ARE INNOVATORS WORTH IDENTIFYING?

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Abstract

The most heavily researched stream within the marketing diffusion tradition is that which looks at individual adoption behaviour. The purpose of this research is to predict and explain the decisions of individual consumers concerning if and when they adopt an innovation. Although a large number of studies have attempted to address the question of what drives individual adoption behaviour, the reasons for conducting this research have not been well established and are rarely critiqued. This paper brings together and analyses the various reasons that have previously been put forward to justify research into innovators. The findings are that although the benefits of identifying early adopters are not as strong and clear-cut as sometimes presented, they are still sufficient to warrant further research into methods that will accurately predict likely early adopters.

Introduction

Perhaps it is because of the fact that this research field was already well established, marketing studies generally do not discuss the reasons for undertaking research into adoption and diffusion processes. The study of diffusion behaviour started with anthropologists, and spread throughout other disciplines such as sociology, psychology and geography. These fields often have as their core goal the understanding of human behaviour. Marketing as a discipline though, is concerned with understanding human behaviour only as a means to other ends, such as the prediction of future events, and as a guide to maximising the effectiveness of corporate marketing activities (Hunt 1991). The reasons other disciplines have for studying individual adoption behaviour are unlikely to justify the interest of marketing scholars.

Some marketing authors argue in broad terms, claiming that individual adoption behaviour is so crucial to marketing activities that its’ study seems almost compulsory. Hirschman (1980), for example, says, “Few concepts in the behavioral sciences have as much immediate relevance to consumer behavior as innovativeness.”… “ It is the inherent willingness of a consuming population to innovate that gives the marketplace its dynamic nature” (pg. 283)

These broad arguments calling for more research and understanding of innovative behaviour, could be criticised for being “ivory tower” perspectives, unless that increased understanding can be shown to have some practical benefit. The question at the heart of this research field is commonly overlooked, and that is “what is the benefit of studying innovative behaviour”?

Reasons to Identify Innovators

A disproportionate amount of marketing work has focused on the first to adopt innovations, attempting to uncover their unique characteristics and reveal their motivations. The strong
focus on the consumers classed as “Innovators” (Gatignon and Robertson 1991) is intuitive given the supposed importance of their actions to the future of both the innovation and the sponsor (or manufacturer) of that innovation. The question here is a simple one – are early purchasers any more important in the diffusion process than later adopters? Unless there are good reasons, treating innovators as a separate group from the rest of society is not justified in a marketing sense. If they are not meaningfully different from other purchasers, that suggests that a simple factor such as awareness or chance is the sole driver adoption time. If such simple factors are all that distinguish between early and late adopters then a mass marketing approach is warranted to attempt to maximise early adoption rates.

Critics of segmentation argue that appealing to one particular segment of the market can often be inefficient (Wright 1996) or worse, ineffective (Hammond, Ehrenberg & Goodhart 1996). Segmentation where it is clear one group of consumers will react differently and reward specific targeting is sensible, provided it can be done easily and profitably. However criticism of the way segmentation is often approached has been strong: “Before any segmentation effort … can be justified properly, we need evidence that two key assumptions are true: namely that the segments are associated with a stable set of preferences, and that targeting these segments really does give a higher return than other approaches, such as mass marketing” (Wright 1996, pg. 23).

There is enough evidence in the past literature to suggest that when it comes to the adoption of more innovative products, early adopters can be associated with a stable set of preferences (Rogers 1995, Gatignon and Robertson 1989). Unfortunately a simple, reliable method of identifying consumer innovators prior to the launch of an innovation presently does not exist. The search for such a method though is not justified unless it can be shown that being able to target innovators is likely to be more beneficial than mass marketing approaches. The following sections identify and critically review the evidence relating to the benefits previously said to be gained from being able to identify and target consumer innovators.

1. Early adopters bring cash flow to an organisation

The importance of innovators (early adopters) to the financial well-being of organisations is a frequently made contention (Goldsmith and Flynn 1992, Gatignon and Robertson 1985, Nabih, Bloom et al 1997). Without the income generated by the sales to early adopters, it is said few companies could afford to make the product refinements and fund the marketing efforts required to spread the innovation to the wider community. Increasingly, companies like Hewlett Packard and Gillette are relying on the success of new product introductions for future growth and immediate profitability (Steenkamp et al 1999). Further, we know that retailers and wholesalers would also be unlikely to support innovative products for long unless innovative consumers purchased them. The growing power of retailers in most countries now means that they are intolerant of slowly moving products, and often require new products to pay subsidies or be heavily supported before taking then on (Berman 1996, Jones and Ritz 1991). Put simply, failure to attract sufficient numbers of buyers (and thus income) in the early stage of the product life cycle puts the organisation under considerable stress, and may cause the demise of the innovation solely because it is removed from retail shelves (Gatignon and Robertson 1991). On the positive side, innovators have been shown to be less price sensitive than later buyers (Goldsmith & Newell 1997), indicating that the practice of price skimming, i.e. charging a premium price to early buyers, is sensible.
2. Early adopters promote the product to others

Bass (1969) argued, and modeled, that word-of-mouth communications drives the diffusion process. Some consumers (Innovators) adopt early because they are comfortable making decisions based on mass media promotions alone. The vast majority of consumers, though, rely on interpersonal (word-of-mouth) communications such as recommendations, or demonstrations before they decide to adopt. It is argued that “individuals have different propensities for relying on mass media or word-of-mouth communications: and that “personal influence is the key factor responsible for the speed and shape of the diffusion process” (Gatignon and Robertson 1985, pg. 849).

