Crowdsourcing: Latest business fad or wellspring of value creation?

An exploratory study.

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Abstract
This study seeks to examine the value creation potential of crowdsourcing in the light of recent strategic management literature. A theory building approach is used with three case studies of crowdsourcing organizations. Findings illustrate how value is created for the crowdsourcing firm and the sources of value creation. Findings indicate that crowd size, loyalty and calibration of management/crowd controls are important factors in crowdsourcing value creation. Due to its nascence as a business phenomenon, it may be too early in the cycle to make fully informed predictions against some established value creation theories. We articulate the contribution in terms of the degree to which sources of value in crowdsourcing are embedded (or not) in existing strategic management value creation frameworks.

Keywords:
Crowdsourcing, competitive advantage, dynamic capabilities, e-business, resource-based view
INTRODUCTION

Crowdsourcing is a term first coined by Jeff Howe (2006a) in Wired magazine and is commonly perceived as a Web 2.0 artefact. Web 2.0 is defined as an online two-way social operating system consisting of networks that surround people, rather than simply present content (Tu, Blocker & Roberts, 2008). It is a potentially value-creating phenomenon that is defined as an organisation outsourcing a function once performed by an organisation’s employees to an undefined and usually large network of people via an open call for proposals usually co-ordinated by a firm (Howe, 2006b).

The concept of crowdsourcing is still an emerging research topic (Afuah & Tucci, 2013; Euchner, 2010; Chanal & Caron-Fasan, 2010). Afuah and Tucci (2012) focus on crowdsourcing primarily as a problem-solving mechanism and examine it through behavioural and evolutionary theories of the organisation. They posit that while crowdsourcing is not new, the development of the Internet has opened many possibilities for the phenomenon to play out. This notion is a basis for establishing that the modern crowdsourcing phenomenon is nascent in view of the fact that the Internet has opened considerable flexibility in its use and added considerably to size and scale potential for organisations using it. However, although influential, Internet companies have struggled to create viable business models. For example the dot-com boom/bust of the late 1990s saw internet firms convince investors that traditional revenue/ profit models no longer applied but they would soon figure out those models. Such models have been slow to emerge (Teece, 2010). Crowdsourcing may be seen as a passing fad or just another business phenomenon which might or might not create elusive long-term value. But is it a passing fad? How exactly is value created? Is this value sustainable? These questions are important and are starting to emerge in serious academic debate.

Such academic debate recently featured in the Dialogue section in the Academy of Management Review which featured an essay and a response regarding the importance of crowdsourcing and value capture (Afuah & Tucci, 2013; Bloodgood, 2013). This study makes a bold attempt to contribute a comprehensive understanding of value creation as called for in this scholarly discussion and explores the nascent phenomenon of crowdsourcing and examines its potential to create value through competing theoretical perspectives at organisation level.
A firm establishes competitive advantage by creating superior value to its competitors and creates this value through the benefits it offers customers outweighing those associated costs (Afuah, 2013). At this point crowdsourcing appears to be showing some early promise of more sustainable value creation (Carroll, 2011). Indeed, the paid crowdsourcing labour pool contains over one million workers who have earned $1-2 billion in the last decade, and crowdsourcing vendors, who typically charge a fee or commission, make over $500 million annually (Felstiner, 2010). Crowdsourcing employs over two million knowledge workers, contributing over half a billion dollars to the digital economy (Vukovic & Bartolini, 2010).

Practice leads theory in crowdsourcing. From a theoretical perspective, the birth of crowdsourcing in its nascent, modern Web 2.0 form demands a strategic literature response to what it is, how it creates value and how it fits with existing value creation theories (Afuah & Tucci, 2013; Bloodgood, 2013). Using a theory building approach utilising case studies of crowdsourcing firms the study seeks to clarify, articulate and build theory on sources of value of crowdsourcing through the following research question: how is value created from crowdsourcing?

