia's national narrative. Classified as a middle-income nation by the OECD (2012), political leaders in Malaysia advance the idea of meeting high-income status by 2020. Vision 2020 calls for a technologically literate workforce that can participate in a modern global economy. Malaysia enjoys a privileged status as a middle-income country amongst its Southeast Asian neighbours, but social inclusion in Malaysia is not enjoyed by all.

The framing of this chapter is broad in that it situates social media participation in terms of national agendas of development and social inclusion. While the previous three chapters have examined information practices on platforms, the scope is now broadened to explore the consequences of social media participation. The immediate objectives are to identify meaningful outcomes of everyday social media participation that are linked to development (simple indicators are established for these); examine differences between users that might have an impact on these outcomes; and to set realistic boundaries on the significance of social media in everyday life. My central argument is that social media as information utilities can benefit users in their everyday lives, but they are not necessarily tools that are instrumental in achieving higher socioeconomic outcomes. What are the factors that differentiate users of socioeconomic advantage in their style of social media participation? Are socioeconomic (including urban and rural residence attributes) or ethnic differences more important in differentiating use and outcomes of social media participation? In Chapter 2, I outlined Malaysian ICT initiatives that have been in place for more than 20 years to support the country's vision to achieve high national income status.

So far, I have discussed the implications of social media participation using the frameworks of social imaginaries, localisation and racial polarisation. These approaches help to contextualise development debates in a Malaysian setting.

The first part of this chapter describes what, broadly, is encompassed by 'development'; the factors that are of interest here are education, employment and quality of life outcomes. These are linked to the quality of participation, rather than an analysis limited to access to new media technologies. The terms 'digital inclusion' and 'social inclusion' address digital divides in participation and attempt to account for wider social systems that create differences between groups in Malaysia. A description of ICT adoption should take into account the local cultures and social networks of their users. I draw relationships between dimensions of social media participation (sources, purpose and value) to identify effective practices. More broadly, I discuss how development should accommodate cultural diversity, building on my critique of a networked individualism perspective. Racial polarisation is revisited as a problem for development, especially as it influences social inclusion. I discuss how ethnic groups might enjoy access and participate freely on social media, yet remain excluded from aspects of Malaysian life. Another key issue introduced is the increasing curtailment of media freedoms, also regarded as a development indicator.

8.1 Development concepts, social inclusion and race

Development discourses concern reducing social, economic and political gaps, or divides between the privileged and less privileged, within and between societies. Geography scholar Katie Willis (2011) argues that development is linked with concepts of economic modernity, industrialisation, progress, and the "increased use of technology within all sectors of the economy" (p. 3). Measures for development emerged from The United Nations in 2000, outlining eight goals related to areas of eradicating poverty and hunger, education, gender equality, health and environmental sustainability. Willis points out that development not only includes socioeconomic attainment such as education and employment, but broad notions of quality of life, including 'soft' goals such as social and cultural participation. Other areas, such as health, are equally important, but are outside the scope of this thesis. Willis further outlines a rights based approach to development that examines the eradication of cultural diversity and effects on environmental

sustainability through industrialisation. Development goals encompass how resources and opportunities are distributed amongst members of society. In Malaysia, development outcomes are relevant both internally and externally. That is, there are significant social and political gaps within Malaysia, and economic gaps as a middle-income country compared globally.

Social inclusion is related to development, referring to equal participation in the social, economic and political life of a country (Stewart 2000). Education and informatics scholar Warschauer (2002) argues that 'social inclusion' is a term to be preferred over the 'digital divide' because it addresses the problems of social systems, and not just access to technologies such as the internet. 'Digital inclusion', which concerns equal online participation (including social media use), is a related concept, but is not synonymous with social inclusion (Buré 2006). Individuals and groups who have the ability to access and use ICTs may still suffer social disadvantages. Warschauer (2002) contends that content and language, literacy and education, and community and institutional structures must all be taken into account as factors for meaningful access to new technologies. It should be observed that social inclusion is not necessarily the same as socioeconomic equality. The author suggests there are many ways the poor can have fuller participation and inclusion, even if they lack an equal share of resources. At the same time, "even the well-to-do may face problems of social exclusion, due to reasons of political persecution or discrimination based on age, gender, sexual preference, or disability". Castells (2000b) reminds us that the adoption of ICT is not necessarily empowering for societal groups. They can be tools of inclusion or exclusion, especially in societies that are not structured to be fully inclusive. I gave the example in Chapter 2 where ethnic Chinese Malaysians have economic advantages and participate actively on the internet, but are marginalised by national programs such as the New Economic Policy.

Debates about social inclusion in Malaysia are being increasingly focused on issues of ethnicity. Rahim, Pawanteh and Salman (2011, p. 4) state that concerns about social inclusion often include factors such as gender, geographical locations, and socioeconomic status. They argue that ethnicity is often subsumed under other characteristics; the role of ethnicity in 'social transformation' is not always highlighted. The authors credit equal access to the internet by the major ethnic groups to numerous efforts by the government for ensuring widespread, affordable access to computers and wireless connectivity (p. 9). While the authors found no major differences in educational and political participation online between ethnic groups, they observed that Chinese use was 'ahead' compared to

other ethnic groups in the adoption of transactional services, such as e-commerce and e-government. Postill (2009a) similarly found advantages among ethnic Chinese in internet use, where most online innovators were "male, ethnic Chinese, university-educated and employed in the private sector" (p. 110). In contrast, "non-Chinese, women, the elderly, the young, foreign workers" were disconnected from online activism. Meanwhile, Rahim, Pawanteh and Salman (2011) advocate more public sector ICT initiatives focusing on digital inclusion for Malays as the major ethnic community. They argue that lifting online participation in transactional services or purposeful use of the internet by all ethnic groups is required to meet the nation's wider ICT goals.

The relationships between race, ICT adoption and social inclusion are not straight-forward. Jones et al. (2009, p.246) in a study on race, gender and digital divides amongst U.S college students recognise that "differential access is only part of the issue." They argue that social and cultural factors contribute to wide variability in attitudes amongst demographic groups towards the value of ICTs for communication, entertainment and education purposes. That is to say, there are no simple binaries of access and styles of use in distinguishing between cultural differences versus social inequalities. It should not be assumed that a group's lack of educational use of a particular technology is detrimental. In a study of a subsidised wireless internet infrastructure for a community of Native Americans, Sandvig (2012) questions the aspirational notion of technology adoption; that the internet, in the context of a subsidisation program, must only be used for educational purposes without regard to the cultural fit to users. In his study, one valued use of the internet by the local community was to watch soccer games; online recreational activity may contribute to community well-being. The point that Sandvig makes is that certain uses of new media technologies, even when deemed 'educational', should not be 'imposed' onto groups. As this chapter will highlight, identifying meaningful styles of participation on social media across socioeconomic and ethnic groups in Malaysia in relation to social inclusion is a complex task.

8.2 The relationships between ICT, social media and socioeconomic indicators

How important is online participation to development, particularly information sharing through technology services such as social media? Castells (2010) argues that development is enabled by how effectively individuals connect and participate through

networked structures. He emphasises that information is the "key ingredient of our social organization and flow of messages and images between networks constitute the basic thread of social structure" (p. 508). Information sharing has a role in development by facilitating transmission of practices, knowledge, co-ordination and various other dimensions. Phipps (2000, p. 62) argues that information is an integral part in promoting social inclusion. Information sharing and ICT have the potential to "not only facilitate employment and contribute to the economy but also to contribute to quality of life, feeling of inclusion, and empowerment of citizens". Furthermore, Mervyn, Simon and Allen (2014, p. 1100) suggest that there is a relationship between information needs and social exclusion, where the information needs of the poor are much more complex than technology developers and government authorities anticipate. Factors such as access to education and employment compound the complexity of the information needs of the socially excluded. ICT play an especially important social and economic development role in Malaysia (Salman 2009). Authorities such as The Ministry of Education support the role of ICT as systems that enable information gathering, management, access, and communication in various forms (Chan 2002). Social media, as a system that encompasses these properties, is relevant in the relationship between ICT and education.

It is not clear whether social media participation should have any significant effect on improving socioeconomic outcomes, specifically in education and employment. Media and youth scholar Sonia Livingstone, in *Critical reflections on the benefits of ICT in education* (2012), argues that it is far from conclusive whether access alone to technologies such as the internet can have a meaningful impact on learning outcomes. In fact, these technologies might simply be a distraction to learning. Hargittai and Hinnant (2008, p. 607) identify that users who use the web for 'capital-enhancing' effects such as job hunting are likely to be educated in the first place. The attainment of education is linked to employment prospects, earning capacity, social status, well-being and social mobility (Boudon 1974; Neelsen 1975). Technology may increase the effects of exclusion by simply allowing those with education and technical skills to increase their social mobility, without providing adequate support structures to those that access the internet without higher education. Users who already have skills gained from formal learning and institutions, may have enhanced abilities to further their opportunities through social media participation. It is certainly not conclusive as to whether users of lower socioeconomic status are able to appropriate ICT for social mobility. Access alone does not mean improved job-seeking skills or employment prospects.

Links between social media participation and social capital, in relation to quality of life, have been identified in new media literature. Valenzuela et al. (2009) argue that social networking activity helps to build social capital, not detract from it. In a study of college students, the authors examine online networking and social capital using the dimensions of life satisfaction, trust and political and civic participation. Their approach on using psychological measures of well-being in relation to social capital is outside the scope of - this thesis; however, their work is relevant for linking social media to wider outcomes such as social inclusion. They found that individuals who invest online in diverse large networks were able to develop "norms of trust and reciprocity which are necessary for successful engagement in collective activities" (p. 877). The ability to build trusted networks online is especially relevant in a Malaysian communal context, where traditional ties are important online. Valenzuela et al. (2009, p.880) highlight that new media use which is related to information acquisition and community building is positively linked to social capital, in contrast to entertainment and diversionary activity. While social media participation may not necessarily improve learning outcomes, users can build social capital through their networks and gain access to information through bridging ties. Ellison et al. (2011) point out there is a need to understand whether particular uses of social network sites (SNS) are more likely to enhance social capital; that is, what users do, and who users interact with on social media is important. They focus on communication practices and 'connection strategies' and found that 'social information-seeking', or using SNS to learn more about people with whom the user has some offline connection, is linked with social capital. My focus is on linking functional information practices on social media (defined below) with social capital, in the form of education, employment and quality of life outcomes.

Participation quality and internet competencies are key issues in Malaysian scholarship on social inclusion (Rahim, Pawanteh and Salman 2011). As established in Chapter 1, a significant proportion of Malaysians have access to the internet and social media. Salman and Rahim (2012, p. 5) argue that "exposure to ICT by Malaysians in general has largely been achieved". Rahim, Pawanteh and Salman (2011) contend that investment by the Malaysian government to date has been sufficient so that digital divides are no longer significant in terms of access. They emphasise the communication, networking, transactional (for example, e-government and e-commerce services), and participation value of ICTs. The authors further point out that digital inclusion "encompasses not only access and skills to use the internet but also to participate and benefit from the knowledge and information that can be retrieved from the large networks of databases" (p. 4). In

other words, online competencies include the ability to search for and use information from the internet. Transactional participation may include information practices that serve functional ends, as I have described in the previous chapter. There is a need to examine social media participation in relation to internet competencies in Malaysia. Access and participation divides in Malaysia on ICT also concern the needs of rural users, given their economic disadvantages (Gibbons and Kasim 1990; Salman 2009). Rural use of the internet has implications for democratic participation in Malaysia, especially access to independent, critical online news sources (see Chapter 5). Further, local content and digital literacy are part of achieving ICT and development outcomes. ICTs can give Malaysians greater access to content in the national Malay language (Salman 2009).

8.3 The complexities of development in Malaysia

Political factors in Malaysia further complicate the relationships between development and social inclusion. Kivunike et al. (2011) build a model of quality of life that includes not just dimensions of social opportunity and economic facilities, but political freedoms. Development is not only defined by 'hard' economic measures, but freedoms to exercise political rights in a society that values transparency and trust. 'Quality of life' may include the concept of freedom where people have the ability to pursue opportunities that lead to a better life (Sen 2000). Access to media and information and communication technologies allows users to participate in the political life of a country. Media freedom is a pressing development issue in Malaysia. Previously, I highlighted a changing media environment, where Malaysians have the opportunity to interact directly on social media, bypassing mediation by authorities on traditional media. Sani (2005, p. 345) explains that the tight government control over the media in Malaysia is rationalised by the nation's development agenda: "The official line is that the country is not ready for greater freedom of expression as it would lead to political instability and inter-ethnic unrest, which would undermine economic development." Sani points out that the *Bangkok NGO Declaration on Human Rights 1993* which stipulates the right to freely express opinions is a challenge to developing nations such as Malaysia. Media freedom in relation to social media is of particular concern; particularly the zealous application of the Sedition Act (I. Lim 2014). The Malaysian Social Science Association (2014) asserts that academic freedoms, under threat by the application of the Sedition Act, are required for a "mature democratic

society". Issues of media freedom and access to information highlight the deeply political nature of development in Malaysia.

There have been increasing calls in Malaysian development literature to consider factors beyond economic modernisation. Asia historian Michael Heng Siam-Heng (2014) criticises the government's Vision 2020 as making the "cardinal mistake of narrowly focusing on the visible material achievements while ignoring the need to build up societal resources" (p. 231). Despite the Vision 2020 project, he cites outstanding areas of concern to include, "depletion of oil resources and rainforest… ethnic polarisation, crime, drug abuse, pollution, frequent floods, erosion of judicial independence and the declining quality of public education" (p. 231). Siam-Heng poses the larger question of whether there is an opportunity for alternative paths to modernisation in Asia outside the dominant Western economic model. He points out that the origins of modernity in Malaysia can be traced back to the colonial period, where Malaysia was integrated into the global economy. Siam-Heng argues that modernisation may occur without being culturally Westernised; that it is "possible to adopt the best practice of Western liberal democracy without undermining enlightened Islamic culture and values" (p. 234). He does not ignore the plural nature of Malaysian society, acknowledging that development encompasses processes of building national identities of diverse cultures, races and religions. Siam-Heng asks whether it is possible for development in Malaysia to avoid the pitfalls of "social alienation and extreme individualism" (p. 233). This allusion to extreme individualism is relevant to a critique of networked individualism.

Networked individualism is an approach that purports to account for how ICT are adopted in developed societies (Rainie and Wellman 2012). In Chapter 4, I introduced arguments by Postill that networked individualism does not account for collectivist structures outside Western settings. Postill (2008b) takes issue with the application of networked individualism outside the 'developed North'. He critiques Wellman and colleagues' claim that, "The developed world has been experiencing for over a century a shift away from communities based on small-group-like villages and neighborhoods and towards flexible partial communities based on networked households and individuals." (Wellman et al. 2003 cited in Postill 2008b). As I have outlined in previous chapters, a localisation perspective calls for accounts of technology use with respect to the relevant social networks of the cultures in which they are adopted. The work of Rainie and Wellman (2012) differentiates between developed and less developed societies using networked individualism as the distinguishing characteristic: "Around the developed world flexible,

manoeuvrable connectivity has increased, group boundaries have weakened, and information has become more directly available - all driving the shift to networked individualism" (p. 22). They argue that their conclusions generally hold true for the entire developed world. Implicit in these claims are that all developed societies will transform into individualised structures. This is a problematic notion, not accounting for cultural diversity and collectivist values that could be preserved in a modern development program. In this thesis, I have advocated a localisation perspective which emphasises local cultural values in how new media and technology services are adopted. The application of a development framework should take into account heterogeneous online information practices, as users interact and share information with traditional and non-traditional social networks.

8.4 Approaches and methods

I address the primary research question of my thesis by focusing on the significance of social media in everyday life, framed here by development indicators. I address the secondary question of the thesis directly, which concerns the implications of social media participation for social inclusion for socioeconomic and ethnic groups in Malaysia. My objective is to determine whether there are any significant socioeconomic or ethnic divides in social media use. I consider social media participation broadly and will provide details below on which dimensions are used for measurement. I build on Malaysian scholarship by examining social media participation 'competencies' in relation to information and networking practices (Rahim, Pawanteh and Salman 2011). Does social media participation merely amplify the social advancement of users who already have skills acquired from formal institutions such as school or work contexts? Are there socioeconomic divides where some users have more effective social media participation styles? Further are there divides in media preferences that have implications for media freedom and development? I discuss how differences in social media participation might affect wider social cohesion in Malaysia, especially with regard to race and religion. The main questions I address in this chapter are:

How important is social media participation to users in achieving life outcomes that are important for social inclusion and development?

Are there socioeconomic or ethnic divides in social media participation and wider media use between groups on social media?

8.4.1 Measuring the outcomes of social media

I examine whether social media participation has impacts on the wider everyday lives of Malaysians, in terms of, education, employment and quality of life. The rationale for focusing on education and employment is that they are indicators of social and economic status; throughout this thesis I have highlighted the need to examine social media not just for their recreational value, but as functional tools for improving lifestyles. I use the concept of 'quality of life' as a limited, general measure of outcomes. This approach helps to establish the significance of social media in users' everyday lives; that information seeking and sharing on social media has implications for how users participate more broadly in society. In my questionnaire I asked:

How has your use of information on social media in general affected your education studies?

