THE DIFFUSION OF INNOVATIONS: LET'S TAKE ANOTHER LOOK

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Abstract

Diffusion theory, popular in the marketing literature in the 1960s and 1970s, has received very little attention in recent years. The accomplishments based on the diffusion process concept are notable ones. However, there are some gaps in this literature. This paper attempts to explain some of the inconsistencies present in diffusional theories and proposes competing and/or complementary explanations based on the theory of weak ties.

Introduction

The diffusion of innovations is a process that is basic to the study of marketing. It was very prominent in the literature for several decades but has received little attention recently. Most investigations focused on the opinion leader's role in the diffusion process. Additionally, the cohesiveness of the group proved to be a significant characteristic of the communication process at the micro-level of inquiry. Granovetter (1973), with the introduction of his theory of weak ties, stated that a fundamental weakness of current sociological theory is its failure to relate micro-level interactions to macro-level phenomena. The basis of his theory was how small group interaction aggregates to form large-scale patterns.

The purpose of this paper is to integrate the sociological theory of weak ties into the diffusional theories, propose competing and/or complementary explanations which may be more accurate, and encourage the renewal of interest in this topic.

The paper begins with a description of the theory of weak ties and its implications. Secondly, past research on the diffusion process in marketing is presented, relating many of the previously mentioned inconsistencies. Lastly, the integration and its implications to the marketer are discussed.

The Strength of Weak Ties

The theory of weak ties has been introduced in the sociology literature in an effort to explain the diffusion of influence and information between groups (Friedkin 1960; Granovetter 1973; Liu and Duff 1972; Marsden and Campbell 1984). It implicates the importance of both homophilous and heterophilous relationships, that is, groups in which members communicate well with one another as well as with members outside of the present group. In the past, it has been hypothesized that communication is strongest among groups which are highly cohesive, a characteristic prevalent when members share similar attitudes, beliefs, and values (Rogers 1983). This speculative weak tie theory, however, challenges the latter assumption and attempts to bring to light the importance of interpersonal communication among various groups. One example of special relevance is the diffusion of information and innovation between different socioeconomic classes.

It is felt that the strength of weak ties rests with the assertion that information will more readily assimilate into new groups and consequently reach a larger number of people. In groups which are strictly homophilous, information tends to recirculate among group members rather than diffusing outside of the group. The flow of communication is restricted to the group itself, thereby, resulting in information redundancy and stagnation.

Groups in which members engage in heterophilous and homophilous relationships are unique in that one central individual, often termed a sociometric star, is not responsible for being the primary transmitter of information. Rather, there may be several peripheral individuals who are responsible for the diffusion of information outside of the group. Research has shown that the flow of influence may be restricted if a central individual perceives risk in transmitting the information (Robertson 1968). The explanation offered is that this individual is likely to be very protective of his reputation and reluctant to assume undue risks of damaging it. The marginal individual, however, is not nearly as concerned with maintaining an external facade and therefore is a likely candidate for information transfer within and outside of the group. Rogers and Homik (1971) summarize the importance of the weak tie relative to the group's makeup:

"For maximum communication diffusion and effectiveness, the receiving audience should be homophilous among its member, at least some of whom would also have heterophilous linkages to sources."

The Diffusion of Innovations in Marketing

The process of diffusion has been prominent in the marketing literature in the 1960s (Arndt 1967; Rogers 1962; Sheth 1971). It has been viewed in primarily three ways, by focusing either on the opinion leader, on the innovator and his behavior, or on the influence of a group. The evolution of the concept of diffusion has generally been in the aforementioned order, although, there is a considerable degree of overlap among the three foci. Innovativeness was initially found to be a characteristic inherent in opinion leaders and consequently its importance blossomed from there. Group influence had been examined in the sociology and social psychology literature but it did not infiltrate the marketing literature as a determin-
ant of the diffusion process until later (Rogers 1983).