**LITERATURE REVIEW**

In terms of value creation there are competing streams of literature in strategic management frameworks. In accordance with Amit and Zott (2001), traditional views in strategic management point that value can be created through Schumpeterian innovation (Schumpeter, 1943), the configuration of the value chain and firm positioning (Porter 1985). Their views extend also to network effects among firms (Gulati, Nohria & Zaheer, 2000), transactional economic exchange efficiencies (Williamson, 1985) the creation of resource value, rarity, inimitability and non-substitutability (VRIN) (Barney 1991) and/or the exploitation of specific firm resources and competences (Teece & Pisano, 1994). In this study network effects among firms (Gulati et al, 2000) and Porter’s value chain positioning (Porter 1985) are not considered strong contenders of value creation. This is due to the fact that in crowdsourcing the crowd is large, free-wheeling and amorphous which makes value chain frameworks unclear and network centrality and inter-network value and behavior difficult to gauge.
Outside strategic management frameworks, value creation is also an important concept. In the marketing literature stream ‘service-dominant logic’ (SD) posits that service, specifically, applied specialized skills and knowledge, are the focus of economic exchange and the locus of value (Vargo & Lusch, 2006). In the S-D logic context, value becomes a joint function of the actions of both provider and consumer but is always determined by the consumer (Vargo & Lusch, 2006). However, because it is difficult at times to clearly define and/or separate provider(s) and consumer (s) in certain crowdsourcing contexts means applying S-D logic may be difficult in the precise assignation of value. As a result, S-D logic has not been applied to this paper.

In the Innovation stream of literature, crowdsourcing may be seen as a form of open innovation, which is defined as a type of innovation whereby firms access and exploit outside knowledge while liberating their own internal expertise for others’ use (Chesbrough, 2003). Alternatively it may be seen as a form of co-creation where consumers interact with firms to co-create value (Prahalad & Ramaswamy (2004). While crowdsourcing could certainly take on the form of open innovation or co-creation, it could also instead potentially be a production line, a recruitment method or an efficient mode of economic exchange. Value for a firm could equally emanate from these alternative posturings. In addition, the crowd may (fully or in part) or may not be considered a firm’s consumer in certain crowdsourcing contexts, which makes the concept of co-creation difficult to apply in all crowdsourcing settings. Some crowds fulfil the role of producer (workforce) and also at times consumer or not.

**Crowdsourcing**

Crowdsourcing, in its different forms and types and even in hybrid formations of these, has the potential to create value for businesses. Kazman & Chen (2009) see crowdsourcing strategy leading to the creation of value specifically because it harnesses the creative energies of self-selecting participants with little or no financial compensation or formal managerial structure.

Value creation is a key concept in management and organisation literature but it is not well understood, there is little consensus on what value creation is, the process by which value is created...
and the mechanisms that move it to value capture (Lepak, Smith & Taylor, 2007). What the sources of value creation are in crowdsourcing is also unclear and lacks a unified consensus. Value is created when firms develop or invent new ways of doing things using new methods, new technologies, and so, when the organisation is the unit of analysis, innovation and invention activities impact the value creation process. Value may be captured by the use of resources with attributes that make them difficult to imitate, through the source’s use of creative destruction prior to competitors using the innovation, and though methods of resource management (Lepak, Smith & Taylor, 2007).

Crowdsourcing has the potential to have a marked effect on value-creating economic transactions. In many cases crowdsourcing firms rely solely on their crowdsourcing participants for important firm capabilities as decision-making, innovation or problem-solving (Afuah & Tucci, 2012).

It is still unclear how crowdsourcing fits with traditional frameworks and theories which point to value creation in the received strategic management literature.