How has your use of information on social media in general affected your employment / training opportunities?

How has your use of information on social media in general affected your quality of living?

Responses could range from 'Significantly improved' to 'Significantly worsened'.

My question on education allows for the fact that users might be using social media for both informal and formal learning ('education studies'). Dabbagh and Kitsantas (2012) outline literature which shows that social media may support informal learning at home, as well as formal higher education learning. My question however does not determine the effectiveness of learning through social media participation. In previous chapters, I introduced literature discussing how the internet and social media might be used to help with employment (Burke and Kraut 2013; Kavanaugh et al. 2005). These studies focused on the benefit of strong and weak ties in building social capital through increasing access to information that might lead to new avenues for jobs. As with the education question, my approach is limited to determining if there is a net benefit in using social media for employment and training opportunities. Finally, I adopt the term 'quality of life' in its

colloquial, subjective meaning of 'general well-being'. Leung and Lee (2005) write that quality of life is a measure of overall life satisfaction which is personally defined, not externally imposed. Each person has their own criteria in determining how they value certain outcomes such as wealth, health, employment and so on. Quality of life is not limited to a specific domain, but rather a "summation of life satisfaction" (p. 163). The study by Leung and Lee (2005) focuses on quality of life and internet use in terms of social support. My approach is focused on information seeking on social media specifically in terms of improving overall outcomes for users. The development of a comprehensive quality of life measure is outside the scope of this thesis.

8.4.2 Measuring participation relationships

My objectives are to firstly to link together important dimensions ('quality indicators') of social media and new media participation; and secondly to determine if there are significant socioeconomic and ethnic divides in new media use. These quality indicators reflect internet and social media competencies and levels of practice; in particular, information skills that users employ to achieve everyday outcomes. Throughout this thesis I have presented data representing dimensions of activity by Malaysian users on social media. These have included how often and where Malaysians use social media (engagement), how they seek and share information with different types of social networks and media (sources), their information, communication and social modes, the diversity of information topics and recreational and functional use (purpose), and how they value social media as utilities in their everyday lives (value). My objective has been to provide an account of a range of practices to describe social media use by Malaysians in everyday life. The dimensions focused on in this chapter concern the choices in information sources (from whom and where information is valued), 'functional information practices', and the wider value users place on social media in their everyday lives. 'Functional information practices' is a composite measure of the intensity and purposeful application of social media information. Table 8.1 outlines the composite participation metrics used in this chapter:

Table 8.1 Composite participation metric measures*

Variable and Type	Description
Social networks (Source)	Measures the number of social networks selected for connectedness, usefulness or trust of information (Chapter 4). Social networks are grouped together into categories; 'friends / family', 'peers', 'acquaintances / strangers', 'religious / ethnic'. See Table 8.2 below for method.
Traditional media; New media (Source)	Measures the number of traditional or new media sources selected for usefulness or trust of information (Chapter 5).
Functional information practice (Purpose)	Measures levels of functional information practices by users on social media. The scale comprises: ▪ Use: functional motivation of information use (Chapter 6). ▪ Mode: 'Getting and sharing information' (Chapter 5). ▪ Mode: Communicating with contacts' (Chapter 5). ▪ Information practice: Number of information practices selected ('Active seeking', 'Active scanning', 'Non-directed monitoring', 'By proxy'; Chapter 6). ▪ Diversity: Number of information topics (Chapter 7).
Utility (Value)	Measures overall utility in everyday life gained from social media participation. The scale comprises: ▪ The importance of social media in everyday life (Chapter 4). ▪ Are social media efficient information utilities? (Chapter 6). ▪ Does social media make users' everyday lives easier? (Chapter 7).
Outcomes (Value)	Measures the 'real world' impacts of social media use. The scale comprises outcomes in (Chapter 8): ▪ Education. ▪ Employment and training. ▪ Quality of life.

**See Appendix 5.1 for how metric measures were weighted and constructed.*

There were a number of usage dimensions that I excluded from this analysis. For example, I did not include common points of access (for example, home, cybercafé and mobile) as my interest is in 'quality' of participation, rather than access. I did not include results comparing users who selected a combination of social networks; this would be useful work for future social network analysis but is outside the scope of the thesis. I tested for

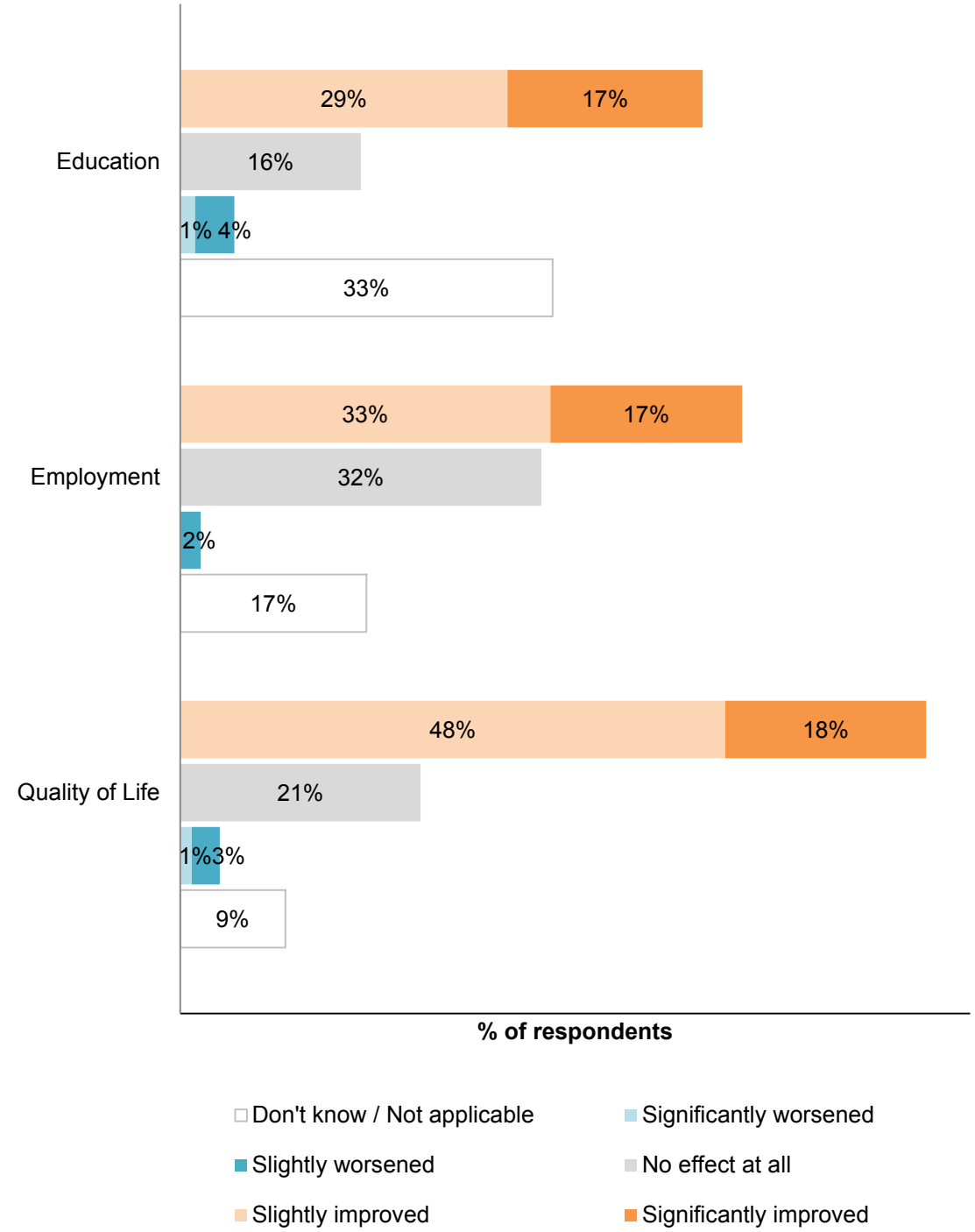
bivariate correlations between the metric participation variables.[21] This approach is limited in that I am not creating a typology of participation measures. Hargittai and Hsieh (2011) offer a typology based on frequency and diversity of social network site usage; there is scope for further studies that create typologies on a wider range of variables of dimensions of participation. Secondly, I compared the means of participation measures (numeric) against demographic variables to identify if there were differences in new media and social media participation between socioeconomic and ethnic groups. The demographic variables I focused on included language (as a proxy for ethnicity) education, employment, income and residence as indicators of socioeconomic status. In Chapter 4, I illustrated how Malaysian users ranked social networks overall in terms of connectedness, sources of useful information, and sources of trusted information as an indication of how they valued social networks. In order to simplify my analysis here to compare relationships between dimensions of social participation, I group together social networks into categories; namely, 'friends / family', 'peers', 'acquaintances / strangers', and 'religious / ethnic.' These categories can be characterised as intimate, collegial, socially distant and cultural social networks.

8.5 Findings I: The outcomes of social media

My findings show that a significant proportion of Malaysian users say that their use of social media improves their lives, in terms of education, employment and quality of life. There are more users who say that social media improves to some degree their education, employment and quality of life opportunities (on average, 54 percent) than those who say social media worsens or has no effect at all on these outcomes (on average, 46 percent). See Figure 8.1. Social media participation is most commonly valued for improving quality of life; although 20 percent of users say that it is has no effect at all. Users with higher levels of education and employment attainment are not more likely to say that social media has a direct effect in improving education studies and employment opportunities, suggesting that social media participation has a limited impact on education outcomes. Figure 8.1 compares outcomes of social media use in terms of education/ training, employment and quality of life.

[21] I have taken a conservative approach in my Bonferroni application (Nakagawa 2004) for determining the significance level; this was calculated by alpha 0.05 divided by the total number of tests (p-value of < 0.00043).

Figure 8.1 Comparison of 'outcomes' for social media information use



Source: Hanchard
October 2012
N=400

The full sample was included for education and employment questions. This is because there were 'valid' responses by users who were not actively studying, had no education or were not working. For education question, there were 7 respondents with 'no formal education' yet 6 out of 7 provided a response other than 'Don't know', ranging from 'significantly improved' to 'significantly worsened'. For employment question, 46 percent of full time students and 40 percent of 'Unemployed / Homemaker / Retired' respondents had an answer other than 'No effect at all' or 'Don't know'.

Social media use had the biggest effect in terms of improved quality of life perceptions, compared to education and employment/training. It should be kept in mind that the quality of life measure was relevant to all respondents, while education and employment/training questions were likely to be most relevant to those respondents who were studying or working at the time of data collection. Most respondents said that social media 'slightly improved' rather than 'significantly improved' each of the outcomes (education, employment, quality of life). Social media participation in itself might not improve life outcomes, without pre-existing supporting social structures, such as employment or school enrolment. The benefits of social media amplify only what users bring with their participation. The fact that 46 percent of respondents answered 'no effect at all', 'slightly worsened', 'significantly worsened' or 'don't know/not applicable' means that for a substantial portion of Malaysian users, the value of social media information for wider outcomes in their lives is inconclusive. This invites further examination in determining the characteristics of users who find social media valuable in life outcomes compared to those who do not; however, the size of my sample was not large enough to segment users into smaller units for analysis as per their responses.

8.5.1 Education

Just under half of Malaysian users believe that social media has improved their education studies. The most common response to the question 'How has your use of information on social media in general affected your education studies?' was 'slightly improved', from 29 percent of respondents (Figure 8.1). Respondents who answered either 'slightly improved' or 'significantly improved' totalled 46 percent, compared to 5 percent of respondents who answered either 'slightly worsened' or 'significantly worsened'. The percentage of respondents who answered 'No effect at all' totalled 16 percent, while respondents who answered 'don't know / not applicable' accounted for 33 percent. Social media may have a role to a certain extent in supporting education studies. Further research is required in understanding what types of learning social media supports.

My data did not provide any evidence that social media was perceived as instrumental by tertiary-educated and highly skilled workers in activities related to education. Tertiary-educated respondents were less likely than non-tertiary educated respondents to say that their use of information on social media had slightly or significantly improved their education studies; 45 percent (n=153) and 52 percent (n=32) respectively (A3.8.1).

Similarly, 'high-skill white collar' users were less likely than 'low-skill white collar' users to say that their use of information on social media had slightly or significantly improved their education studies; 42 percent (n=86) and 47 percent respectively (n=32) (A3.8.2). As Livingstone (2012) argues, it is not conclusive whether use of ICT and higher education (and employment) attainment are directly linked. Malay and Indian speakers were more likely than Chinese and English speakers to say that their use of information on social media had slightly or significantly improved their education studies; 51 percent (n=51) and 53 percent (n=53) for Malay and Indian speakers compared to 43 percent (n=43) and 38 percent (n=38) for Chinese and English speakers respectively (A3.8.3). In Chapter 6, I observed that Malay and Indian speakers overall were more 'engaged' with their information practices on social media (that is, more likely to select each of the four information seeking practices). Similarly, these groups appear to place greater value on their social media information practices. However, Chinese and English speakers overall have income advantages (see Chapter 3), so it is notable that they are not more likely to value social media for education outcomes.

8.5.2 Employment and training

Half of Malaysian users believe that social media has improved their employment or training opportunities. The most common response to the question 'How has your use of information on social media in general affected your employment / training opportunities?' was 'slightly improved' from 33 percent of respondents (Figure 8.1). Respondents who answered either 'slightly improved' or 'significantly improved' totalled 50 percent, compared to 2 percent of respondents who answered 'slightly worsened'. No respondents answered 'significantly worsened'. The total percentage of respondents who answered 'no effect at all' was 32 percent while 'don't know / not applicable' responses accounted for 17 percent. Social media may have some role in supporting employment and training opportunities, although further research is required in understanding how effective social media are and in what circumstances.

My results suggested possibilities of social media opening up employment opportunities for rural users; 48 percent (n=157) of urban users compared to 62 percent (n=42) of rural users said that their use of information on social media had slightly or significantly improved their employment or training opportunities (A3.8.4). This finding invites

further analysis on how social media participation allows rural users to gain access to job networks in urban centres or opportunities to work remotely. Tertiary educated users were less likely than non-tertiary educated users to say that their use of information on social media had slightly or significantly improved their employment / training outcomes; 49 percent (n=166) and 54 percent (n=33) respectively (A3.8.5). High-education is not necessarily linked to improved employment opportunities through social media use. 'Low-skill white collar' users were more likely than 'high-skill white collar' users to say that their use of information on social media had slightly or significantly improved their employment or training opportunities; 61 percent (n=41) and 47 (n=97) respectively (A3.8.6). Social media are more likely to be augmentative, not primary information tools for outcomes which require technical skills; that is the role of foundational education and training. As with education outcomes from social media, Malay and Indian speakers were more likely than Chinese and English speakers to say that their use of information on social media had slightly or significantly improved their employment or training opportunities; 57 percent (n=57) and 52 percent (n=52) of Malay and Indian speakers compared to 43 percent (n=43) and 47 percent (n=47) of Chinese and English speakers respectively (A3.8.7).

8.5.3 Quality of life

Finally, about two in three Malaysian respondents believe social media to have improved their quality of living. The most common response to the question 'How has your use of information on social media in general affected your quality of living?' was 'slightly improved', from 48 percent of respondents (Figure 8.1). Respondents who answered either 'slightly improved' or 'significantly improved' totalled 66 percent, compared to 4 percent of respondents who answered 'slightly worsened' or 'significantly worsened'. The percentage of respondents who answered 'no effect at all' was 21 percent, while 'don't know / not applicable' totalled 9 percent.

Language group results were very different for 'quality of life' compared to education and employment / training outcomes. Chinese, Indian and English speakers were more likely than Malay speakers to say that their use of information on social media had slightly or significantly improved their quality of living; 71 percent (n=71) of Chinese, 69 percent (n=69) of Indian speakers, and 65 percent (n=65) of English speakers, compared to 59 percent (n=59) of Malay speakers. See A3.8.8. The fact that Malay speakers had lower

rates of reporting social media as valuable for quality of life outcomes does not necessarily reflect a divide in social participation; as I discussed in Chapter 5, there could be a relationship between the freedom that social media affords in political participation and how social media are valued by minority groups in Malaysia; namely, Chinese and Indians. Traditional media forms such as television are valued by Malay speakers, which might be a reflection of content that is better tailored to the majority ethnic group in Malaysia; participation in wider cultural life is already afforded by traditional media. This requires future research to substantiate.

8.6 Findings II: Participation relationships

Users who have high levels of functional information practices on social media are also likely to value information from new media, to network with 'peers', and regard social media as utilities for improving life outcomes. My results show that information utility and value are strongly linked. Users who put more effort into information seeking and sharing on social media, also say they derive more benefits from social media as tools in their everyday lives. There were no clear demographic differences in users who had higher-level functional information practices. Socioeconomic divides exist firstly in the propensity of highly educated users to source information from peers; and secondly, the likelihood for low income users to prefer traditional media.