Opinion Leadership

Opinion leaders were first studied by Lazarsfeld in 1940 during a presidential election when he found that "ideas flow often from radio and print to opinion leaders and from these to less active sections of the population" (Lazarsfeld 1944). He felt it was opinion leaders who had the ability to exert personal influence over a number of individuals in a variety of circumstances. As a result, marketers have attempted to identify predominant characteristics in opinion leaders for the purpose of directing their communications toward these individuals. By targeting their messages to a select group of individuals, it was felt their communication strategy would be more efficient and effective.

Categories of characteristics identified fell within the domain of demographic, sociological, psychological, and behavioral. Demographically, opinion leaders appeared to be younger, have more education, have higher incomes, and a higher occupational status (Summers 1970; Katz and Lazarsfeld 1955). Sociologically, they were determined to have high physical mobility (in reference to living location and travel), be high in social communication, participate more in formal and informal social activities, and have more organizational affiliations (Summers 1970). Opinion leaders were also thought to exhibit greater self-confidence (Reynolds 1971) and cosmopolitanism (Katz 1957), as well as being more exposed to other individuals and mass media. Their sources of information were felt to differentiate them from nonleaders. Opinion leaders supposedly receive most of their information from impersonal sources such as forms of mass media including radio, television, and magazines while other individuals rely more heavily on personal sources (Rogers 1962).

Not all researchers have agreed with the above findings, however. Robertson (1968) found that opinion leadership was not a discrete trait within the individual, but rather, it was a matter of degree. He hypothesized that everyone has the ability to exert a given amount of influence. In a later study, Robertson found personality to be poorly correlated with opinion leadership (Robertson 1969). Myers (1972) reported little differences between opinion leaders and nonleaders relative to demographic variables. Nicosia (1964) summarizes research which indicates that opinion leaders in one product area may be different from those in another product area since leaders tend to specialize in different products. The differences encountered included both socioeconomic and demographic characteristics.

The flow of communication and influence relative to the opinion leader has been speculated upon. In most cases, it is assumed that the flow of information occurs within a particular group. There are two competing theories to explain the flow: "horizontal" opinion leadership and "vertical" opinion leadership. Lazarsfeld and Katz (1955) explored the horizontal flow of information within distinct social groups. Nicosia (1964) also supports the concept of the horizontal opinion leader, rejecting the vertical theory in which information is filtered down through a social group from top to bottom.

The greater acceptance of the theory of horizontal influence may also be supportive of the reciprocal, two-way flow of communication among group members. Originally, a one-way flow of information and influence was hypothesized. It did not, however, seem to accurately reflect the evident interpersonal communication process (Reynolds and Darden 1971). Bales (1951), who has done a considerable amount of work on interpersonal communications in small groups, supports this view. He has found that those individuals who transmit the most information also receive the most communication.

Reynolds and Darden (1971) report a relationship between opinion leadership and information seeking and conceptualize this in four interpersonal communication networks. These include the socially integrated (individuals high on opinion leadership and information seeking), the socially independent (individuals high on opinion leadership and low on information seeking), the socially dependent (those individuals low on opinion leadership and high on information seeking), and the socially isolated (those individuals low on both characteristics). The socially integrated and socially independent have traditionally been thought of as opinion leaders. In considering the characteristic of information seeking as well as opinion leadership, researchers are able to consider a reciprocal rather than strictly unilateral influence (Reingen and Kernan 1986).

Innovative Behavior

The second major focus of diffusion research was an investigation into innovative behavior. Many researchers in the past have treated opinion leaders and innovators as one in the same. Others have questioned the extent of this relationship (Myers 1972; Armstrong 1976). Armstrong (1976) found no differences in media exposure among innovators and noninnovators but significant differences among leaders and nonleaders. He also found no differences among innovators and noninnovators relative to social interaction while significant differences surfaced among leaders and nonleaders. Nicosia (1964) asserts that opinion leaders may be early adopters for some products but that their decision to accept an innovation may also follow that of the early adopter. Centrality in the network (implied by opinion leadership) does not seem to necessarily lead to early adoption (Czepiel 1974).

The latter distinction reflects the importance of distinguishing the innovator from the opinion leader. Many of the same issues have been researched including a determination of the identifiable characteristics of innovators and their communication networks. In general, demographic and psychological characteristics have not been useful in identifying early adopters.