**Schumpeterian Innovation**

Clearly, the implication of firms failing to respond to changing market externalities can potentially be Schumpeterian obliteration - as described in Schumpeter’s Theory of Creative Destruction (Schumpeter, 1943). This theory posited that the innovative transformation created by entrepreneurs engaged in introducing disruptive technologies sustained long-term economic growth and created wealth while it simultaneously destroyed the value of established dominant companies, not engaged in such innovation. A good example is to consider what crowdsourcing organisation Wikipedia - barely more than a decade old and with its 35 paid staff - has done to the 200 year old firm Encyclopaedia Britannica with its 400 paid staff – grown to 25 times its size and almost decimated its business (Angelova, 2010; Wikipedia, 2011).

In relation to Schumpeter’s contribution to distinguishing types of innovation, Casadeus-Masanell and Zhu (2013) highlight the different types of innovation he framed, which includes: new products, new production methods, new supply sources, exploitation of new markets and new ways to organise business. These five types of innovation are individual sources of value creation and crowdsourcing
has been used in a way to engage all these different types of innovation. For example new products are created through crowdsourcing via crowd ideas in Innocentive, a crowdsourcing firm. Threadless, a firm reliant on crowdsourcing for submitting, choosing and buying new t-shirts has designed new production methods, new supply sources, exploited social media for new markets and by so doing has re-engineered a new way to organise t-shirt retail.

**Transaction Cost Economics**

Transaction Cost Economics (TCE) posits that firms’ and markets’ exchange governance is driven by the desire to minimize the direct and opportunity costs of economic exchange, known as “transaction costs” (Williamson 1985). The firm, guided by its goal of transaction cost minimization, helps explain why firms use certain exchange relationship governance tools (Lambe, Wittmann & Spekman, 2001).

In the type of crowdsourcing described as ‘Tournament-based’ (Afuah & Tucci, 2012) crowdsourcing participants compete for a winner-takes-all prize. The transaction cost minimization of this contest style crowdsourcing is great considering that each client avails themselves of many person hours of work for what is usually a superior result as a consequence of the combined efforts of the crowd (Shapiro, 2011). The cost in the form of prize-money the client offers in most cases is far less than if they had employed staff, agents or contractors to complete the task (Simonson & Brahma, 2011).

In addition, the lack of formal employment contracts and of formal workplace relations allows crowdsourcing exchange parties to largely eschew traditional contracting costs. The approach adopted by the crowdsourcing firm 99Designs of having an over-arching, simple, generic, rules-based agreement does lower transaction costs to the extent that the Internet allows very efficient matching of employee and employers and allows for a relatively low-cost and high volume of transactions – a huge paradigm shift in work, production and employer-employee exchange (Felstiner, 2010). This in turn creates firm value through lowering firm transaction costs, because no individual contract is required and crowdsourced labour can continue to work at relatively low cost for agents on single task transactions. As well, due to the nature of the task-specific, on-demand labor that offers the efficiency
of 100 percent (task-based) utilization, industry reports estimate an additional saving of 10 to 15 percent on each labour transaction in comparison to traditional regimes (Simonson & Brahma, 2011).

**Resource-based view of the firm**

Established economic and strategic management streams point to the configuration of firm resources and capabilities. A firm that has attained a competitive advantage has enhanced its value creation potential. Such value creation is the difference between the benefits of a resource-capability combination and the economic cost to exploit them over rival firms (Peteraf & Barney, 2003).

Such firm heterogeneity is a hallmark of the resource-based view of the firm, which establishes that firm heterogeneity is largely based on a firm’s unique bundle of resources and capabilities which create value. Organisation value and hence competitive advantage can be created by an organisation via monopoly rents in an exclusive, unique or protected market environment, or via Ricardian rents by virtue of firm resources which are valuable, rare, inimitable and non-substitutable (VRIN) – a key concept in the resource-based view (RBV) (Barney, 1991; Makadok, 2001; Wernerfelt, 1984).