8.6.1 Dimensions

Users who regard social media highly as utilities in their everyday lives ('Value - Utility') were also likely to report that social media helps them achieve outcomes in everyday life ('Value Outcomes') in terms of education, employment and quality of life attainment (Table 8.3). There was a strong correlation ($\rho = .916$; $p < 0.001$) between 'Value - Utility' and 'Value – Outcomes.' Users who value 'Peers' were also moderately likely to value new media ($\rho = .427$, $p < 0.001$). Users who have high scores for Functional Information Practice were also likely to have high scores on Value – Outcomes ($\rho = .499$, $p < 0.001$); Peers ($\rho = .482$, $p < 0.001$); New media ($\rho = .465$, $p < 0.001$); and Value – Utility ($\rho = .456$, $p < 0.001$) measures.

Table 8.2 Moderate and strong significant relationships between participation dimensions+

Measure 1	Measure 2	Correlation coefficient
Value Utility	Value Outcomes	.916** (strong)
Peers	New media	.427* (moderate)
Functional Information Practice	Value Outcomes	.499** (moderate)
Functional Information Practice	Peers	.482** (moderate)
Functional Information Practice	New media	.465** (moderate)
Functional Information Practice	Value Utility	.456** (moderate)

** Correlation is significant at the 0.01 level (2-tailed). All p-values in table satisfy <0.001
Spearman rho (ρ) was used instead of Pearson's r as a normal distribution is not assumed.
+See Appendix 5.2 for full matrix.

Source: Hanchard
October 2012
N=400

The more likely a user is to value social media as important, efficient information tools that make their life easier, the more likely they are to value social media for helping them in outcomes that matter; such as education, work and quality of life. This was expressed by the strong relationship between Value – Utility and Value – Outcomes. There is a 'payoff' between utility and reward. This does not mean that utility and outcome is linked to social mobility; simply that effective application of social media as information utilities allows users to enjoy outcomes that are related to social inclusion; namely, learning and employment opportunities and overall lifestyle satisfaction. Users who valued 'peers' on social media also valued new media, suggesting a sophisticated ability to appropriate information sources from technology. These users are willing to go beyond the familiar, and possibly find information that helps them in novel ways. This could be linked to the ability to curate and make judgements on the quality of information, inviting more research. Finally, users who scored highly on 'Functional Information Practice' were able to apply social media and new media information effectively overall for meaningful outcomes. Again, it is not certain whether their social media use helps them achieve social mobility; it simply points to a group of users who use information seeking as a part of their everyday lives to achieve outcomes that are of value to them.

8.6.2 Demographics

My results, comparing means using ANOVA, indicated that there were significant relationships between educational attainment and 'peers' sources on social media, and between income level and preferences for traditional media (Table 8.4). Tertiary-educated users were more likely than non-tertiary educated users to value information on social media from 'peers' sources (work peers; school, college or university peers; and 'people who share your interests'); a 'small effect' was observed. Users of low income groups were the most likely to value information from traditional media, while users of very high income were the least likely; a linear relationship with a 'medium effect' across all income groups was observed.[22]

Table 8.3 Relationships between participation measures and demographics

IV	DV	IV Category	n	Mean	SD	df	F	Sig	Eta squared*
Education	Peers	Tertiary-educated	338	4.03	2.66	Total 399	12.966	0.00036	0.032 (small)
		Non-Tertiary	62	2.73	2.33				
Income	Traditional Media	Very high	44	1.86	1.81	Total 325	10.691	0.00000	.091 (medium)
		High	83	2.9	2.09				
		Middle	109	3.03	2.13				
		Low	90	3.91	1.88				

*eta squared effect size: 0.01 = small, 0.06 = medium, 0.14 = large (Cohen 1988). Eta squared effect sizes were obtained from SPSS version 21.

Source: Hanchard
October 2012
Education N=400
Income N=326 as 'Prefer not to say' and 'No income' excluded.

While there were some socioeconomic divides at play in participation, reflected by major education and income differences, my results did not indicate significant differences between language groups. This suggests that socioeconomic divides, rather than ethnic divides are of more concern for adoption of new media in Malaysia. The most important differences were in choices of information sources rather than functional information

[22] Post-hoc tests (tukey) demonstrated that Low and Very High income were different from all groups; while Middle and High income groups were similar.

practice. As discussed in Chapters 6 and 7, social media are tools for everyday information – small-talk – and do not necessarily support technical, expert information seeking and sharing. Social media may be democratic and inclusive tools in allowing users of different backgrounds to engage in information and communication practices. However, the propensity for highly educated users to source information from their 'peers' suggests that information sharing is occurring between users of similar education attainment. This could potentially reinforce socioeconomic divides. Further social network analysis on information practices between homophilic socioeconomic groups on social media would be useful for studies on social mobility. The appeal of traditional media for users of low income has important implications for democratic participation in Malaysia. As highlighted in Chapter 2, traditional media is tightly controlled by the government. Users who subscribe only to traditional media may be restricting their ability to receive critical, information that is independent of government mediation. In Chapter 5, I highlighted that urban users were more likely to value online news websites as useful and trusted sources of information, while rural users were likely to value traditional media forms for useful information. This indicates that residency, as well as income, is linked to media preferences. As stated in my literature review, a free media is important for a nation's development; in the case of Malaysia, preferences by those of low income for traditional media suggest that not all Malaysian users are benefiting from information through independent online media.

8.7 Discussion

In this thesis I have sought to demonstrate the significance of social media in everyday life in Malaysia; in participation dimensions ranging from how often they are used on a daily basis to the outcomes of the application of social media information. There were four key findings in this chapter. Firstly, education, employment, and quality of life outcomes are for some linked to social media participation in Malaysia; a significant proportion of Malaysian users say that social media information helps them achieve outcomes that may have positive impacts in their everyday lives. Secondly, social media are perceived to be information utilities that have meaningful outcomes in Malaysia, but are not necessarily tools that are instrumental in achieving higher socioeconomic attainment. Thirdly, what differentiates Malaysian users of socioeconomic advantage are their choices of information sources on social media, rather than high levels of functional information

practices. Fourthly, there are income divides reflected in media preferences; Malaysian users of low income levels are more likely to value traditional media, which may have impacts on their democratic participation because of lack of access to critical, independent information. Overall, Malaysian users who have high levels of functional information practices are also likely to value information from new media, source information from peers (network across greater social distances), and regard social media as information utilities which improve lifestyle outcomes.

Differences in networking ability across peers and preferences for traditional media highlight where a divide in social media participation exists in Malaysia. Disadvantages in education, income and residence (problems related to social inclusion) are reflected in styles of social media participation. Less clear were differences in participation practices across ethnic groups. Categories of race and religion, which persist in dominant political narratives, do not emerge as clear factors in determining how effectively Malaysians participate on social media. There were some nuances between how Malay and Indian users valued social media for education, employment and quality of life outcomes compared to Chinese and English speakers. The reasons for these differences are uncertain, especially where they might relate to cultural values. As literature by Jones et al. (2009) and Sandvig (2012) highlight, differences in how new media is adopted across ethnic groups are not necessarily indicative of social inequality. In a collectivist setting such as Malaysia, attention should be paid to whether some groups may place greater emphasis on social environments for gaining information and informal learning. Further data collection is required to understand these differences and their implications.

Malaysian social media users of different socioeconomic levels share and seek information with social networks that are important to them but it is not clear whether social media participation leads to socioeconomic advancement. What does this mean for the nation overall? I introduced this chapter by outlining aspirations in Malaysia for the country to achieve high-income status by 2020, and to "beat the middle-income trap" (Nehru 2013). Social media are an important part of the ICTs environment, where ICTs have been deemed important in achieving development aspirations. As I have identified, it is not clear whether a significant link exists between internet use and general education improvement (Livingstone 2012); although I have shown that highly educated Malaysian users value social media for networking with peers. Social media information is quotidian and unlikely to be highly technical or authenticated. Malaysians that have access to the internet and social media, whatever their skills or background, can seek and share

information they believe to be of value with social networks. The ability for users to be connected, and share information freely on social media may be valuable for social inclusion. To substantiate this claim, further research is required about users who do not, or choose not, to use social media, and whether they are consequently excluded in a manner that affects how they participate in society. Are users who are not on social media excluded from important education, employment and quality of life outcomes?

Social media participation is important in the cultural life of Malaysia. The net benefits of social media participation for education, employment and quality of life outcomes should outweigh concerns of political agitation and further racial polarisation in Malaysia. This is not always acknowledged in an environment where there have been calls to censor social media based on alleged political inflammation around religion and race (Zurairi 2013). There have also been moves by the Malaysian Multimedia Communication Authority to prosecute individuals for making alleged defamatory statements during the General Election in 2012 (The Star Online 2013). Racism is a social problem that exists irrespective of social media participation, and needs to be addressed in national political dialogue. Government efforts can be focused on initiatives that support local social media ecologies that serve Malaysians' content needs. Concerns outlined by Malaysian scholars on global media environments and local sovereignty are valid (Ahmad et al. 2012; Wok, Idid and Misman 2012). These include fears of language and media consumption becoming homogenised with the globalisation of media, to the detriment of local content producers. Malaysians appear to adopt social media platforms (global technologies) for socially meaningful ends that have local relevance. Further, bodies such as the Multimedia Development Corporation (MDeC) can promote local content by continuing to improve access to the internet and adoption of new media by rural users.

After several decades of development, Malaysians value a range of social networks in their everyday information practices on social media, indicating that both traditional and non-traditional social networks are important. Concerns about networked individualism and the weakening of social networks are not necessarily relevant in Malaysia, where one can speculate there is a fusion of traditional and modern sensibilities. Traditional social networks that are built on trusted connections should not be undervalued in how social media are adopted by diverse cultures. As demonstrated in Chapter 4, friends and family are highly valued by Malaysian social media users. We can speculate that connecting to third-parties through trusted intermediaries remains an important factor in how Malaysians network for social and economic opportunities. However, choices in

information sharing between 'established' and known ties may compound digital divides. The affluent, for example, may continue to use 'gated' means for maintaining their status through private networks, rather than share opportunities in open media environments. As my results have shown, users with socioeconomic advantages are not necessarily characterised by how engaged they are with social media information practices, but from whom they source information. Social media does, however, offer the opportunity to open up novel sources of information, depending on the networking skills of each user.

I have examined the consequences of social media information in Malaysian society to a limited extent, but have not explored questions such as the productive value of social media information (see Benkler 2006). This is beyond the scope of my thesis in terms of measurement, but it is relevant to how my findings are framed. My thesis invites more discussion about the social production of information on social media mean for liberal markets, especially the creation of new economic opportunities as the result of gaining access to novel information sources through weak ties. My results demonstrate that information seeking and sharing on social media is linked with improved outcomes in life, but the common characteristics of users who are able to do so is not clear. There is an avenue for future research in distinguishing the characteristics and motivations of users who are able to link participation with meaningful outcomes in their lives. Social media are utilities for information seeking, sharing and communicating that allow Malaysians to participate in the wider social and economic life of the country. Social media provide freedom of access to information between Malaysians of different cultural backgrounds. In the widest meaning of development, social media are inclusive information and media technologies, allowing Malaysians to connect and share information directly across networks.

Chapter 9 Conclusion

My travels to Malaysia have gone past quickly. When I leave Malaysia, the first food I will look for is *chilli pan mee* or *nasi lemak*. I miss the flavours. While I am still a foreigner in Malaysia, the Klang Valley has become embedded in my experience of the everyday, even the polluted haze. Shorthand language such as *'lah'* (used for emphasis at the end of a sentence) or *'boleh'* (expresses 'can do it!') has become part of my everyday vocabulary. My daily news feed on Facebook is filled with everyday references by my Malaysian friends that I have been describing throughout this thesis. Calling myself a detached observer of social media participation and everyday life in Malaysia no longer feels accurate, if it ever was. Even when I leave Malaysia, digital traces of my everyday life here will remain and persist on social media.

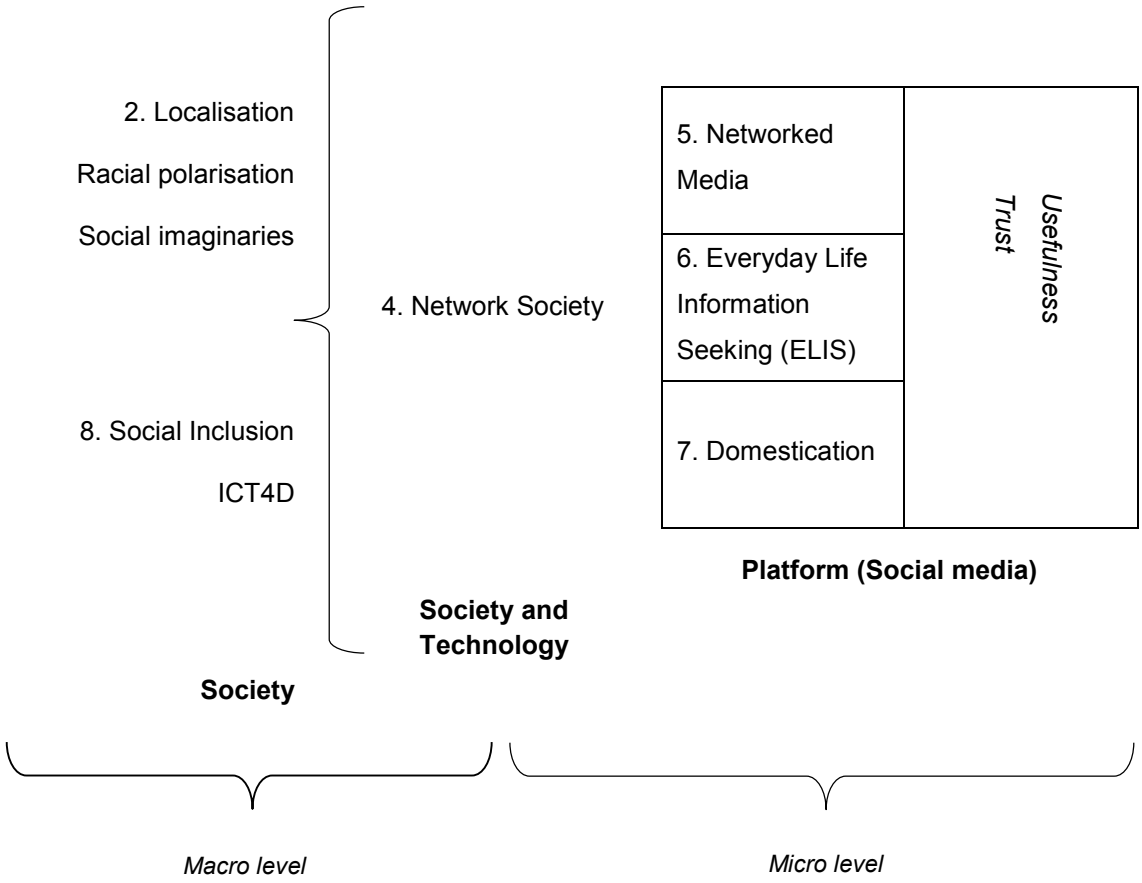
This thesis has set out to provide a detailed account of social media participation in Malaysia, an important middle-income economy in Southeast Asia. There are two broad research questions that have shaped the direction of this study. I have examined the importance of social media as information utilities, embedded in networked, everyday contexts for users. Secondly, I have discussed the societal implications of social media participation in terms of social inclusion for socioeconomic and ethnic groups in Malaysia. The significance of the research is underscored by the global rise of social media adoption by a wide spectrum of users across geopolitical regions. A localised study on social media use in Malaysia contributes to a comparative body of global new media scholarship; the objective being to understand the diverse ways in which information and communication technologies are adopted in relation to the socio-cultural contexts of users. In this concluding chapter, I outline my major findings with reference to the theoretical structure introduced in Chapter 3 and contribution of the study to new media literatures. I discuss the extent to which I have achieved my objectives, limitations and future directions for research; and the broader implications to Malaysian society and global new media adoption.

9.1 Theoretical overview

The 'micro' level of this thesis described social media as platforms with associated patterns of user participation. I analysed platforms firstly in terms of their architectures and affordances as a way of explaining how networked user patterns in Malaysia are enabled and constrained by design; secondly, I described social media as information ecologies, linking information seeking and sharing practices with Malaysian users' functional and recreational needs in everyday life; and thirdly, I identified the utilities of social media platforms by their information typologies, linked with domestic contexts of everyday use in Malaysia. Qualities of usefulness and trust were described as criteria by users to determine the value of social media information. Connecting the overlapping 'micro' and 'macro' levels of the thesis, I examined society and technology relationships inherent in social media participation. I illustrated how Malaysian users prioritised social networks for everyday information, using the criteria of 'connectedness' (increased contact with social networks), sources of useful information, and sources of trusted information. The implications of how Malaysian socioeconomic and ethnic groups valued this information to varying degrees to build social capital were raised. Social networks were discussed in terms of networked individualism and collectivist culture perspectives in Malaysia.

The 'macro' level of the thesis described societal factors that shape and give meaning to social media participation. The key concepts I used included: localisation, which emphasises local contexts that give technology use social meaning; racial polarisation in national narratives; and a social imaginaries model for bridging everyday and national practices in defining public culture. I connected the implications of social media participation with desires for development in the nation's agenda and objectives of social inclusion for all Malaysians in the social, economic and political spheres of society. The implications of differential styles of participation on social media across Malaysian socioeconomic and ethnic groups for social equality were questioned. The multi-granular structure of the thesis is a metaphor for a sociological process of comprehending everyday life across micro and macro realms. Figure 9.1 repeats the framework diagram from Chapter 3.