Although this is a widely held belief, and is frequently used to justify research into innovators, the evidence is limited and somewhat mixed. Early research generally supported the notion of innovators as the generators and spreaders of word of mouth communications regarding the innovation (Arndt 1967, Engel et. Al. 1969, Baumgarten 1975). This research established the idea that innovators used different media sources from later buyers, particularly media that was high in informational and editorial content. More recently it has been found that later adopters found it more difficult to determine appropriate evaluative criteria, and looked to current users for help (Olshavsky and Spreng 1996).

If we accept the idea that it is innovators who drive later adoption through their words and actions, then it has a number of important implications, including:

- Unless some people adopt the innovation before any word-of-mouth communication exists, and then discuss it with others, diffusion to a wide market may not occur. Someone must start the interpersonal communication chain. Failure to appeal to innovators means market failure for the innovation (Baumgarten 1975).
- Innovators through their word-of-mouth promotion efforts can reduce the cost of promotion later in the innovation life cycle (Feick and Price 1987, Arndt 1967). As such word-of-mouth communication is vital for risky products and companies with limited promotional funds (Gatignon and Robertson 1985).
- Innovators reduce the perceived risk for later adopters through their adoption and use of the innovation (Rogers 1995). Early users contribute to both the observability and trialability of the innovation through their example, and these are two factors positively correlated with increased diffusion speed (Tornatsky and Klein 1982).
- There is a great potential for wasting marketing resources if innovators are not identified. We know most people do not adopt based on mass media alone, only a small percentage will. Initial mass media communications then need to address those consumers as accurately as possible, not the rest of the market whom we know will be unresponsive. Being able to target marketing mixes to innovators is often cited as the true payoff for this research stream (Argarwal and Prasad 1998, Rogers 1995, Foxall 1994, Goldsmith and Flynn 1992, Gatignon and Robertson 1985, Bass 1960). The mass media communications, structured to suit innovators, can still have the impact of building brand awareness and preferences amongst the broader market should they see them. The point of mass communication though, is initially to drive innovators to act, and later encourage repeat purchase (East 1996). Goldsmith and Flynn (1992) agree, claiming “practising managers would like to measure consumer innovativeness so they can devise optimal, diffusion-promoting marketing strategies” (pg. 44).

Despite the popularity and seemingly logical nature of this argument, there is some contrary evidence amongst the literature. Arndt (1967) despite a generally positive finding about the communicative role of the innovators, found that communication was not one-way but took
the form of information swapping discussions between current and potential users. The word-of-mouth was also not “controlling”, with large numbers (46%) of those exposed to positive communications still choosing not to adopt. Labay and Kinnear (1984) also found large groups of consumers with detailed product knowledge, very similar to adopters, who decided not to adopt. The conclusion is that although awareness must precede adoption, often people are exposed to both word of mouth and mass media, yet still reject or delay adoption of the innovation.

If innovators were vital in spreading word-of-mouth communications, it would be expected that they would rate highly on opinion leadership scales. This has not consistently been shown to be the case with some positive results (e.g. Baumgarten 1974) and some negative results (e.g. Robertson and Myers 1969). Overall the relationship has been generally positive, with many inconclusive results (Subramanian and Mittlestaedt 1991). Poorly developed opinion leadership scales have been blamed for these results (Flynn, Goldsmith and Eastman 1996), but the results could be read as saying there are many innovators who do not communicate the outcomes of their experience with others. The propensity of the innovator to communicate with others may depend on the innovation itself. Computing innovators were found to be “not interested in the arts or cooking or a great deal of social interaction” (Dickerson and Gentry 1983 pg. 232) but fashion innovators were found to be more socially active (Midgely and Dowling 1993).

It has been proposed that there are some consumers who actively distribute information on products across a wide range of categories, called “Market Mavens”. These consumers often had no direct experience with the product but were influential on others (Feick and Price 1987). Consumers, it appears can be innovators but not necessarily information spreaders, as well as being spreaders of information without actually adopting.

The impact of word-of-mouth has not been shown to be consistent for all innovations. The nature of the innovation plays a role in the amount of influence word-of-mouth communication has on later adopters. Most consumers reduce their reliance on personal sources for continuous innovations (Lambert 1972), and generally it has been shown that the level of social involvement in a product decision depends on the type of goods (Witt 1969, Witt and Bruce 1972, Bearden and Etzel 1982).