The VRIN concept in the RBV when applied to crowdsourcing can vest in the crowd - the formation of which may be viewed as a unique resource. Only in relatively recent history have firms been able to advantage themselves of relatively cheap, high speed computer networks which now allow unprecedented access to scaled-up workforces, crowd-based production, crowd intelligence, crowd-generated monetary exchange (known as crowdfunding) and crowd ideas.

Crowdsourcing firm Kaggle – a near monopoly in its specific field of endeavour – attracts and retains its key resource which is a highly valuable, rare, difficult to imitate or substitute niche crowd of almost 100,000 data scientists (with over 10,000 PhD level participants) comprising tens of thousands of experts from quantitative fields such as computer science, statistics, econometrics, maths and physics sourced from over 100 countries and 200 universities (Kaggle, 2013).
Dynamic Capabilities

The Dynamic Capabilities View (DCV) which was originally constructed by Teece and Pisano (1994) and focuses on a firm’s strategically-assembled dynamic internal capabilities which when bundled optimally can foster new and valuable products/processes creation while being ever-mindful of changing market circumstances. The theoretical construct of the DCV helps to specifically address the question of how firms can cope with changing environments, systematically solve problems, sense opportunities and threats to its business and to make timely and market-sensitive decisions to alter its resource base (Barreto, 2010). The DCV establishes that a firm must create and sustain competitive advantage via VRIN through bundling internal capabilities to manage firm resources while accounting for the dynamism of the market to avoid an untimely Schumpeterian demise.

Strategic management scholars have generally regarded resources and capabilities as separate entities in the creation of economic rents – although they may work in concert. Makadok (2001) speaks of the individual element or the combination of both strategic resource-picking (RBV) and capability-building (DCV) in terms of how firms create superior economic rents or competitive advantage. His view of resource-picking is seen in terms of a firm ‘purchasing’ and ‘acquiring good resources’ (Makadok, 2001, p. 388). Traditionally, for example, a firm must ‘purchase’ its human resources by offering salary/contract payments or by setting up ‘purchased’ third-party suppliers of human capital.

Crowdsourcing recasts the organisation’s role in resource-picking to make it a degree more complex than simple acquisition. The act of organisations ‘resource-picking’ in crowdsourcing scenarios is often more aptly termed resource-attracting, resource-motivating or perhaps resource-inspiring and this is achieved through a variety of means including positive brand appeal, trust-sharing, community-building, cash incentives, fame-potential, altruism/philanthropy-appeal, career-development, reputation-building or pleasure-appeal (Brabham, 2010; Dellarocas, 2010).

So, the way in which crowdsourcing firms access crowdsourcing capabilities and resources, create innovation and ideas, efficiently mediate demand and supply transactions, produce collective
intelligence and can attract and grow a huge and scaleable global workforce with relatively cheap economic transaction costs via Internet networks is intriguing and worthy of further investigation on how value is created and what are the sources of such value creation. How crowdsourcing measures up against traditional value creation theories is likewise intriguing. We are also responding to Afuah and Tucci’s (2012) article on crowdsourcing which predicts this new phenomenon of crowdsourcing to be “a rich source of theoretical and empirical knowledge and scholarly activity for many years to come” (p.372) and their current view that there has been little theorizing on crowdsourcing itself (Afuah & Tucci, 2013, p.458) as well as Bloodgood’s (2013) view researchers will now start to build up a research stream on crowdsourcing.

**RESEARCH METHODOLOGY**

In response to the nascence of Web 2.0 style crowdsourcing as a phenomenon and the still emergent theory surrounding and deficient evidence related to crowdsourcing firms and their sources of value creation, we utilised qualitative methods for the purpose of inductive theory building using multiple firm-based cases (Gioia, Corley & Hamilton, 2012).