Figure 9.1 Recapitulation on major theoretical perspectives in each chapter



**Numbers indicate chapters which are devoted to each literature area.*

There were two broad research questions directing the enquiry of research. *What is the importance for users in Malaysia of social media as information utilities embedded in networked, everyday contexts? What are the implications of social media participation in terms of social inclusion for Malaysian users of different socioeconomic and ethnic groups?* Guided by my theoretical framework, the dimensions of social media participation I examined were engagement, source, purpose and value. Engagement encompassed frequency of use and places of access. Information sources were a range of social networks, and traditional and new media. Purpose measured practices on social media; namely, 'mode' (information, communication and social), 'information practice' (active and passive), 'information diversity' (number of topics) and 'use' (functional and recreational). Value referred to social media as information utilities and outcomes

(education, employment and quality of life). I employed two methods to investigate my research questions. Firstly, an online questionnaire based on a quota of 400 Malay, Chinese, Indian and English speakers; other demographic data that was collected were age, gender, residence, language, education, income and occupation. The second method was a content analysis of Twitter, based on large-scale data collection. My objective was to measure both stated intentions and preferences of social media use, as well as actual information practices.

Before I outline the major narratives of my thesis in the next section, I acknowledge that some of my findings on Malaysian social media participation may appear unsurprising as they reflect usage globally. Indeed, Malaysia's status as a middle-income country with aspirations to be a 'fully developed' country by 2020 means that its netizens may participate in similar ways to other users around the world of equivalent socioeconomic backgrounds. What I do emphasise is that parallel social media practices become significant in relation to local contexts. For example, despite government techno-utopian policies, Malaysia remains a politically restrictive state with a tightly-controlled traditional media environment. Therefore, affordances of seeking and sharing information between strong and weak ties on social media, unmediated by authorities, enables a more open information and communication ecology for middle-class Malaysians. Since the time of data collection for this thesis in 2012 at a perhaps less volatile moment in history for Malaysians, citizens in 2016 have become increasingly frustrated with perceptions of government corruption, notably the 1MDB scandal where almost $700 million linked to the state-owned investment fund 1Malaysia Development Bhd was allegedly transferred into Primer Minister Najib Razik's personal accounts (The Wall Street Journal 2015). Further, racial tensions have increased reflected by the Lowyat incident in July 2015 involving a brawl between Chinese traders and Malay youths, allegedly inflamed by groups with political interests. Social media offer spaces for Malaysians to vent their concerns and alongside their connections make sense of these events that constitute the social imaginary of the nation. Nuanced differences in information, communication and social practices between socioeconomic and ethnic groups on social media enable the circulation of diverse values of social networks that attempt to live harmoniously side by side in a multicultural society.

9.2 Social media as information utilities

Social media platforms are complex information utilities that allow Malaysian users to meet diverse needs based on everyday use contexts.

Social media are compelling information media in the wider ICT ecology because platform architectures allow users to interact across a range of social networks that they deem valuable for useful information. The particularly high daily activity rates by Malaysian social media users compared globally, and mainstream access, are indicators of the embeddedness of social media in the domestic lives of users. Social media is used in many locations, including the home, work, school and 'out and about' on mobile devices (mobile domesticity). Platforms are valued as efficient information utilities that make Malaysian users' everyday lives easier. Users can curate relevant sources for information based on different levels of social familiarity. Asking connections on social media with known prior experience or local knowledge on a certain topic might be a faster route to attaining information than through third-party sources, such as search engines. Information is given credibility and relevancy through social networks. Platforms allow information to be sought and shared in systems of social relationships; but this information has wider purpose and applicability in users' everyday lives outside the information system. Both traditional and new media are important in Malaysia, yet new media offer possibilities for opening up direct access to information from users across different socioeconomic and ethnic groups. Trust mechanisms have yet to be established on social media and accepted by Malaysian users, who still rely on traditional media for verified information. I take a novel approach of comparing usefulness and trust as qualifiers of the relevancy of information from social networks, although there is scope for a more exhaustive examination of other information criteria. Furthermore, I contribute to Malaysian new media studies on social media information (for example, Wok, Idid and Misman 2012) by comparing everyday information value using these criteria across traditional and new media.

Social media support information seeking and sharing, in addition to communication and social practices. Malaysian users said their most common use of social media was seeking and sharing information. Information practices are not uniform across platforms; the architectures of social media enable and constrain social action (Hogan 2009). Users make their own choices in how they participate on social media and convert information for uses that are meaningful to them in their daily lives. Social media can be understood firstly as information ecologies; and more broadly as information utilities. Emerging studies

examine social media platforms as information ecologies, in particular recent work by Wohn et al. (2011) seeking to create high-level frameworks capturing social information uses. My approach differs by adopting grounded typologies from general internet use as a framework for establishing information topics on social media. I examine social media as information utilities that can serve both functional and recreational ends in everyday life, diverging from networked media scholarship that focuses on sociality and self-presentation (for example, Papacharissi 2011). A large portion of Twitter use in Malaysia can be characterised as small-talk and recreational, with users more likely to share information than to ask questions. Referencing work on micro and broadcast content on social media (for example, Wohn et al. 2011), my results show that in Malaysia the sharing of tips, advice and recommendations are more likely to occur in conversational (micro-broadcast) settings, rather than in broadcast content. While Malaysian cultural traits of sharing information openly (Budiman and Abidin 2011) is reflected by public conversations on Twitter, there could be a reluctance to ask questions in open platforms.

Diverse information practices, including active and passive types, highlight a burgeoning application of social media as information utilities in Malaysia. The most common practices are active seeking and active scanning. Finding information serendipitously (non-directed monitoring) is slightly less common, and the least common practice is to use social media to gain information from sources that could not be accessed elsewhere (by proxy). Here I apply McKenzie's (2003) framework of active and passive information practices in everyday life to social media. Unlike McKenzie's study, I compare information practices across broad demographic categories rather than focusing on a single group. Further, I examine active and passive information practices in the context of networked environments (boyd 2011; Papacharissi 2011) where practices are influenced by the design of platforms. My thesis makes a contribution by applying an everyday life information seeking approach to social media practices. Waller (2013) points out that while there are numerous studies that focus on the internet and information seeking practices, there is a need for studies that focus on specific technology services, such as social media. I offer a diverse information typology of social media in a Malaysian context. These topics are treated as proxies for the uses and contexts in which social media might be helpful to users. Here I extend both domestication and internet and everyday life studies frameworks (Bakardjieva 2005; Wellman and Haythornthwaite 2002) by focusing on social media as distinct services of the internet. Malaysians use social media for information topics that are connected to both functional and recreational everyday use contexts.

9.3 The value of social networks and localisation

Malaysians value information across a range of social networks on social media; while family and friends are particularly important, connections of shared religion and ethnicity are not necessarily prioritised above other social networks in everyday information practices for domestic purposes.

Social media information sharing between groups reflects networks that exist online and offline. Through information, communication and social practices on social media, Malaysians can build social capital with a range of social networks. Networking with peers that might have social and economic value, possibly allow users to access novel information that they might not encounter in other contexts. Malaysian users can sometimes source information on social media they cannot access elsewhere, suggesting that social media are utilities for connecting Malaysians across greater social distances. Yet social media are important for connecting Malaysians with people they know intimately; Malaysian users are most likely to enjoy increased connectedness with friends and family (collectivist networks) who are also most likely to provide useful and trusted information. I have highlighted recent new media scholarship that emphasises the role of strong ties on social media (Burke and Kraut 2013). In a Malaysian cultural context, the role of how social media can help preserve traditional social structures in Malaysia can be explored. We can speculate that social media as global platforms and services are not necessarily weakening traditional social structures in Malaysia. My study makes a contribution to debates on the appropriateness of networked individualism outside Western contexts. A 'networked individualism' perspective accounts for some social media practices (for example, networking outside intimate connections), but not all. Malaysian cultural values of networking and seeking opportunities through trusted intermediaries shape social media participation alongside networking with peers and other types of social networks. I have emphasised the communal aspect of Malaysian culture (Tong 2006) which places a high value on social relationships. In a collectivist culture it may be perceived as much quicker, easier and safer to ask someone whom a user knows than to search through unknown information sources. My findings indicate that cultural networks (religious and ethnic) are important for Malaysian users with socioeconomic disadvantages, highlighting the role of collectivism in providing social support.

Malaysian users do not say they prioritise everyday information on social media from connections of shared religion or ethnicity above other types of social networks. Indeed,

social media users were more likely to connect with and value everyday information from peers, acquaintances and strangers than ethnic and religious connections. Racial polarisation pervades the national narrative, but does not necessarily determine everyday realities of how Malaysians connect on social media for information in domestic contexts; there is a 'two-social' reality at play (Shamsul 1996, 2001a). Racial boundaries which are entrenched in traditional media and in the national narrative, are not necessarily consistent with everyday information seeking practices on social media platforms. This finding may not apply in times of heightened political conflict. Nor does it apply to information practices within social media groups based on political and racial affiliations. Further, while Malaysian users do not say they prioritise religious and ethnic social networks as sources in their everyday information seeking on social media, this does not mean this is true in practice; users may be unconsciously biased. The stated intentions of information seeking and sharing by Malaysian social media users can be interpreted somewhat as a willingness to avoid religious and ethnic biases in everyday life, an encouraging sign for social cohesion. While there are emerging Malaysian studies that investigate ethnocentrism on the internet and social media (Ridzuan et al. 2012; Ridzuan et al. 2014) there is a literature gap in terms of examining religious and ethnic connections compared to other types of social networks. New media studies on racial segregation on social networking sites (Boyd, 2012; Hargittai, 2012) that demonstrate silos that exist offline are mirrored in online environments, invite global comparative scholarship.

This thesis builds on the localisation and socio-historical approaches of Postill (2011) and Leong (2011) to focus on Malaysian social media users. Castells (2004) argues that the network society has common features in all global contexts; as stated previously, some of my findings on Malaysian users' information preferences are not surprising comparatively. Information topics that are of value to Malaysians include entertainment, food and dining out, travel and holidays, education, news and current affairs, lifestyle, relationships and technology. Castells (2004) however observes that the network society takes on different forms depending on cultural environments. In Malaysia, cultural values come through in social media religious references to Islamic, Buddhist, Hindu, and Christian festivals and words of inspiration. In Malaysia, with a warm tropical climate, sharing information on dining out experiences is a social activity. While this tendency may be similar to users in other countries, I highlight the cultural appreciation of food in Malaysia and Southeast Asia (Van Esterik 2008) to emphasise that online practices are deeply coupled with offline activities. I provide a culturally-specific case study in how global information and communication technologies are adopted in a Malaysian context.

9.4 Inclusive platforms for socioeconomic and ethnic groups

Social media are inclusive information and media technologies in Malaysia, valued by a broad spectrum of socioeconomic and ethnic groups, but not necessarily tools for conferring socioeconomic advantages that are important for development goals.

Social media services are inclusive for allowing Malaysian users of broad socioeconomic and ethnic backgrounds to seek and share information with social networks that are meaningful to them. My thesis makes a contribution by focusing on social media participation and its relationship to social inclusion in Malaysia, building on literature that examines the internet more broadly (Rahim, Pawanteh, and Salman 2011). Social media participation is linked to improved education, employment and quality of life outcomes in Malaysia; however, social media are not necessarily tools that differentiate users of higher education and employment attainment. Social media enable diverse information, communication and social practices, but do not necessarily provide verification tools for highly-technical information that might support education or employment goals. Livingstone (2012) argues that there are no clear links between ICT use and literacy; my findings do not demonstrate significant relationships between information seeking on social media and attainment of higher socioeconomic status by Malaysian users. Rather, tertiary-educated users in Malaysia are more likely to use social media for communication purposes, suggesting higher networking priorities. The value of communication practices and 'connection strategies' on social media for building social capital should be emphasised as claimed by Ellison et al. (2011). What differentiates users of higher education and employment attainment in Malaysia are their choices of information sources, rather than information practices. There are significant differences in how educated Malaysian users value 'peers' (work and school peers, and connections of shared interests). Not only do tertiary-educated users value 'peers', they are more likely to value acquaintances and strangers for useful information on social media, suggesting that highly educated users are more likely to have 'open' networking skills. Malaysian users of low income are more likely to value traditional media, which may affect their ability to access independent news that is critical of Malaysian authorities. I reconsider cultural definitions of development, citing media freedom and information sharing as important criteria, in addition to economic goals that dominate narratives of progress in Malaysia. We can speculate that social media has a role in promoting social cohesion towards development.

My findings demonstrate nuanced differences in social media information practices across ethnic groups in Malaysia, which could be attributed to cultural values; but there were no

clear trends that suggested digital divides based on ethnicity. I have highlighted race scholarship that emphasise racial divides still exist on the internet (Hoffman, Novak, and Scholosser 2001; Nakamura and Chow-White, 2012). Race scholars are now more focused on 'second-order' divides of how new media is used, rather than access alone (Daniels 2013; Hargittai 2010). Across the ethnic groups I measured, there were many common points of access to social media; however, I did find differences in information practices. As Jones et al. (2009) and Sandvig (2012 point out), these did not necessarily signal social inequality. Malay and Indian speakers reported high levels of active and passive information seeking on social media, and were more likely to say that their use of information on social media had improved their education studies and their employment or training opportunities. These groups apparently place a greater value on everyday information received in social environments. More research is warranted on how social media information is applied socially by these groups to help them achieve objectives that I have connected to development aspirations. My data suggests that Chinese and English speakers, who have socioeconomic advantages, are less likely to value social media as information utilities. As I noted above, the application of social media information is not necessarily instrumental in conferring socioeconomic advantages. Further, my findings showed Malay speakers demonstrate preferences for traditional media, reflecting national media tailored towards the official language; online news websites are more likely to be trusted by Chinese and English speakers. Further study is warranted on different preferences of information sources in the Malaysian contemporary media environment and social cohesion (Sunstein 2007).

Social media are particularly important in the everyday lives of young users in Malaysia; especially for increasing connectedness with friends and family, who are also considered trusted sources of information. Keeping up to date on what contacts were doing (being social) is an important reason for using social media by young Malaysians; even when they are not looking for useful information, young users are still likely to receive it passively through their participation. Young users in Malaysia, by and large, agree that social media, compared to other media, provides useful information and overall makes everyday life easier for them. This is a generation that has grown up with the internet, where networked information and communication practices are part of everyday life. While this is common to young people globally, we can speculate on the implications of active social media participation by young users to ongoing democratic aspirations of the nation; alternative information sources from social networks and new media, and exposure to foreign values through global platforms, could mean that young Malaysians expect greater

transparency from authorities than previous generations (Ahmad et al. 2012). Urban and rural differences in participation were notable in my findings, with higher engagement rates on social media by Malaysian urban users; suggesting disadvantages for rural users given that social media use has been linked with building social capital (Ellison, Steinfield and Lampe 2007). Urban users are more likely to value online news websites for useful everyday information, while rural users are more likely to value traditional media, which has implications for access to independent news and democratic participation. On nearly all dimensions measured, male and female users in Malaysia demonstrate similar patterns of participation.

9.5 Limitations and future studies

My analysis has raised a spectrum of questions on the nature of information, communication and social practices on social media, and how they are related to wider social, cultural and political outcomes. In particular, my research prompts further investigation into measures of quality information seeking and sharing on social media; a comprehensive modelling of strong and weak ties on social media as they are culturally interpreted by users; and productivity measures that link peer-validated quotidian content with purposeful outcomes. The objective of my project was to inspect social media participation across broad social categories in Malaysia; the known 'cost' was a deep qualitative analysis of the personal motivations and circumstances that determine if social media are successful in meeting everyday needs for each user. Further, my questionnaire addressed social media broadly; I did not compare responses across different platforms. While I provided an in-depth analysis of Twitter participation through my content analysis, a cross-platform comparison would have been useful to study the relationships between architectures and practices. More comparative work across global contexts using similar dimensions of social media participation (engagement, source, purpose and value) and metrics would be beneficial for further work illuminating the specific local tendencies of Malaysian users. My results do not address highly politicised discussion on social media between members of different affiliations. A detailed social network analysis approach could be used to examine interactions of users within and between socioeconomic or ethnic groups, to shed light on silos and racial polarisation. My study invites more work in Malaysia on connecting social capital activity through social media participation with quality of life outcomes. A comparison of social media users against non-users or ex-users would be of benefit for identifying the significance of social media participation, and in

examining digital divides (Blank and Dutton 2013; Leong 2011). Questions that might be asked include why have ex-users chosen not to continue their social media participation? Are there other information and media ecologies that are more compelling to them? Did their social media use have a negative impact on their social relations?