Finally, the impact of negative word-of-mouth on later adopters has not been studied. Reflecting the pro-innovation bias common to much of adoption research (Rogers 1985), studies so far have only looked at the role of positive word-of-mouth. A more realistic situation would involve looking at the impact of both positive and negative word-of-mouth on later adopters, unless it is sensible to assume all early adopters have had similar, positive experiences with the innovation.

The “independent innovator” perspective put forward by Bass, despite its numerous adaptations and expansions, has at its core, a very simplistic view of the market operation. The view is that the innovation is developed by an organisation, released to a virgin market, promoted by mass media and then in turn, by word-of-mouth from early users. Two recent developments complicate this view of the adoption / diffusion process. Firstly the rise of cross-national media and international travel mean that consumers are often exposed to innovations from abroad, either through the media or first hand, long before they are available in their home market. Secondly, improvements in communication technology, most notably the rise of the Internet, have allowed word-of-mouth communication to occur globally almost
The formation of special interest groups means that consumers can access word-of-mouth communications even before the launch of products. The popularity of Star Wars: Episode One related websites, which housed previews, gossip and reviews of the movie up to 12 months before its scheduled release, illustrates the complex manner of new product related information sources today. Whereas being well traveled, and well-connected was once the domain of a select few, and a distinguishing characteristic of innovators (Rogers 1995), they are characteristics of a much wider group today.

In conclusion, The flow of information throughout a market place today is complicated and rapid, and although early buyers would still seem to play an important role in communications, their influence may not be as profound as some researchers believe.

3. Early adopters are often heavy users of the category
The work of Ehrenberg (1988) has consistently shown that brands with a large market share not only attract a large number of customers, but they also gain a large proportion of each of those customers business. Innovators tend to be heavy users of the product class (Taylor 1977, Summers 1971), so not only do they effect the behaviour of others, but they tend to make up a large portion of sales themselves. “Not only are the heavy users early triers, but their reaction to a new product will be critical because of the potential volume they represent” (Taylor 1977, pg. 106). As such, they are an important group of consumers to identify, attract and hold. Attracting a large share of the business of heavy users is vital to gaining a large market share. If attracting a large share of the business of heavy users is indeed vital to gaining a large market share, a product must appeal to heavy users such as innovators to be successful in the long run. This positive finding must be kept in context though, since innovators constitute only a small percentage of the market (2.5%), and therefore they can only have a limited impact despite greater than normal usage rates. Taylor’s (1977) findings that those who adopted early had average monthly purchases around 82% higher than later adopters, suggests that innovators alone may only account for a small fraction of overall market sales.

4. Early adopters help refine/improve the product
In his 1991 book “Crossing the Chasm”, Geoffrey Moore argues that the real value of innovators is that they “appreciate technology for its own sake” (pg. 29). He characterises first purchases of high technology innovations as being “techies”. They are people enamoured with the features of innovations, who seek out new things and are tolerant of any teething problems, provided they are given the opportunity to help fix them. Moore suggests that from innovators companies “get great feedback early in the design cycle and begin building a supporter who will influence buyers’ (pg. 31). Although Moores’ work is based almost exclusively on anecdotes and personal experience, the idea of early users (or “lead users”) improving products, or even finding new uses for them has been well-documented (Price and Ridgeway 1983, Urban and von Hippel 1988). In practice we see this behaviour frequently occurring with computer software products such as Netscape and Linux (Cochrane 1999).

5. Early adopters help create “market leader” image
Establishing an image as the market leader is said to be important in convincing the more conservative members of society to adopt an innovation (Moore 1991). Obviously, a market leadership image cannot be created unless people have adopted and are using the product and it is appropriately distributed. Consumers often use market leadership as a proxy for other dimensions, such as quality, when making unfamiliar purchase decisions (Kamins, Alpert and Perner 1998). Market pioneers have been shown to gain substantial advantages in terms of long term market share, distribution and awareness. A successful pioneer can erect barriers to
entry restricting later entrants (Gatignon and Robertson 1991). Successfully identifying and appealing to innovators may then establish the innovation in the market place for the rest of its’ lifecycle.

6. We may stop the adoption of undesirable innovations
A variation of adoption research makes the identification of innovators interesting to a wider range of organisations than just commercial operators. Not all innovations are good, and some are socially undesirable or destructive. Understanding individual innovation might not only help organisations to market innovations more effectively, but also aid governments and other groups who seek to restrict adoption of undesirable innovations e.g. gambling, drug use, graffiti or other anti-social behaviours (Hirschman 1992). Identifying those individuals most likely to adopt in innovative forms of anti-social behaviour or undesirable innovations (e.g. new illicit drugs) may help in the allocation of resources to prevent it.

Conclusion

Whilst not as strong as often claimed, there are a number of valid reasons for researching innovators. As knowledge on the stable preferences of early buyers increases, methods of identifying them will become more reliable and cost effective, allowing the tailoring of marketing mixes to maximise efficiency. The role innovators play in shaping the future of both the innovation and its sponsor, mean that the search for such identifying methods is still a worthwhile undertaking, offering the potential to greatly improve the way innovations are marketed.

References