In keeping with the theoretical sampling approach I selected firms in multiple industries and those which used crowdsourcing as a significant basis for revenue generation (over 50%). We chose firms which had crowd member sizes of over 10,000 because these were large enough to do justice to Howe’s (2006a) original definition of crowdsourcing as a ‘large network of people’. We chose firms based in two countries including Australia and the United States of America (USA) to participate in this study. The case studies used multiple sources of data such as interviews, qualitative surveys, emails and phone calls, media reports and interviews, document analysis, site visits, online website material, firm blogs and archival material. In total 9 semi-structured interviews were conducted including a cross-case matched selection of similarly-ranked firm executives. The main interview questions asked of each group (firm executives) is detailed at Appendix A. These case studies were selected on the basis of theoretical sampling (Eisenhardt, 1989, Eisenhardt & Graebner, 2007, Yin, 1993). Details of the three case study participants are presented in Table 1.
Data Analysis

The data for this study was analysed using observations among emerging data, themes, concepts and dimensions in line with the literature which built a data structure featuring first order concepts refining to second order themes and then resulting in a finalised aggregate of dimensions (Gioia, Corley & Hamilton, 2012). This was a fluid process and honoured the tradition of inductive research.

In order to enhance the reliability and validity of the findings I executed a series of steps including maintaining a case study file, ensuring similar rank and designations inside each firm was consistent, interviewees reviewed interview transcriptions and were sent results (Yin, 2003).

FINDINGS

A within-case analysis establishes that each firm institutes its own set of value creation strategies which is unique. Table 2 (below) summarises this within-case analysis of firms A, B and C and their individual value creation strategies along with an analysis of how each firm fits with established strategic management value creation framework.

A cross-case analysis of firms A, B and C reveal the following: each firm is the biggest in its marketplace and respectively attract remarkably sizeable crowdsourcing crowds. For example, firm C attracts a huge crowd of greater than 2.5 million. Growth in all three companies has been organic and explosive – particularly firm B which has established a 100,000-strong crowd containing more than 10,000 PhD level scientists in less than three years. Each firm runs contests and has unique and highly systematised technologies in place to assist in managing their respective large crowds. All three are revenue positive and have attracted external venture capital. Each company has a relationship focus and elicits crowd trust through various methods of crowd curation such as individual feedback, crowd community websites, showcasing outstanding examples of crowd production, efficient and fast prize winning payment and crowd oriented weblogs maintained by the company. Firm A has a specialised crowd curation team, showcases individual crowd members’ work in outstanding examples and has had executives visit some crowd members in developing countries in particular. Firm B runs extensive online self-regulating community web-boards where crowd members assist each other. In addition firm B has at times offered its elite members – those who have performed well in contests –
to special additional contests with certain clients. In these contests all participants are paid not just the
top one or two winners. Firm C showcases some individual crowd contributors, has personally visited
individual crowd members in foreign countries and has rejected major contracts with suppliers
refusing to individually honour and showcase specific crowd contributors’ work.

Each firm efficiently manages their crowd workforce with firm A having one staff to every 3,040
crowd members, firm B having one staff to 4,795 crowd and firm C having one staff to 23,585 crowd.

Each firm provides an efficient contest-based work platform which relates to crowd members
competing against each other at volume resulting in each client receiving a greater volume of work
from which to choose. Firm B ensures the client is not over-burdened by choice by having an
automated leader-board which objectively chooses the winning contributions in real-time until the
contest conclusion. Firm C also mitigates crowd contribution ‘over-supply’ by having the crowd
choose the winner of each category via popular voting choice thereby reducing internal firm workload
in having to cull great volumes of incoming crowd-produced material.

None of the firms provide substantial support costs like training or on-costs such as payment for
crowd member laptops or power supply. There are no significant marketing or recruitment costs to
attract new crowd members. In firm A growth has been organic via ‘word-of-mouth’. In firm B crowd
growth has been from organic networking across like and philosophically-aligned crowd communities.
In firm C growth has been organic ‘word-of-mouth’ and via friendship and social media channels.

**DISCUSSION**

Our study, having articulated the different strategic management theories concerning value creation
now discusses how each of these theories adds insight to crowdsourcing.