A substantial challenge to an examination of social relationships on social media is rapid technological change. Ellison and boyd (2013) write that as social media platforms offer new tools and remove old ones, and user practices evolve, these objects of research are changing. The authors encourage researchers to thoroughly describe features of social media they are investigating, as the possibility of obsolescence could rule out comparative work by other researchers. User-fatigue in 'over-connecting' on social media, boredom, and frustration with increasing trespasses on privacy threaten the sustainability of social media platforms, both as everyday information tools and as objects of research. The significance of social media as information utilities embedded in networked everyday contexts is not fixed. Information and communication technologies are only socially meaningful depending on the value that users give them through their active participation. Growing research on 'digital lives' during the span of a user's life and after is also of future interest (Leaver 2013). The need to combine different types of data collection based on both quantitative and qualitative approaches has become ever more apparent in the age of big data. Vast samples of behavioural information afforded by social media platforms offer alluring insight into societal patterns of human behaviour. Determining 'social meaning' from big data will be ongoing challenges for computational social science research. The development of machine learning techniques and crowd-sourcing approaches to information categorisation will assist in the interpretation of big data, but will not replace established sample survey and qualitative sociological practices. There are ethical concerns in the treatment of personal information, particularly where the cross-matching of databases might reveal sensitive information about users (Acquisti and Gross 2009; boyd and Crawford 2012). Access to proprietary big data sources and the development of computational skills by social researchers will be ongoing needs in the field.

9.6 Implications

In this thesis I have examined everyday contexts of social media participation in Malaysia. I do not claim that the practices I have observed are features of all applications of social media use, especially in times of social upheaval. Social media ecologies are dynamic in

that they reflect and possibly contribute to wider societal volatility, raising the question of whether authorities need to establish regulatory frameworks for social media use. Commentators, for example, speculated on whether the use of social media promoted the formation of violent groups during the London riots in 2011 (Ingram 2011; Mackenzie 2011). The Arab Spring revolt, where protestors toppled governments, illustrated the role social media can have in supporting activism (Andersen 2011; Anderson 2011). In Malaysia, during 2011 *Bersih* protests calling for 'clean' government, Twitter and Facebook were primary sources for finding out what was happening 'on the ground', particularly as the government had gone to extraordinary lengths to deter protestors. The ability for Malaysians to connect freely on social media is under pressure, with moves to crack down on criticism of the government and with harsher penalties for those charged with sedition (Boo & Tan 2015). Malaysian users are increasingly concerned by online surveillance by local authorities. Government agencies understand the disruptive potential of social media to spread information quickly and widely, beyond their control. Authorities, however, need to consider the underlying social systemic issues behind uprisings expressed on social media (Fuchs 2011); in Malaysia, concerns about race, socioeconomic status and political exclusion are paramount. While there could be harmful effects of rumours or hate speech being spread, users should be encouraged to use skills of critical evaluation developed in formal education institutions. This does not mean that the potential rapid spread of harmful content should not be assessed. Rather, these problems should be tackled by re-examining government programs which increase resentment between racial groups and distrust of democratic processes, such as the New Economic Policy and alleged election irregularities. Information silos along racial, religious and other ideological lines on social media may increase, given geopolitical instabilities. In Malaysia, there is a danger that religious extremism may lead to more polarised social media practices as Malaysians become more divided. The net benefit of protecting cultural diversity in allowing Malaysians to share and seek information freely on social media should be valued.

Social media are compelling because they offer a space for users to share their experiences of events that constitute the social imaginary of the nation. Periods of crisis and events of historical significance can be intensely experienced on social media. When Malaysian airline flight #MH370 went missing in March 2014, and when flight #MH17 was downed in July 2014, global outpourings of grief and anger contributed to a volatile information environment where unverified information spread rapidly on social media. This was despite efforts by authorities to provide 'correct' and 'official' versions of events. Social

media served to illustrate that Malaysians live in a global media environment, with improved access to local news through new media sources. My study raises unresolved questions of whether global technology services such as social media promote dominant Western values to the detriment of cultural diversity. How 'culturally neutral' are platforms in allowing users with different languages and values to share information in ways that are appropriate to their backgrounds? Many of the major social media platforms used in Malaysia originate from the United States. However, social media platforms are transformed by participation; shared content and social meaning is supplied by users who bring their own local values. While politicians might speak of Pan-Asian values, social media participation will be different in Malaysia, Singapore, Thailand, Philippines, Indonesia, Cambodia and other neighbouring countries, even where there are shared colonial histories and patterns of migration. Differences in factors across Southeast Asia, such as access to ICT infrastructure, education and income levels, and political and cultural values will mean diverse information, communication and social practices. As more users come online and use social media, particularly in regions of low internet penetration, this provides opportunities to study how global technologies are adopted in heterogeneous cultural settings. Governments can support local content by providing funding for home-grown technology development and talent, and by continuing to bolster a highly-skilled labour market through education and research and development. Cultural diversity enabled through new media participation, as much as economic activity, is important for Malaysia's development.

As temporal everyday information utilities, social media platforms will continue to evolve. The research problem I have addressed has been in articulating in what sense and to what degree social media are important in everyday life in Malaysia. As social media platforms evolve with features that improve archiving, retrieval, interpretation and verification processes, they could become tools for knowledge creation. Information and knowledge are becoming increasingly socialised, with technology playing an important role in production, distribution and consumption between users. Socio-technical mechanisms for improving the quality of social information are nascent. Rapid change in information and communication technologies will continue to pose challenges for users in how they adopt these utilities in their social worlds. The affordances of social media for reshaping social relationships, for example, can be disorienting with relatively new phenomena such as context collapse (Marwick and boyd 2011). Young users of social media will have to contend with the consequences of their social lives being recorded for posterity. The collection of social data through platforms will continue to be debated in terms of ethics

and privacy. Values of information sharing, freedom of expression and cultural diversity on social media should be fostered in Malaysia; social media are important information utilities embedded in networked, everyday contexts. Social media participation supports social inclusion by allowing a range of socioeconomic and ethnic groups to seek and share information that is meaningful to their everyday lives. Malaysians who participate on social media can help each other, celebrate, complain, gossip and enjoy small-talk.

Bibliography

Please note that for many Malay and Chinese names, it is conventional to write the surname first. For example, the scholar Shamsul Amri Baharuddin is commonly known by his surname, Shamsul. In my bibliography, I have listed authors with their surname first, followed by their first name initials.

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Appendix 1 Questionnaire and distribution

A1.1 Questionnaire: Social Media Information Uses and Everyday Life in Malaysia

Please complete this questionnaire only if you have used Social Media in the past six months.

Social media, here, is defined as an online platform where you can share content privately or publicly with your lists of contacts; such as friends, family and peers, acquaintances or strangers. Examples of Social Media include Facebook, Twitter, Google+, Orkut, LinkedIn and Reddit.

1. Where do you commonly access social media?

Tick all that apply:

- o Home
- o Work
- o School or University
- o Cybercafé
- o Mobile device (for example, phone, tablet)
- o Other

2. How often do you use social media?

- o At least Hourly
- o At least Daily
- o At least Weekly
- o At least Monthly
- o Less than Monthly

3. How important is social media to you in your everyday life?

- o Very important
- o Important
- o Not important
- o Not at all important

Comments: _____

4. Agree or disagree: social media makes everyday life easier for me.

- o Strongly agree
- o Agree
- o Neither agree nor disagree
- o Disagree
- o Strongly disagree

Comments: _____

5. Agree or disagree: social media is an efficient means for me to get useful everyday information.

- o Strongly agree
- o Agree
- o Neither agree nor disagree
- o Disagree
- o Strongly disagree

Comments: _____

6. Has social media increased in general your everyday contact, online or offline, with any of the following?

Tick all that apply:

- o Friends and / or Family
- o Work peers
- o School, College or University peers
- o Acquaintances and / or Strangers
- o People who share your religion
- o People who share you race / ethnicity
- o People who share your interests
- o Other
- o None

7. Do you get information on social media that is *useful* in your everyday life from any of the following?

Tick all that apply:

- o Friends and / or Family
- o Work peers
- o School, College or University peers
- o Acquaintances and / or Strangers
- o People who share your religion
- o People who share you race / ethnicity
- o People who share your interests
- o Other
- o None

8. Do you get information on social media that you generally *trust* from any of the following?

Tick all that apply:

- o Friends and / or Family
- o Work peers
- o School, College or University peers
- o Acquaintances and / or Strangers
- o People who share your religion
- o People who share you race / ethnicity
- o People who share your interests
- o Other
- o None

9. From which of the following do you get *useful* information for your everyday life?

Tick all that apply:

- o Social media
- o Search engines
- o Online news websites
- o Blogs
- o Television
- o Radio
- o Newspapers (print)
- o Other: Please specify _____
- o None

10. From which of the following do you get information that you generally *trust*?

Tick all that apply:

- o Social media
- o Search engines
- o Online news websites
- o Blogs
- o Television
- o Radio
- o Newspapers (print)
- o Other: Please specify _____
- o None

11. Do you ever use social media with the intent of finding the answer to a specific question? For example, Recommendations, tips or advice

- o Very often
- o Often
- o Not Often
- o Never

Comments: _____

12. Do you ever *browse* social media for information that might be useful in your everyday life? For example, Recommendations, tips or advice

- o Very often
- o Often
- o Not Often
- o Never

Comments: _____

13. Do you ever get information on social media that is useful in your everyday life, even when you were not looking for it?
For example, Recommendations, tips or advice

- o Very often
- o Often
- o Not Often
- o Never

Comments: _____

14. Do you ever get information on social media which you could not obtain elsewhere? For example, Recommendations, tips or advice

- o Very often
- o Often
- o Not Often
- o Never

Comments: _____

15. What is your usual reason for using social media?
Tick all that apply:

- o Updates on what your contacts are doing
- o Getting and sharing Information
- o Communication with contacts
- o Other: Please specify _____

16. Which of the following topics have you found information on using social media in the past month?

Tick all that apply:

- o Banking / Insurance / Financial Services / Stocks
- o Celebrity
- o Community / Humanitarian
- o Communication
- o Education
- o Employment and / or Training
- o Entertainment
- o Festivals
- o Food and Dining out
- o Games
- o Government Services
- o Health and Medical
- o Humour
- o Legal
- o Lifestyle (general)
- o Lifestyle – Beauty, Fashion and Health
- o Lifestyle - Family
- o Local events
- o Locational / Mapping
- o Media downloads: music / movies / photography / video
- o News and Current Affairs
- o Personal blog (for example, link to blog)
- o Politics
- o Product / Brand / Shopping
- o Property
- o Recreational activities
- o Relationship and / or Dating
- o Sports
- o Technology (for example, Consumer Electronics)
- o Travel and holiday

17. Do you view items on social media for mostly functional or mostly recreational purposes?

- o Mostly functional for example, to find out information
- o Mostly recreational for example, for entertainment
- o About half functional and half recreational
- o Can't say

Comments: _____

18. Do you post/share items on social media for mostly functional or mostly recreational purposes?

- o Mostly functional for example, to inform others
- o Mostly recreational - for example, to entertain others
- o About half functional and half recreational
- o Can't say

Comments: _____

19. How has your use of information on social media in general affected your education studies?

- o Significantly improved
- o Slightly improved
- o No effect at all
- o Slightly worsened
- o Significant worsened
- o Don't know
- o Not applicable

Comments: _____

20. How has your use of information on social media in general affected your employment / training opportunities?[23]

- o Significantly improved
- o Slightly improved
- o No effect at all
- o Slightly worsened
- o Significant worsened
- o Don't know

Comments: _____

21. How has your use of information on social media in general affected your quality of living?

- o Significantly improved
- o Slightly improved
- o No effect at all
- o Slightly worsened
- o Significant worsened
- o Don't know

Comments: _____

Thank you --- End of survey

[23] Question 20 and 21 omitted 'Not applicable' intentionally. 'Don't know' and 'Not applicable' in Q19-21 are grouped together for interpretation in Chapter 8.

A1.2 List of syndicated websites for questionnaire distribution

	Website URL		Website URL
1	thestar.com.my	26	Bayt.com
2	Mylaunchpad.com.my	27	Malaysia.shoppinglifestyle.com
3	fmtnews.com	28	ohbulan.com
4	mystarjob.com	29	journeymalaysia.com
5	nst.com.my	30	commercialasia.com
6	paultan.org	31	galaxieblog.com.my
7	cinema.com.my	32	ecentral.my
8	chinapress.com.my	33	mailonline.com - Travel
9	sinchew.com.my	34	fooyoh.com
10	musicunlimited.com.my	35	bola.kompas.com/ligaspanyol
11	malaysia.msn.com	36	kfm.co.za
12	motortrader.com.my	37	abante.com.ph
13	carlist.my	38	MSN Malaysia - Baby Care
14	kuali.com	39	qatarliving.com
15	dailychilli.com	40	MSN Malaysia - Travel
16	mailonline.com - News	41	pcauthority.com.au
17	mailonline.com - Sport	42	zerotohundred.com
18	MSN Malaysia - Motoring	43	mailonline.com - TV and Showbiz
19	starproperty.my	44	mystar.com.my
20	btimes.com.my	45	parenthots.com
21	StadiumAstro.com	46	rappler.com
22	garuda-indonesia.com	47	autoworld.com.my
23	MSN Malaysia - News	48	lelong.com.my
24	bernama.com	49	mailonline.com - Femail
25	mailonline.com - Home	50	santika.com

Appendix 2 Demographic profiles

A2.1 Demographic categories

Demographic variable	Category	Notes
Residence	Urban	Includes Large city, Capital city.
	Rural	
Education	Tertiary	
	Non-tertiary	Includes No formal education, Primary education, Secondary education.
Income*	Very high	Above $5,100USD (highest value above $35,300USD)
	High	$2,001USD-$5,000USD
	Middle	$1,000USD-2,000USD
	Low	$0-500-$1,000USD
	No income	Dependents, unemployed, no income [students excluded from cross-tabs] Ignored from analysis as n=12 after students excluded but included in appendix tables for illustrative purposes. Total n = 341
	Prefer not to say	[treated as missing value]
Occupation	High-skill white collar	Includes Associate Professional and Technical, Director, CEO, COO, CFO, Large Company Owner, Professional, Senior manager, Middle manager
	Low-skill white collar	Includes Administrative and Secretarial, Executive / Other white Collar, Sales and Customer Service
	Non white collar	Farmer/agricultural worker, Personal Service, Skilled Trade, Standard worker
	Full-time Student	[treated as missing value]
	Other	[treated as missing value]
	Unemployed / Homemaker / Retired	Referred to in descriptive analysis only.

*Income brackets were provided in USD. I performed a rough conversion to Malaysian Ringgit (MYR) using an online currency converter. I then based 'Low', 'Middle' and 'High' groupings based on Economic Planning Unit 2012 data on *Mean Monthly Gross Household Income of Top 20%, Middle 40% and Bottom 40% of Households by Ethnicity and Strata, Malaysia, 1970-2012* (Economic Planning Unit 2012). A category, 'Very high' was created for mean household income per month above approximately 15,000 MYR.

A2.2 Age versus occupation crosstabulation

Occupation	within Age	15-24	25-34	35-44	45-54	55+
High-skill white collar	Count	18	80	64	37	7
	% within Age	18%	60%	65%	71%	47%
Low-skill white collar	Count	12	31	17	6	1
	% within Age	12%	23%	17%	12%	7%
Non white collar	Count	2	6	3	4	0
	% within Age	2%	4%	3%	8%	0%
Other	Count	6	6	11	2	0
	% within Age	6%	4%	11%	4%	0%
Unemployed	Count	9	5	4	3	7
	% within Age	9%	4%	4%	6%	47%
Full time student	Count	53	6	0	0	0
	% within Age	53%	4%	0%	0%	0%
Total	Count	100	134	99	52	15
	% within Age	100%	100%	100%	100%	100%

A2.3 Residence versus education crosstabulation

Education	within Residence	Urban	Rural
Tertiary	Count	284	54
	% within Residence	86%	79%
Non-tertiary	Count	48	14
	% within Residence	14%	21%
Total	Count	332	68
	% within Residence	100%	100%

A2.4 Residence versus income crosstabulation

Income	within Residence	Urban	Rural
Very high	Count	40	4
	% within Residence	12%	6%
High	Count	74	9
	% within Residence	22%	13%
Middle	Count	91	18
	% within Residence	27%	26%
Low	Count	65	25
	% within Residence	20%	37%
No income	Count	29	8
	% within Residence	9%	12%
Prefer not to say	Count	33	4
	% within Residence	10%	6%
Total	Count	332	68
	% within Residence	100%	100%

A2.5 Residence versus occupation crosstabulation

Occupation	within Residence	Urban	Rural
High-skill white collar	Count	174	32
	% within Residence	52%	47%
Low-skill white collar	Count	59	8
	% within Residence	18%	12%
Non white collar	Count	13	2
	% within Residence	4%	3%
Other	Count	20	5
	% within Residence	6%	7%
Unemployed	Count	20	8
	% within Residence	6%	12%
Full time student	Count	46	13
	% within Residence	14%	19%
Total	Count	332	68
	% within Residence	100%	100%

A2.6 Language versus residence crosstabulation

Residence	within Language	Malay	Chinese	Indian	English
Urban	Count	75	88	78	91
	% within Language	75%	88%	78%	91%
Rural	Count	25	12	22	9
	% within Language	25%	12%	22%	9%
Total	Count	100	100	100	100
	% within Language	100%	100%	100%	100%

A2.7 Language versus income crosstabulation

Income	within Language	Malay	Chinese	Indian	English
Very high	Count	4	7	10	23
	% within Language	4%	7%	10%	23%
High	Count	17	24	11	31
	% within Language	17%	24%	11%	31%
Middle	Count	33	36	27	13
	% within Language	33%	36%	27%	13%
Low	Count	21	21	36	12
	% within Language	21%	21%	36%	12%
No income	Count	12	7	10	8
	% within Language	12%	7%	10%	8%
Prefer not to say	Count	13	5	6	13
	% within Language	13%	5%	6%	13%
Total	Count	100	100	100	100
	% within Language	100%	100%	100%	100%

A2.8 Language versus occupation (raw) crosstabulation

Occupation (raw)	within Language	Malay	Chinese	Indian	English
Administrative and Secretarial	Count	6	8	7	2
	% within Language	6%	8%	7%	2%
Director / Owner	Count	4	2	5	9
	% within Language	4%	2%	5%	9%
Full time student	Count	19	16	13	11
	% within Language	19%	16%	13%	11%
Labourer / Trade	Count	5	1	5	3
	% within Language	5%	1%	5%	3%
Manager	Count	16	24	13	25
	% within Language	16%	24%	13%	25%
Other	Count	9	5	6	5
	% within Language	9%	5%	6%	5%
Professional	Count	32	35	42	30
	% within Language	32%	35%	42%	30%
Service	Count	4	4	2	4
	% within Language	4%	4%	2%	4%
Unemployed / Homemaker / Retired	Count	5	5	7	11
	% within Language	5%	5%	7%	11%
Total	Count	100	100	100	100
	% within Language	100%	100%	100%	100%

A2.9 Language versus age crosstabulation

Age	within Language	Malay	Chinese	Indian	English
15-24	Count	28	21	31	20
	% within Language	28%	21%	31%	20%
25-34	Count	37	39	30	28
	% within Language	37%	39%	30%	28%
35-44	Count	24	29	22	24
	% within Language	24%	29%	22%	24%
45-54	Count	11	10	14	17
	% within Language	11%	10%	14%	17%
55+	Count	0	1	3	11
	% within Language	0%	1%	3%	11%
Total	Count	100	100	100	100
	% within Language	100%	100%	100%	100%

A2.10 Income versus occupation crosstabulation

Occupation	within Income	Very high	High	Middle	Low	No income	Prefer not to say
High-skill white collar	Count	38	63	65	25	2	13
	% within Income	86%	76%	60%	28%	5%	35%
Low-skill white collar	Count	1	8	27	20	1	10
	% within Income	2%	10%	25%	22%	3%	27%
Non white collar	Count	1	1	4	8	0	1
	% within Income	2%	1%	4%	9%	0%	3%
Other	Count	4	2	4	10	2	3
	% within Income	9%	2%	4%	11%	5%	8%
Unemployed	Count	0	5	4	12	7	0
	% within Income	0%	6%	4%	13%	19%	0%
Full time student	Count	0	4	5	15	25	10
	% within Income	0%	5%	5%	17%	68%	27%
Total	Count	44	83	109	90	37	37
	% within Income	100%	100%	100%	100%	100%	100%

A2.11 Occupation versus education crosstabulation

Education	within Occupation	High-skill white collar	Low-skill white collar	Non white collar	Other	Unemployed	Full time student
Tertiary	Count	191	52	9	18	21	47
	% within Occupation	93%	78%	60%	72%	75%	80%
Non-Tertiary	Count	15	15	6	7	7	12
	% within Occupation	7%	22%	40%	28%	25%	20%
Total	Count	206	67	15	25	28	59
	% within Occupation	100%	100%	100%	100%	100%	100%

Appendix 3 Demographic data for Chapters 4 - 8

Note: Second number in Appendix header refers to each chapter for example, A3.4.1 refers to data in Chapter 4.

A3.4 Demographic results for Chapter 4

A3.4.1 How important is social media to you in your everyday life? versus age crosstabulation

		15-24	25-34	35-44	45-54	55+
Not at all important	Count	3	9	7	3	1
	% within Age	3%	7%	7%	6%	7%
Not important	Count	11	28	19	6	1
	% within Age	11%	21%	19%	12%	7%
Important	Count	55	62	49	26	10
	% within Age	55%	46%	49%	50%	67%
Very important	Count	31	35	24	17	3
	% within Age	31%	26%	24%	33%	20%
Total	Count	100	134	99	52	15
	% within Age	100%	100%	100%	100%	100%

A3.4.2 How often do you use social media? versus age crosstabulation

		15-24	25-34	35-44	45-54	55+
Less than Monthly	Count	6	8	6	2	1
	% within Age	6%	6%	6%	4%	7%
At least Monthly	Count	1	4	6	3	1
	% within Age	1%	3%	6%	6%	7%
At least Weekly	Count	12	26	12	6	3
	% within Age	12%	19%	12%	12%	20%
At least Daily	Count	59	66	63	37	9
	% within Age	59%	49%	64%	71%	60%
At least Hourly	Count	22	30	12	4	1
	% within Age	22%	22%	12%	8%	7%
Total	Count	100	134	99	52	15
	% within Age	100%	100%	100%	100%	100%

A3.4.3 How often do you use social media? versus residence crosstabulation

		Urban	Rural
Less than Monthly	Count	19	4
	% within Residence	6%	6%
At least Monthly	Count	10	5
	% within Residence	3%	7%
At least Weekly	Count	46	13
	% within Residence	14%	19%
At least Daily	Count	197	37
	% within Residence	59%	54%
At least Hourly	Count	60	9
	% within Residence	18%	13%
Total	Count	332	68
	% within Residence	100%	100%

A3.4.4 Where do you commonly access social media? Cybercafé versus income crosstabulation

		Very high	High	Middle	Low	No income
No	Count	41	78	98	66	10
	% within Income	93%	99%	94%	88%	83%
Yes	Count	3	1	6	9	2
	% within Income	7%	1%	6%	12%	17%
Total	Count	44	79	104	75	12
	% within Income	100%	100%	100%	100%	100%

A3.4.5 Where do you commonly access social media? Mobile versus education crosstabulation

		Tertiary	Non-Tertiary
No	Count	159	41
	% within Education	47%	66%
Yes	Count	179	21
	% within Education	53%	34%
Total	Count	338	62
	% within Education	100%	100%

A3.4.6 Where do you commonly access social media? Mobile versus income crosstabulation

		Very high	High	Middle	Low	No income
No	Count	17	32	57	42	7
	% within Income	39%	41%	55%	56%	58%
Yes	Count	27	47	47	33	5
	% within Income	61%	59%	45%	44%	42%
Total	Count	44	79	104	75	12
	% within Income	100%	100%	100%	100%	100%

A3.4.7 Where do you commonly access social media? Mobile versus residence crosstabulation

		Urban	Rural
No	Count	159	41
	% within Residence	48%	60%
Yes	Count	173	27
	% within Residence	52%	40%
Total	Count	332	68
	% within Residence	100%	100%

A3.4.8 Has social media increased in general your everyday contact, online or offline, with any of the following? Friends and / or Family versus age crosstabulation

		15-24	25-34	35-44	45-54	55+
No	Count	6	17	23	13	3
	% within Age	6%	13%	23%	25%	20%
Yes	Count	94	117	76	39	12
	% within Age	94%	87%	77%	75%	80%
Total	Count	100	134	99	52	15
	% within Age	100%	100%	100%	100%	100%

A3.4.9 Has social media increased in general your everyday contact, online or offline, with any of the following? Work peers versus education crosstabulation

		Tertiary	Non-Tertiary
No	Count	158	46
	% within Education	47%	74%
Yes	Count	180	16
	% within Education	53%	26%
Total	Count	338	62
	% within Education	100%	100%

A3.4.10 Has social media increased in general your everyday contact, online or offline, with any of the following? School peers versus education crosstabulation

		Tertiary	Non-Tertiary
No	Count	185	47
	% within Education	55%	76%
Yes	Count	153	15
	% within Education	45%	24%
Total	Count	338	62
	% within Education	100%	100%

A3.4.11 Has social media increased in general your everyday contact, online or offline, with any of the following? Acquaintances and / or strangers versus education crosstabulation

		Tertiary	Non-Tertiary
No	Count	248	52
	% within Education	73%	84%
Yes	Count	90	10
	% within Education	27%	16%
Total	Count	338	62
	% within Education	100%	100%

A3.4.12 Do you get information on social media that is useful in your everyday life from any of the following? Religion versus language crosstabulation

		Malay	Chinese	Indian	English
No	Count	73	86	83	85
	% within Language	73%	86%	83%	85%
Yes	Count	27	14	17	15
	% within Language	27%	14%	17%	15%
Total	Count	100	100	100	100
	% within Language	100%	100%	100%	100%

A3.4.13 Do you get information on social media that is useful in your everyday life from any of the following? Religion versus residence crosstabulation

		Urban	Rural
No	Count	276	51
	% within Residence	83%	75%
Yes	Count	56	17
	% within Residence	17%	25%
Total	Count	332	68
	% within Residence	100%	100%

A3.4.14 Do you get information on social media that is useful in your everyday life from any of the following? Work peers versus education crosstabulation

		Tertiary	Non-Tertiary
No	Count	158	46
	% within Education	47%	74%
Yes	Count	180	16
	% within Education	53%	26%
Total	Count	338	62
	% within Education	100%	100%

A3.4.15 Do you get information on social media that is useful in your everyday life from any of the following? School peers versus education crosstabulation

		Tertiary	Non-Tertiary
No	Count	185	47
	% within Education	55%	76%
Yes	Count	153	15
	% within Education	45%	24%
Total	Count	338	62
	% within Education	100%	100%

A3.4.16 Do you get information on social media that is useful in your everyday life from any of the following? Interests versus education crosstabulation

		Tertiary	Non-Tertiary
No	Count	199	40
	% within Education	59%	65%
Yes	Count	139	22
	% within Education	41%	35%
Total	Count	338	62
	% within Education	100%	100%

A3.4.17 Do you get information on social media that is useful in your everyday life from any of the following? Acquaintances and / or strangers versus education crosstabulation

		Tertiary	Non-Tertiary
No	Count	248	54
	% within Education	73%	87%
Yes	Count	90	8
	% within Education	27%	13%
Total	Count	338	62
	% within Education	100%	100%

A3.4.18 Do you get information on social media that is useful in your everyday life from any of the following? Religion versus education crosstabulation

		Tertiary	Non-Tertiary
No	Count	279	48
	% within Education	83%	77%
Yes	Count	59	14
	% within Education	17%	23%
Total	Count	338	62
	% within Education	100%	100%

A3.4.19 Do you get information on social media that is useful in your everyday life from any of the following? Religion versus income crosstabulation

		Very high	High	Middle	Low	No income
No	Count	38	70	90	54	7
	% within Income	86%	89%	87%	72%	58%
Yes	Count	6	9	14	21	5
	% within Income	14%	11%	14%	28%	42
Total	Count	44	79	104	75	12
	% within Income	100%	100%	100%	100%	100%

A.3.4.20 Do you get information on social media that is useful in your everyday life from any of the following? Religion versus occupation crosstabulation

		High-skill white collar	Low-skill white collar	Non white collar	Other	Un-employed	Full time student
No	Count	175	53	12	19	23	45
	% within Occupation	85%	79%	80%	76%	82%	76%
Yes	Count	31	14	3	6	5	14
	% within Occupation	15%	21%	20%	24%	18%	24%
Total	Count	206	67	15	25	28	59
	% within Occupation	100%	100%	100%	100%	100%	100%

A3.4.21 Do you get information on social media that you generally trust from any of the following? Friends and / or family versus age crosstabulation

		15-24	25-34	35-44	45-54	55+
No	Count	13	26	21	17	4
	% within Age	13%	19%	21%	33%	27%
Yes	Count	87	108	78	35	11
	% within Age	87%	81%	79%	67%	73%
Total	Count	100	134	99	52	15
	% within Age	100%	100%	100%	100%	100%

A3.4.22 Do you get information on social media that you generally trust from any of the following? Work peers versus education crosstabulation

		Tertiary	Non-Tertiary
No	Count	183	43
	% within Education	54%	69%
Yes	Count	155	19
	% within Education	46%	31%
Total	Count	338	62
	% within Education	100%	100%

A3.4.23 Do you get information on social media that you generally trust from any of the following? School peers versus education crosstabulation

		Tertiary	Non-Tertiary
No	Count	200	48
	% within Education	59%	77%
Yes	Count	138	14
	% within Education	41%	23%
Total	Count	338	62
	% within Education	100%	100%

A3.5 Demographic results for Chapter 5

A3.5.1 From which of the following do you get useful information for your everyday life? Social media versus age crosstabulation

		15-24	25-34	35-44	45-54	55+
No	Count	14	34	29	20	4
	% within Age	14%	25%	29%	38%	27%
Yes	Count	86	100	70	32	11
	% within Age	86%	75%	71%	62%	73%
Total	Count	100	134	99	52	15
	% within Age	100%	100%	100%	100%	100%

A3.5.2 From which of the following do you get useful information for your everyday life? Online news websites versus age crosstabulation

		15-24	25-34	35-44	45-54	55+
No	Count	39	33	30	7	1
	% within Age	39%	25%	30%	13%	7%
Yes	Count	61	101	69	45	14
	% within Age	61%	75%	70%	87%	93%
Total	Count	100	134	99	52	15
	% within Age	100%	100%	100%	100%	100%

A3.5.3 From which of the following do you get useful information for your everyday life? Online news websites versus residence crosstabulation

		Urban	Rural
No	Count	85	25
	% within Residence	26%	37%
Yes	Count	247	43
	% within Residence	74%	63%
Total	Count	332	68
	% within Residence	100%	100%

A3.5.4 From which of the following do you get useful information for your everyday life? Newspapers - print versus residence crosstabulation

		Urban	Rural
No	Count	128	20
	% within Residence	39%	29%
Yes	Count	204	48
	% within Residence	61%	71%
Total	Count	332	68
	% within Residence	100%	100%

A3.5.5 From which of the following do you get useful information for your everyday life? Television versus residence crosstabulation

		Urban	Rural
No	Count	158	19
	% within Residence	48%	28%
Yes	Count	174	49
	% within Residence	52%	72%
Total	Count	332	68
	% within Residence	100%	100%

A3.5.6 From which of the following do you get useful information for your everyday life? Radio versus residence crosstabulation

		Urban	Rural
No	Count	162	23
	% within Residence	49%	34%
Yes	Count	170	45
	% within Residence	51%	66%
Total	Count	332	68
	% within Residence	100%	100%

A3.5.7 From which of the following do you get useful information for your everyday life? Television versus language crosstabulation

		Malay	Chinese	Indian	English
No	Count	33	53	41	50
	% within Language	33%	53%	41%	50%
Yes	Count	67	47	59	50
	% within Language	67%	47%	59%	50%
Total	Count	100	100	100	100
	% within Language	100%	100%	100%	100%

A3.5.8 From which of the following do you get useful information for your everyday life? Search engines versus education crosstabulation

		Tertiary	Non-Tertiary
No	Count	128	33
	% within Education	38%	53%
Yes	Count	210	29
	% within Education	62%	47%
Total	Count	338	62
	% within Education	100%	100%

A3.5.9 From which of the following do you get useful information for your everyday life? Online news websites versus education crosstabulation

		Tertiary	Non-Tertiary
No	Count	83	27
	% within Education	25%	44%
Yes	Count	255	35
	% within Education	75%	56%
Total	Count	338	62
	% within Education	100%	100%

A3.5.10 From which of the following do you get useful information for your everyday life? Newspapers – print versus income crosstabulation

		Very high	High	Middle	Low	No income
No	Count	25	35	32	19	6
	% within Income	57%	44%	31%	25%	50%
Yes	Count	19	44	72	56	6
	% within Income	43%	56%	69%	75%	50%
Total	Count	44	79	104	75	12
	% within Income	100%	100%	100%	100%	100%

A3.5.11 From which of the following do you get useful information for your everyday life? Television versus income crosstabulation

		Very high	High	Middle	Low	No income
No	Count	30	41	43	21	7
	% within Income	68%	52%	41%	28%	58%
Yes	Count	14	38	61	54	5
	% within Income	32%	48%	59%	72%	42%
Total	Count	44	79	104	75	12
	% within Income	100%	100%	100%	100%	100%

A3.5.12 From which of the following do you get useful information for your everyday life? Radio versus income crosstabulation

		Very high	High	Middle	Low	No income
No	Count	27	35	56	23	6
	% within Income	61%	44%	54%	31%	50%
Yes	Count	17	44	48	52	6
	% within Income	39%	56%	46%	69%	50%
Total	Count	44	79	104	75	12
	% within Income	100%	100%	100%	100%	100%

A3.5.13 From which of the following do you get useful information for your everyday life? Search engines versus occupation crosstabulation

		High-skill white collar	Low-skill white collar	Non white collar	Other	Un-employed	Full time student
No	Count	71	32	9	13	13	23
	% within Occupation	34%	48%	60%	52%	46%	39%
Yes	Count	135	35	6	12	15	36
	% within Occupation	66%	52%	40%	48%	54%	61%
Total	Count	206	67	15	25	28	59
	% within Occupation	100%	100%	100%	100%	100%	100%

A3.5.14 From which of the following do you get useful information for your everyday life? Newspapers - print versus occupation crosstabulation