In terms of existing frameworks all firms are industry disruptors and exemplify levels of
Schumpeterian innovation. Firms A and B are dominant niche players in their respective industries –
both producing niche services, a new way of doing business and dominating their respective online
markets. Firm C is an outstanding example of Schumpeterian innovation relentlessly producing new
tailed products as a result of its co-producer crowd and quality production-sorting/voting crowd and
consumer-oriented crowd. This results in a new way of conducting business in its industry where
product production and consumption are tightly inter-woven by means of the crowd. It has won major
industry prizes for being among USA’s most innovative companies. It challenges closely-held
conventional retailing production methods and places as a retail industry disrupter and thereby a firm
which can claim to be a Schumpeterian innovator.

All firms dynamically reconfigure their core capabilities to improve governance in terms of crowd
control, management and mediation. Capabilities governing innovation have been re-configured to
enhance each firm’s industry disrupting size and scope. Firm capabilities concerning structural
elements have been improved to better crowd community self-regulation, system controls and to allow
collective production to thrive. Firm capabilities around relationship and trust generation have been
emphasised and heightened to develop better crowd retention and to increase crowd size. Firm
capabilities have been re-configured to better hone technical capabilities to manage and control crowd
and client mediation. In some firms, such as Firm C, considerable capabilities vest in the crowd and
such firms experience frequent capability reconfiguration due to the oft-changing work requested by
the firm combined with sheer size and the changing and changeable nature of the crowd over time.

Each firm has indicated categorically that the crowd is their greatest resource. The sheer
unprecedented sizes, global reach in the range of 100 -192 countries and niche specialities
(particularly firm B) of each firm’s crowdsourcing workforce in their industries is an outstanding
example of the elusive value-creating VRIN of the resource-based view (Barney, 1991).

In terms of TCE theory (Williamson, 1985), each firm is a highly efficient mediator of demand and
supply forces in its marketplace. Only the successful individual or team behind the crowd-supplied
product or service receives payment from the client. Most crowd production is therefore rejected and
unsuccessful crowd members are not formally compensated through any payments. Such crowd
production in these instances is vast, for example firm A receives new production material from a
crowd member every five seconds and firm C receives over 300 crowd production material items per
day. Such vast quantities of crowd produced items are controlled and governed by strict technology protocols. In addition, firm A partially mitigates the production wastage by having an after-market site for rejected, unpaid crowd production items at reduced prices to encourage clients to purchase.

However, there are certain puzzling aspects of crowdsourcing which cannot be well explained by existing theories. Alternatively due to crowdsourcing’s nascence, there may not be enough maturity associated with the phenomenon for theoretical predictive cycles to fully unfold.

In the rational markets underpinning TCE theory, demand for labour is met with supply of labour at a suitable exchange price point. The fact that in some crowdsourcing firms such as firms A and B, many members of the crowd never get paid or seldom receive payment for their labour presents a puzzle for the rational market. Why would many members of the crowd (rational labour suppliers in the market) continue to supply labour for no monetary return? In such a scenario, why would the crowd continue to supply labour and not simply disappear? Why are such firms’ labour pools growing and not shrinking, given this scenario?

In terms of Schumpeterian creative destruction, crowdsourcing firms may be at some risk of obliteration from rival firms who may be able to attract equally large and able crowds. It is unclear, at this stage, what difficulties rival firms would encounter establishing rival crowds to those existing established crowdsourcing firms which have enjoyed first mover advantage. What challenges a firm faces to retain its own (sometimes largely unpaid) crowd if better quality, more frequent or better-paying work were offered elsewhere by rivals to such a crowd are still yet to be established. How sticky (loyal) or not are each established crowdsourcing firm’s crowd? At this point, due to the nascence of crowdsourcing as a core business practice, such Schumpeterian obliteration predicted by the theory is possibly too early in the cycle to play out fully.