		High-skill white collar	Low-skill white collar	Non white collar	Other	Un-employed	Full time student
No	Count	84	17	8	9	10	20
	% within Occupation	41%	25%	53%	36%	36%	34%
Yes	Count	122	50	7	16	18	39
	% within Occupation	59%	75%	47%	64%	64%	66%
Total	Count	206	67	15	25	28	59
	% within Occupation	100%	100%	100%	100%	100%	100%

A3.5.15 From which of the following do you get useful information for your everyday life? Television versus occupation crosstabulation

		High-skill white collar	Low-skill white collar	Non white collar	Other	Un-employed	Full time student
No	Count	102	25	6	6	11	27
	% within Occupation	50%	37%	40%	24%	39%	46%
Yes	Count	104	42	9	19	17	32
	% within Occupation	50%	63%	60%	76%	61%	54%
Total	Count	206	67	15	25	28	59
	% within Occupation	100%	100%	100%	100%	100%	100%

A3.5.16 From which of the following do you get information that you generally trust? Online news websites versus residence crosstabulation

		Urban	Rural
No	Count	134	36
	% within Residence	40%	53%
Yes	Count	198	32
	% within Residence	60%	47%
Total	Count	332	68
	% within Residence	100%	100%

A3.5.17 From which of the following do you get information that you generally trust? Online news websites versus language crosstabulation

		Malay	Chinese	Indian	English
No	Count	49	41	52	28
	% within Language	49%	41%	52%	28%
Yes	Count	51	59	48	72
	% within Language	51%	59%	48%	72%
Total	Count	100	100	100	100
	% within Language	100%	100%	100%	100%

A3.5.18 From which of the following do you get information that you generally trust? Online news websites versus education crosstabulation

		Tertiary	Non-Tertiary
No	Count	136	34
	% within Education	40%	55%
Yes	Count	202	28
	% within Education	60%	45%
Total	Count	338	62
	% within Education	100%	100%

A3.5.19 From which of the following do you get information that you generally trust? Newspapers - print versus income crosstabulation

		Very high	High	Middle	Low	No income
No	Count	32	40	45	27	6
	% within Income	73%	51%	43%	36%	50%
Yes	Count	12	39	59	48	6
	% within Income	27%	49%	57%	64%	50%
Total	Count	44	79	104	75	12
	% within Income	100%	100%	100%	100%	100%

A3.5.20 From which of the following do you get information that you generally trust? Television versus income crosstabulation

		Very high	High	Middle	Low	No income
No	Count	36	50	58	32	8
	% within Income	82%	63%	56%	43%	67%
Yes	Count	8	29	46	43	4
	% within Income	18%	37%	44%	57%	33%
Total	Count	44	79	104	75	12
	% within Income	100%	100%	100%	100%	100%

A3.5.21 From which of the following do you get information that you generally trust? Radio versus income crosstabulation

		Very high	High	Middle	Low	No income
No	Count	32	43	64	36	8
	% within Income	73%	54%	62%	48%	67%
Yes	Count	12	36	40	39	4
	% within Income	27%	46%	38%	52%	33%
Total	Count	44	79	104	75	12
	% within Income	100%	100%	100%	100%	100%

A3.5.22 From which of the following do you get information that you generally trust? Newspapers - print versus occupation crosstabulation

		High-skill white collar	Low-skill white collar	Non white collar	Other	Un-employed	Full time student
No	Count	106	22	8	14	13	21
	% within Occupation	51%	33%	53%	56%	46%	36%
Yes	Count	100	45	7	11	15	38
	% within Occupation	49%	67%	47%	44%	54%	64%
Total	Count	206	67	15	25	28	59
	% within Occupation	100%	100%	100%	100%	100%	100%

A3.5.23 From which of the following do you get information that you generally trust? Television versus occupation crosstabulation

		High-skill white collar	Low-skill white collar	Non white collar	Other	Un-employed	Full time student
No	Count	128	30	9	10	18	31
	% within Occupation	62%	45%	60%	40%	64%	53%
Yes	Count	78	37	6	15	10	28
	% within Occupation	38%	55%	40%	60%	36%	47%
Total	Count	206	67	15	25	28	59
	% within Occupation	100%	100%	100%	100%	100%	100%

A3.5.24 From which of the following do you get information that you generally trust? Radio versus occupation crosstabulation

		High-skill white collar	Low-skill white collar	Non white collar	Other	Un-employed	Full time student
No	Count	126	36	7	11	17	33
	% within Occupation	61%	54%	47%	44%	61%	56%
Yes	Count	80	31	8	14	11	26
	% within Occupation	39%	46%	53%	56%	39%	44%
Total	Count	206	67	15	25	28	59
	% within Occupation	100%	100%	100%	100%	100%	100%

A3.5.25 What is your usual reason for using social media? Updates on what your contacts are doing versus age crosstabulation

		15-24	25-34	35-44	45-54	55+
No	Count	29	50	41	27	7
	% within Age	29%	37%	41%	52%	47%
Yes	Count	71	84	58	25	8
	% within Age	71%	63%	59%	48%	53%
Total	Count	100	134	99	52	15
	% within Age	100%	100%	100%	100%	100%

A3.5.26 What is your usual reason for using social media? Communication with contacts versus language crosstabulation

		Malay	Chinese	Indian	English
No	Count	49	39	42	26
	% within Language	49%	39%	42%	26%
Yes	Count	51	61	58	74
	% within Language	51%	61%	58%	74%
Total	Count	100	100	100	100
	% within Language	100%	100%	100%	100%

A3.5.27 What is your usual reason for using social media? Getting and sharing information versus language crosstabulation

		Malay	Chinese	Indian	English
No	Count	14	24	28	24
	% within Language	14%	24%	28%	24%
Yes	Count	86	76	72	76
	% within Language	86%	76%	72%	76%
Total	Count	100	100	100	100
	% within Language	100%	100%	100%	100%

A3.5.28 What is your usual reason for using social media? Communication with contacts versus education crosstabulation

		Tertiary	Non-Tertiary
No	Count	128	28
	% within Education	38%	45%
Yes	Count	210	34
	% within Education	62%	55%
Total	Count	338	62
	% within Education	100%	100%

A3.6 Demographic results for Chapter 6

A3.6.1 Non-directed monitoring versus age crosstabulation

		15-24	25-34	35-44	45-54	55+
Never	Count	5	11	9	3	1
	% within Age	5%	8%	9%	6%	7%
Not often	Count	25	44	30	19	7
	% within Age	25%	33%	30%	37%	47%
Often	Count	48	54	41	18	5
	% within Age	48%	40%	41%	35%	33%
Very often	Count	22	25	19	12	2
	% within Age	22%	19%	19%	23%	13%
Total	Count	100	134	99	52	15
	% within Age	100%	100%	100%	100%	100%

A3.6.2 Active seeking versus residence crosstabulation

		Urban	Rural
Never	Count	33	6
	% within Residence	10%	9%
Not often	Count	81	23
	% within Residence	24%	34%
Often	Count	133	25
	% within Residence	40%	37%
Very often	Count	85	14
	% within Residence	26%	21%
Total	Count	332	68
	% within Residence	100%	100%

A3.6.3 Active scanning versus residence crosstabulation

		Urban	Rural
Never	Count	22	8
	% within Residence	7%	12%
Not often	Count	90	18
	% within Residence	27%	26%
Often	Count	136	27
	% within Residence	41%	40%
Very often	Count	84	15
	% within Residence	25%	22%
Total	Count	332	68
	% within Residence	100%	100%

A3.6.4 Non-directed monitoring versus residence crosstabulation

		Urban	Rural
Never	Count	23	6
	% within Residence	7%	9%
Not often	Count	100	25
	% within Residence	30%	37%
Often	Count	143	23
	% within Residence	43%	34%
Very often	Count	66	14
	% within Residence	20%	21%
Total	Count	332	68
	% within Residence	100%	100%

A3.6.5 By proxy versus residence crosstabulation

		Urban	Rural
Never	Count	26	7
	% within Residence	8%	10%
Not often	Count	118	28
	% within Residence	36%	41%
Often	Count	128	25
	% within Residence	39%	37%
Very often	Count	60	8
	% within Residence	18%	12%
Total	Count	332	68
	% within Residence	100%	100%

A3.6.6 Active seeking versus language crosstabulation

		Malay	Chinese	Indian	English
Never	Count	7	11	9	12
	% within Language	7%	11%	9%	12%
Not often	Count	22	29	22	31
	% within Language	22%	29%	22%	31%
Often	Count	40	48	36	34
	% within Language	40%	48%	36%	34%
Very often	Count	31	12	33	23
	% within Language	31%	12%	33%	23%
Total	Count	100	100	100	100
	% within Language	100%	100%	100%	100%

A3.6.7 Active scanning versus language crosstabulation

		Malay	Chinese	Indian	English
Never	Count	4	9	9	8
	% within Language	4%	9%	9%	8%
Not often	Count	26	29	21	32
	% within Language	26%	29%	21%	32%
Often	Count	41	49	37	36
	% within Language	41%	49%	37%	36%
Very often	Count	29	13	33	24
	% within Language	29%	13%	33%	24%
Total	Count	100	100	100	100
	% within Language	100%	100%	100%	100%

A3.6.8 Non-directed monitoring versus language crosstabulation

		Malay	Chinese	Indian	English
Never	Count	4	5	10	10
	% within Language	4%	5%	10%	10%
Not often	Count	28	36	28	33
	% within Language	28%	36%	28%	33%
Often	Count	43	47	39	37
	% within Language	43%	47%	39%	37%
Very often	Count	25	12	23	20
	% within Language	25%	12%	23%	20%
Total	Count	100	100	100	100
	% within Language	100%	100%	100%	100%

A3.6.9 By proxy versus language crosstabulation

		Malay	Chinese	Indian	English
Never	Count	4	7	13	9
	% within Language	4%	7%	13%	9%
Not often	Count	35	41	26	44
	% within Language	35%	41%	26%	44%
Often	Count	41	41	42	29
	% within Language	41%	41%	42%	29%
Very often	Count	20	11	19	18
	% within Language	20%	11%	19%	18%
Total	Count	100	100	100	100
	% within Language	100%	100%	100%	100%

A3.6.10 Active scanning versus education crosstabulation

		Tertiary	Non-Tertiary
Never	Count	22	8
	% within Education	7%	13%
Not often	Count	90	18
	% within Education	27%	29%
Often	Count	143	20
	% within Education	42%	32%
Very often	Count	83	16
	% within Education	25%	26%
Total	Count	338	62
	% within Education	100%	100%

A3.7 Demographic results for Chapter 7

A3.7.1 Agree or disagree: Social media makes everyday life easier for me? versus age crosstabulation

		15-24	25-34	35-44	45-54	55+
Strongly disagree	Count	0	1	1	2	0
	% within Age	0%	1%	1%	4%	0%
Disagree	Count	0	3	7	1	2
	% within Age	0%	2%	7%	2%	13%
Neither agree nor disagree	Count	25	46	27	13	4
	% within Age	25%	34%	27%	25%	27%
Agree	Count	51	59	42	25	8
	% within Age	51%	44%	42%	48%	53%
Strongly agree	Count	24	25	22	11	1
	% within Age	24%	19%	22%	21%	7%
Total	Count	100	134	99	52	15
	% within Age	100%	100%	100%	100%	100%

A3.7.2 Agree or disagree: Social media makes everyday life easier for me? versus education crosstabulation

		Tertiary	Non-Tertiary
Strongly disagree	Count	3	1
	% within Education	1%	2%
Disagree	Count	12	1
	% within Education	4%	2%
Neither agree nor disagree	Count	102	13
	% within Education	30%	21%
Agree	Count	149	36
	% within Education	44%	58%
Strongly agree	Count	72	11
	% within Education	21%	18%
Total	Count	338	62
	% within Education	100%	100%

A3.7.3 Agree or disagree: Social media makes everyday life easier for me? Versus language crosstabulation

		Malay	Chinese	Indian	English
Strongly disagree	Count	1	0	1	2
	% within Language	1%	0%	1%	2%
Disagree	Count	0	3	5	5
	% within Language	0%	3%	5%	5%
Neither agree nor disagree	Count	27	33	24	31
	% within Language	27%	33%	24%	31%
Agree	Count	50	44	44	47
	% within Language	50%	44%	44%	47%
Strongly agree	Count	22	20	26	15
	% within Language	22%	20%	26%	15%
Total	Count	100	100	100	100
	% within Language	100%	100%	100%	100%

A3.7.4 View recreational versus gender crosstabulation

		Female	Male
No	Count	139	153
	% within Gender	77%	70%
Yes	Count	41	67
	% within Gender	23%	30%
Total	Count	180	220
	% within Gender	100%	100%

A3.7.5 View functional versus gender crosstabulation

		Female	Male
No	Count	127	146
	% within Gender	71%	66%
Yes	Count	53	74
	% within Gender	29%	34%
Total	Count	180	220
	% within Gender	100%	100%

A3.7.6 Post recreational versus gender crosstabulation

		Female	Male
No	Count	147	165
	% within Gender	82%	75%
Yes	Count	33	55
	% within Gender	18%	25%
Total	Count	180	220
	% within Gender	100%	100%

A3.7.7 Post functional versus gender crosstabulation

		Female	Male
No	Count	137	155
	% within Gender	76%	70%
Yes	Count	43	65
	% within Gender	24%	30%
Total	Count	180	220
	% within Gender	100%	100%

A3.7.8 View recreational versus occupation crosstabulation

		High-skill white collar	Low-skill white collar	Non white collar	Other	Un-employed	Full time student
No	Count	143	55	11	19	24	40
	% within Occupation	69%	82%	73%	76%	86%	68%
Yes	Count	63	12	4	6	4	19
	% within Occupation	31%	18%	27%	24%	14%	32%
Total	Count	206	67	15	25	28	59
	% within Occupation	100%	100%	100%	100%	100%	100%

A3.7.9 View functional versus occupation crosstabulation

		High-skill white collar	Low-skill white collar	Non white collar	Other	Un-employed	Full time student
No	Count	148	41	9	15	17	43
	% within Occupation	72%	61%	60%	60%	61%	73%
Yes	Count	58	26	6	10	11	16
	% within Occupation	28%	39%	40%	40%	39%	27%
Total	Count	206	67	15	25	28	59
	% within Occupation	100%	100%	100%	100%	100%	100%

A3.7.10 Post recreational versus occupation crosstabulation

		High-skill white collar	Low-skill white collar	Non white collar	Other	Un-employed	Full time student
No	Count	161	54	11	21	20	45
	% within Occupation	78%	81%	73%	84%	71%	76%
Yes	Count	45	13	4	4	8	14
	% within Occupation	22%	19%	27%	16%	29%	24%
Total	Count	206	67	15	25	28	59
	% within Occupation	100%	100%	100%	100%	100%	100%

A3.7.11 Post functional versus occupation crosstabulation

		High-skill white collar	Low-skill white collar	Non white collar	Other	Un-employed	Full time student
No	Count	146	53	11	18	22	42
	% within Occupation	71%	79%	73%	72%	79%	71%
Yes	Count	60	14	4	7	6	17
	% within Occupation	29%	21%	27%	28%	21%	29%
Total	Count	206	67	15	25	28	59
	% within Occupation	100%	100%	100%	100%	100%	100%

A3.8 Demographic results for Chapter 8

A3.8.1 How has your use of information on social media in general affected your education studies? versus education crosstabulation

		Tertiary	Non-Tertiary
Significantly worsened	Count	4	1
	% within Education	1%	2%
Slightly worsened	Count	12	2
	% within Education	4%	3%
No effect at all	Count	56	8
	% within Education	17%	13%
Slightly improved	Count	98	18
	% within Education	29%	29%
Significantly improved	Count	55	14
	% within Education	16%	23%
Don't know / Not applicable	Count	113	19
	% within Education	33%	31%
Total	Count	338	62
	% within Education	100%	100%

A3.8.2 How has your use of information on social media in general affected your education studies? versus occupation crosstabulation

		High-skill white collar	Low-skill white collar	Non white collar	Other	Un-employed	Full time student
Significantly worsened	Count	3	0	0	1	1	0
	% within Occupation	1%	0%	0%	4%	4%	0%
Slightly worsened	Count	6	1	0	1	1	5
	% within Occupation	3%	1%	0%	4%	4%	8%
No effect at all	Count	37	6	5	2	6	8
	% within Occupation	18%	9%	33%	8%	21%	14%
Slightly improved	Count	49	19	5	9	9	25
	% within Occupation	24%	28%	33%	36%	32%	42%
Significantly improved	Count	37	13	2	4	4	9
	% within Occupation	18%	19%	13%	16%	14%	15%
Don't know / Not applicable	Count	74	28	3	8	7	12
	% within Occupation	36%	42%	20%	32%	25%	20%
Total	Count	206	67	15	25	28	59
	% within Occupation	100%	100%	100%	100%	100%	100%

A3.8.3 How has your use of information on social media in general affected your education studies? versus language crosstabulation