In terms of the creation of VRIN in the resource-based view, many crowdsourcing firms appear to have enormous crowds in sometimes highly niche fields which could satisfy the notion of VRIN and its value creating promise. However, due to the global nature of crowdsourcing the rarity, inimitability and non-substitutability of crowds may be threatened as the more than 2 billion people in
developing countries make the transition to being online, digital citizens and potential crowd workforce participants (Kleiner 2010). Will a huge influx of potential new labour suppliers who may commence taking part as crowd labour threaten some of the established firms' resource VRIN? Or, indeed, such an influx may paradoxically strengthen established crowdsourcing firms’ resource VRIN by sheer force of numbers if those established firms can attract these new crowd members?

In terms of dynamic capabilities, crowdsourcing firms must over time reconfigure resources and capabilities to maintain, attract and/or grow value. However, crowdsourcing presents a dilemma for firms wishing to reconfigure their capabilities in terms of the degree of loyalty of the crowd. It is unclear at this stage how a firm reconfigures its resources and capabilities over time to continue to attract, maintain and grow its crowd. All case study firms report their growth as ‘organic’ which implies the crowd grew itself with less reliance on carefully and strategically configured sustained management capabilities. All firms see their crowd as having strong degrees of self-management. Through its ability to self-govern, the crowd itself – albeit paradoxically amorphous and free-wheeling - has thereby adopted some dynamic capabilities that usually reside inside firms with firm managers.

In terms of its contribution to theory and practice, whether crowdsourcing can represent a well-spring of value creation remains largely unchartered but signals promise. It is clear, at this point, that practice is ahead of theory in terms of the phenomenon of crowdsourcing and there have been recent calls for theory development in this specific field ((Afuah & Tucci, 2013; Bloodgood, 2013). This paper is an early attempt to provide a response to such calls.

In conclusion, as evidenced by its unique value creation sources and through the ways it corroborates (or not) various theories of value creation in the strategic management literature there is emerging evidence to support the idea of a well-spring of value emanating from crowdsourcing. Given crowdsourcing’s growing size and scope and the value that even very newly established companies are creating in crowdsourcing it is unlikely to be just another business fad.
### Table 1 – Case study participant firm details

<table>
<thead>
<tr>
<th>Firm</th>
<th>HQ</th>
<th>Staff</th>
<th>Crowd Size</th>
<th>Industry</th>
<th>Firm Maturity</th>
<th>Interviewees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm A</td>
<td>Australia</td>
<td>75</td>
<td>228,000</td>
<td>Design</td>
<td>Start-up</td>
<td>Founder/CEO</td>
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<td>Founded 2008</td>
<td>Chief Op’s Officer</td>
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<td></td>
<td>Community Director</td>
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<td>Firm B</td>
<td>USA</td>
<td>20</td>
<td>95,900</td>
<td>Science</td>
<td>Start-up</td>
<td>Chairman</td>
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<td></td>
<td>Founded 2010</td>
<td>Founder/CEO</td>
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<td></td>
<td>Scientist</td>
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<tr>
<td>Firm C</td>
<td>USA</td>
<td>106</td>
<td>2,500,000</td>
<td>Retail</td>
<td>Start-up</td>
<td>Founder/CEO</td>
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<td></td>
<td>Founded 2000</td>
<td>Chief Creative Officer</td>
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<td></td>
<td>Business Dev Manager</td>
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<tr>
<td>Firm A</td>
<td>Value creation Strategies</td>
<td>Transaction Cost Economics</td>
<td>Schumpeterian Innovation</td>
<td>Valuable Rare Inimitable Non-Substitutable Resource</td>
<td>Core Capabilities</td>
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<td>Biggest in marketplace</td>
<td>New design uploaded</td>
<td>New online product offering</td>
<td>World's fastest grow'g bus in its market</td>
<td>Innovation: Industry disruption</td>
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<tr>
<td>Organic growth</td>
<td>Every 5 sec's</td>
<td>Higher choice offering</td>
<td>World's biggest bus in its marketplace</td>
<td>Innovation: New bus model</td>
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</tr>
<tr>
<td>Global expansion</td>
<td>Community self-mgmt</td>
<td>Unprecedented large supply</td>
<td>Attracts 228,000 niche global crowd</td>
<td>Governance: Global crowd mgt</td>
<td></td>
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<tr>
<td>Industry innovation</td>
<td>Tech exchange control</td>
<td>New market exploita'on's SME's</td>
<td>&gt;$53M prize money to crowd awarded</td>
<td>Governance: Crowd controls</td>
<td></td>
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<tr>
<td>Growth in crowd size</td>
<td>Activities all online</td>
<td>Innov/novel bus model</td>
<td>&gt;217,000 contests held</td>
<td>Governance: Crowd mediation</td>
<td></td>
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<tr>
<td>High product choice</td>
<td>Efficient money exchange</td>
<td>Technical control innovation</td>
<td>Presence in 192 countries</td>
<td>Governance: Trust building</td>
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<tr>
<td>Curating workforce</td>
<td>Anyone, anywhere, anytime</td>
<td>Industry disruption</td>
<td>Innovative cheaper, bigger offering</td>
<td>Growth: Business search</td>
<td></td>
<td></td>
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<tr>
<td>Attracting workforce</td>
<td>Task-centric exchange</td>
<td>Innovative config of transac'n</td>
<td>Small number of similar competitors</td>
<td>Growth: Workforce expansion</td>
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<td>&gt;$7,000,000 awarded to 1,500 crowd</td>
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<td>Large focused market</td>
<td>New constant source of buyers</td>
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REFERENCES


Chanal, V. & Caron-Fasan, M. L. 2010. The difficulties involved in developing business models open to innovation communities: the case of a crowdsourcing platform. M@n@gement, 13 (4): 318-341.


APPENDIX A

Interview Guide

Crowdsourcing Executives

Name of organisation: _______________________________________________________________

Name of respondent & position: _______________________________________________________

Contact (email): _________________________________________________________________

Address: ________________________________________________________________

Interview guide for the qualitative study: unstructured interviews

1) Company background (Historical background, missions and goals, corporate culture, number of employees etc.).
   - When established? _____________________________________________________________
   - Main goal/type of company? ___________________________________________________
   - Is it privately held company? ___________________________________________________
   - A start-up? ___________________________________________________________________
   - No. of employees? _____________________________________________________________
   - No. of clients? ________________________________________________________________
   - No. of crowdsourced resources if known? _________________________________________

2) How does using crowdsourcing create value for your organisation?

3) In what ways does the company create value for its own stakeholders (this can be for clients as well as crowdsourced staff)?

4) Why did you choose a crowdsourcing approach?

5) How did you go about choosing a crowdsourcing based business model out of other models you could have chosen?

6) What is the company’s operations strategy in dealing with the changing business environment?

7) Are there companies with whom you are in direct competition?
8) How does the company communicate with its main stakeholders – particularly those who form the crowd?

9) Has the company encountered difficulties with communication with its crowd in particular? Eg. Is there high turnover? Quality problems?

10) How does the company attract a crowd? Ie. Do you do anything special to engage/attract them?

11) How would you characterise your company’s crowd? Eg educated, creative, young, from developing economies, tech-savvy etc.

12) How does the company define its core capabilities? Eg. Innovative, Tech-savvy, flexible

13) What does this company consider to be the most important capability and how does the crowd fit in (if at all) to this important capability?

14) What would the company consider its most valuable resource(s)?

15) Do you think your crowd creates any sort of competitive advantage for your company over competitors?

16) Do see crowdsourcing as primarily a business model, a company capability, a company resource or a form of communication?

17) What is the future outlook for the company?