		Malay	Chinese	Indian	English
Significantly worsened	Count	2	1	1	1
	% within Language	2%	1%	1%	1%
Slightly worsened	Count	1	3	6	4
	% within Language	1%	3%	6%	4%
No effect at all	Count	17	19	11	17
	% within Language	17%	19%	11%	17%
Slightly improved	Count	33	33	35	15
	% within Language	33%	33%	35%	15%
Significantly improved	Count	18	10	18	23
	% within Language	18%	10%	18%	23%
Don't know / Not applicable	Count	29	34	29	40
	% within Language	29%	34%	29%	40%
Total	Count	100	100	100	100
	% within Language	100%	100%	100%	100%

A3.8.4 How has your use of information on social media in general affected your employment / training opportunities? versus residence crosstabulation

		Urban	Rural
Slightly worsened	Count	6	1
	% within Residence	2%	1%
No effect at all	Count	113	15
	% within Residence	34%	22%
Slightly improved	Count	102	29
	% within Residence	31%	43%
Significantly improved	Count	55	13
	% within Residence	17%	19%
Don't know / Not applicable	Count	56	10
	% within Residence	17%	15%
Total	Count	332	68
	% within Residence	100%	100%

A3.8.5 How has your use of information on social media in general affected your employment / training opportunities? versus education crosstabulation

		Tertiary	Non-Tertiary
Slightly worsened	Count	7	0
	% within Education	2%	0%
No effect at all	Count	119	9
	% within Education	35%	15%
Slightly improved	Count	112	19
	% within Education	33%	31%
Significantly improved	Count	54	14
	% within Education	16%	23%
Don't know / Not applicable	Count	46	20
	% within Education	14%	32%
Total	Count	338	62
	% within Education	100%	100%

A3.8.6 How has your use of information on social media in general affected your employment / training opportunities? versus occupation crosstabulation

		High-skill white collar	Low-skill white collar	Non white collar	Other	Un-employed	Full time student
Slightly worsened	Count	4	1	0	0	0	2
	% within Occupation	2%	1%	0%	0%	0%	3%
No effect at all	Count	80	13	5	7	11	12
	% within Occupation	39%	19%	33%	28%	39%	20%
Slightly improved	Count	61	27	5	7	7	24
	% within Occupation	30%	40%	33%	28%	25%	41%
Significantly improved	Count	36	14	3	5	4	6
	% within Occupation	17%	21%	20%	20%	14%	10%
Don't know / Not applicable	Count	25	12	2	6	6	15
	% within Occupation	12%	18%	13%	24%	21%	25%
Total	Count	206	67	15	25	28	59
	% within Occupation	100%	100%	100%	100%	100%	100%

A3.8.7 How has your use of information on social media in general affected your employment / training opportunities? versus language crosstabulation

		Malay	Chinese	Indian	English
Slightly worsened	Count	1	3	2	1
	% within Language	1%	3%	2%	1%
No effect at all	Count	29	31	31	37
	% within Language	29%	31%	31%	37%
Slightly improved	Count	42	33	35	21
	% within Language	42%	33%	35%	21%
Significantly improved	Count	15	10	17	26
	% within Language	15%	10%	17%	26%
Don't know / Not applicable	Count	13	23	15	15
	% within Language	13%	23%	15%	15%
Total	Count	100	100	100	100
	% within Language	100%	100%	100%	100%

A3.8.8 How has your use of information on social media in general affected your quality of living? versus language crosstabulation

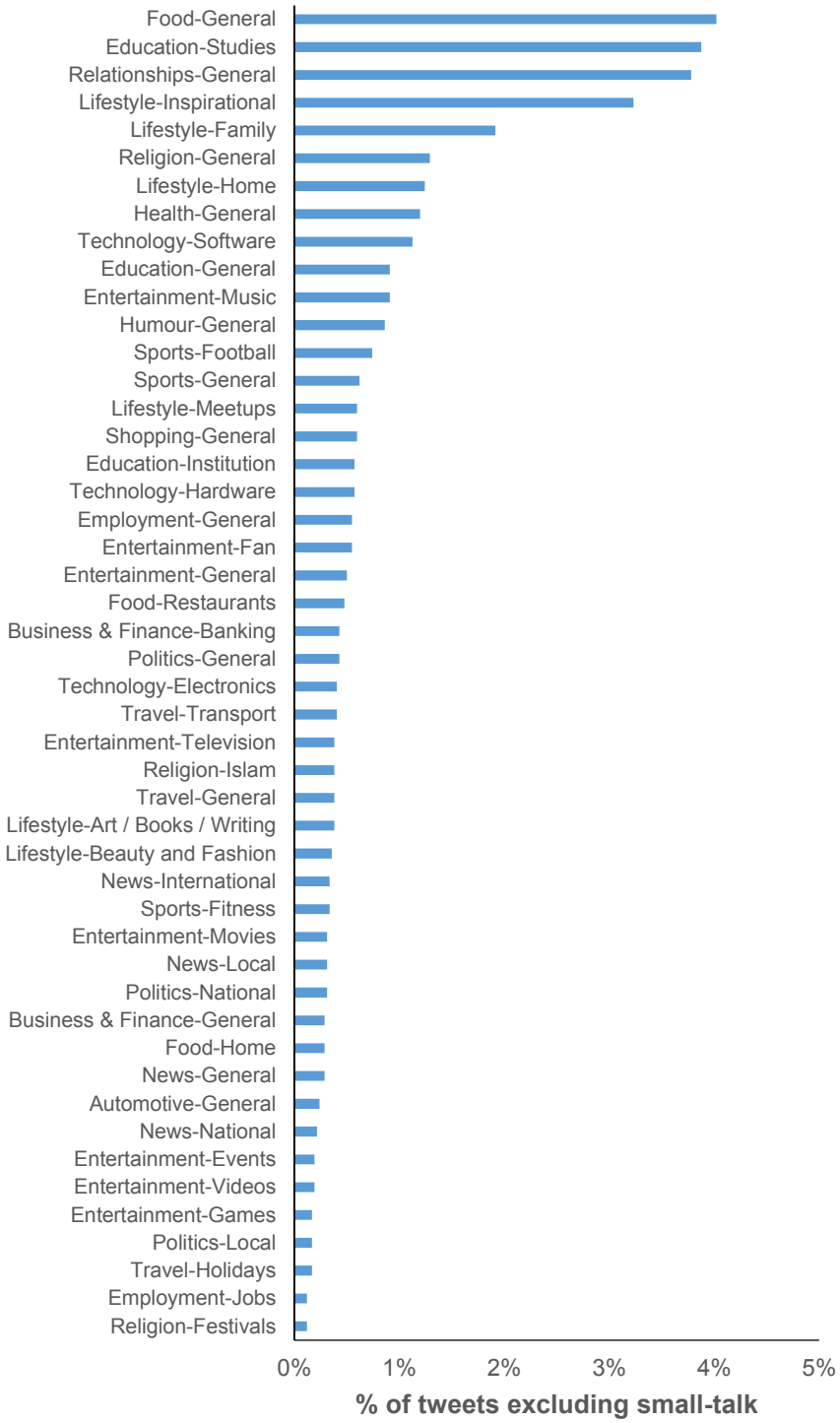
		Malay	Chinese	Indian	English
Significantly worsened	Count	0	1	3	0
	% within Language	0%	1%	3%	0%
Slightly worsened	Count	1	2	3	4
	% within Language	1%	2%	3%	4%
No effect at all	Count	32	17	16	20
	% within Language	32%	17%	16%	20%
Slightly improved	Count	41	60	52	40
	% within Language	41%	60%	52%	40%
Significantly improved	Count	18	11	17	25
	% within Language	18%	11%	17%	25%
Don't know / Not applicable	Count	8	9	9	11
	% within Language	8%	9%	9%	11%
Total	Count	100	100	100	100
	% within Language	100%	100%	100%	100%

Appendix 4 Topics on Twitter

A4.1 Parent and sub-category descriptions of tweets

Parent	Sub-category	Description of tweets
Automotive	General	Tweets related to any form of automotive vehicle
Business and Finance	General	Tweets related to general business and finance information
	Banking	Tweets related to banking information (including stocks and
Education	General	Tweets of an educational nature, but not focused on
	Institutions	Tweets related to universities, colleges, schools
	Studies	Tweets related to studying and exams
Employment	General	Tweets related to general employment information
	Jobs	Tweets related to job vacancies, opportunities and training
Entertainment	General	Tweets related to general entertainment information
	Events	Tweets related to entertainment events, including concerts
	Fan	Tweets related to fan topics (e.g. fans of books, authors,
	Games	Tweets related to any types of games
	Movies	Tweets related to movies
	Music	Tweets related to music
	Television	Tweets related to television formats
	Videos	Tweets related to video formats
Food	General	Tweets generally related to food
	Home	Tweets relate to food made and served in the home
	Restaurants	Tweets related to food made and served outside the home
Health	General	Tweets related to general health information
Humour	General	Tweets related to humor, satire and sarcasm
Lifestyle	General	Tweets of a general recreational and leisure nature
	Art / Books /	Tweets related to art, books, photography, writing as a hobby
	Beauty and	Tweets related to beauty and fashion as recreation
	Family	Tweets related to the family and families
	Home	Tweets related to the home and household
	Inspirational	Tweets related to spiritual, motivational advice and tips
	Meetups	Tweets related to meeting up; checking into locations
News	General	Tweets related to general news information
	International	Tweets related to international news issues
	Local	Tweets related to local news issues (e.g. at suburb level)
	National	Tweets related to national news issues in Malaysia
Politics	General	Tweets related to general politics; including global politics
	Local	Tweets related to local politics issues (e.g. at suburb level)
	National	Tweets related to national politics issues in Malaysia
Relationships	General	Tweets related to intimate personal and familial relations,
Religion	General	Tweets related to general religion information
	Festivals	Tweets related to religious festivals (including Buddhist,
	Islam	Tweets related to Islamic religion
Shopping	General	Tweets related to general shopping information and
Small-talk	General	Tweets related to chit-chat, gossip, communication without a
Sports	General	Tweets related to sports in general, including cricket,
	Fitness	Tweets related to fitness activities
	Football	Tweets related to football (soccer)
Technology	Electronics	Tweets related to electronics information
	Hardware	Tweets related to hardware and devices
	Software	Tweets related to software (consumer and B2B)
Travel	General	Tweets related to general travel
	Holidays	Tweets related to travel for holidays, including destinations
	Transport	Tweets related to travel modes; including air flight information

A4.2 Content analysis of Twitter subtopics excluding small-talk



Adds up to 38 percent of tweets; tweets could be counted in two categories
Period: 21 Sep 2012 – 11 Oct 2012
Source: Hanchard
Total tweets = 4,108

Appendix 5 Metric measures analysis

A5.1 Calculation of metric measures for participation

Measure	Added scales
Social networks {'friends/family', 'peers', 'acquaintances/strangers', 'religious/ethnic'} (Source)	Q6. Has social media increased in general your everyday contact, online or offline, with any of the following? Q7. Do you get information on social media that is useful in your everyday life from any of the following? Q8. Do you get information on social media that you generally trust from any of the following? Selections across Q6-8 that were given 1 count for each type of tie.
Traditional media; New media (Source)	Q9. From which of the following do you get useful information for your everyday life? Q10. From which of the following do you get information that you generally trust? Selections across Q9-Q10 were given 1 count for each type of media.
Functional Information practice (Purpose)	<u>Use (weight =3)</u> Q17. Do you view items on social media for mostly functional or mostly recreational purposes? Selection of 'Mostly functional for example, to find out information' given 1 count. Q18. Do you post/share items on social media for mostly functional or mostly recreational purposes? Selection of 'Mostly functional for example, to inform others' given 1 count. <u>Mode (weight = 2)</u> Q15. What is your usual reason for using social media? Selections that were given 1 count each: • Getting and sharing Information • Communication with contacts <u>Information practice (weight = 2)</u> Q11 – Q16 • Do you ever use social media with the intent of finding the answer to a specific question? • Do you ever browse social media for information that might be useful in your everyday life? • Do you ever get information on social media that is useful in your everyday life, even when you were not looking for it? • Do you ever get information on social media which you could not obtain elsewhere? Scale 0 – 3 per question; maximum score of 12 across four questions. <u>Diversity (weight = 1)</u> Q16. Which of the following topics have you found information on using social media in the past month? Each selection given 1 count. Total count possible =30.
Value – Utility (Value)	Q3. How important is social media to you in your everyday life? Likert score from -2 to 2 Q4. Agree or disagree: social media makes everyday life easier for me. Likert score from -2 to 2 Q5. Agree or disagree: social media is an efficient means for me to get useful everyday information. Likert score from -2 to 2

Value – Outcomes (Value)	19. How has your use of information on social media in general affected your education studies? Likert score from -2 to 2 20. How has your use of information on social media in general affected your employment / training opportunities? Likert score from -2 to 2 21. How has your use of information on social media in general affected your quality of living? Likert score from -2 to 2

A5.2 Correlation coefficient matrix between metric participation measures

		F/F	Peers	A/S	R/E	Media(T)	Media(N)	FuncInfo	Utility	Outcomes
F/F	ρ	1.000								
	Sig	.								
Peers	ρ	.436**	1.000							
	Sig	.00000	.							
A/S	ρ	.175**	.421**	1.000						
	Sig	.00045	.00000	.						
R/E	ρ	.123*	.351**	.397**	1.000					
	Sig	.01381	.00000	.00000	.					
Media(T)	ρ	.059	.259**	.188**	.229**	1.000				
	Sig	.23691	.00000	.00015	.00000	.				
Media(N)	ρ	.219**	.427**	.347**	.279**	.142**	1.000			
	Sig	.00001	.00000	.00000	.00000	.00454	.			
FuncInfo	ρ	.353**	.482**	.314**	.315**	.228**	.465**	1.000		
	Sig	.00000	.00000	.00000	.00000	.00000	.00000	.		
Utility	ρ	.239**	.238**	.112*	.210**	.109*	.161**	.456**	1.000	
	Sig	.00000	.00000	.02520	.00002	.02906	.00125	.00000	.	
Outcomes	ρ	.223**	.239**	.147**	.203**	.130**	.171**	.499**	.916**	1.000
	Sig	.00001	.00000	.00319	.00004	.00911	.00059	.00000	.00000	.

F/F= Friends / Family
Peers = Peers
A/S = Acquaintances / Strangers
R/E =Religious / ethnic
Media (T) = Traditional media
Media (N)= New media
FuncInfo = Functional information practice
Utility = Value Utility
Outcomes = Value outcomes

Yellow highlights indicate relationships where ρ>.4. Relationship between strong ties and weak ties - peers (ρ=.436) ignored from this analysis.

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).
Spearman rho (ρ) was used instead of Pearson's r as a normal distribution is not assumed.

Appendix 6 Ethics documentation

A6.1 Evidence of clearance

Email on Friday, 7 September 2012 12:41 PM

To: Dr Julian Thomas, FLSS/Ms Sandra Hanchard

Dear Julian and Sandra

SUHREC Project 2012/077 Social Media and Everyday Uses in Malaysia

Prof Julian Thomas, ISR/FLSS; Ms Sandra Hanchard, Dr Vivienne Waller
Approved Duration: 06/09/2012 to 31/12/2013 [Adjusted]

I refer to the ethical review of the above project protocol conducted on behalf of Swinburne's Human Research Ethics Committee (SUHREC) by a SUHREC Subcommittee (SHESC4). Your responses to the review, as emailed on 29 August and 5 September 2012, the latter email clarifying changed circumstances and attaching an updated consent instrument, were put to the Acting Chair of SUHREC for consideration.

I am pleased to advise that, as submitted to date, the project has approval to proceed in line with standard on-going ethics clearance conditions here outlined.

- All human research activity undertaken under Swinburne auspices must conform to Swinburne and external regulatory standards, including the *National Statement on Ethical Conduct in Human Research* and with respect to secure data use, retention and disposal.

-The named Swinburne Chief Investigator/Supervisor remains responsible for any personnel appointed to or associated with the project being made aware of ethics clearance conditions, including research and consent procedures or instruments approved. Any change in chief investigator/supervisor requires timely notification and SUHREC endorsement.

-The above project has been approved as submitted for ethical review by or on behalf of SUHREC. Amendments to approved procedures or instruments ordinarily require prior ethical appraisal/ clearance. SUHREC must be notified immediately or as soon as possible thereafter of (a) any serious or unexpected adverse effects on participants and any redress measures; (b) proposed changes in protocols; and (c) unforeseen events which might affect continued ethical acceptability of the project.

-At a minimum, an annual report on the progress of the project is required as well as at the conclusion (or abandonment) of the project.

-A duly authorised external or internal audit of the project may be undertaken at any time.

Please contact the Research Ethics Office if you have any queries about on-going ethics clearance or you need a signed ethics clearance certificate, citing the SUHREC project number. A copy of this clearance email should be retained as part of project record-keeping.

Best wishes for the project.

Yours sincerely

Keith Wilkins for
Kaye Goldenberg
Secretary, SHESC4
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A6.2 Statement of compliance

I declare that all conditions pertaining to the clearance were properly met and that final reports have been submitted.

Sandra Hanchard

Email confirmation of Ethics Final Report submission on Thursday, 14 May 2015 9:31 AM

Astrid Nordmann

To:

Sandra Hanchard

Cc:

RES Ethics

Thursday, 14 May 2015 9:31 AM

Dear Sandra

Just confirming that the Final Report was received on 06 May 2014.

Kind regards
Astrid