CONCEPTUALIZING THE INTERNATIONAL INDUSTRIAL MARKET SEGMENTATION PROBLEM

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Abstract

Several purported normative models of industrial market segmentation have been developed. International market segmentation has been approached in terms of clustering eligible countries, but has not specifically addressed the problems of industrial marketers. This paper not only suggests a conceptualization incorporating the problem of international scale marketing, but conceptualizes the process from a different perspective, that of a user needs/strategic planning interface.

Introduction

A recent article by Chiesl and Lamb (1983) demonstrates the use of a multivariate statistical procedure, MANOVA, to identify segments of industrial markets in Japan. Plank (1985) has suggested that most approaches to industrial market segmentation have emphasized a sophisticated statistical technique, not the important aspect of conceptualizing the segmentation process and its relationship to industrial marketing management. Segmentation at the international level has not been dealt with conceptually since the work of Sethi (1971) and Frank, Massy, and Wind (1972). No specific approach to industrial or business to business markets has been offered.

The purpose of this paper is to argue for a new approach to developing conceptual frameworks for industrial market segmentation. An underlying assumption is that specific frameworks are needed for industrial or business to business markets as opposed to using frameworks developed for consumer markets. The central thesis is that user needs must be defined as a starting point for the segmentation process. Thus developing an understanding of what it means to segment markets and to define why is critical to the process. It is only at this point that developing a conceptual framework becomes viable. Clearly there may be many ways to conceptualize the particular problem discussed here. One particular framework will be briefly developed.

Segmenting Industrial Markets

Market segmentation currently has a somewhat narrow focus. A recent definition which appears to be the norm has been offered by Kotler (1984);

"the act of dividing a market into distinct groups of buyers who might require separate products and/or marketing mixes."

Plank (1985) has suggested this narrow view of segmentation as a research process of dividing units may lead to a number of problems. Included was the misallocation of resources and suboptimization as noted by both Mahajan and Jain (1978) and Keegan (1972).

Schiffman and Kanuk (1984) have defined market segmentation as follows;

"The process of dividing a potential market into distinct subsets of consumers and selecting one or more segments as a market target to be reached with a distinct marketing mix."

The differences here are not subtle. In the latter definition market segmentation is viewed as a research process which includes, not only dividing market segments, but the process of selecting them and developing marketing mixes. Kotler (1984) views market segmentation, market targeting, and allocation of resources or positioning as separate issues.

The main emphasis of industrial market segmentation models has generally been on determining the basis for segmentation. There are essentially three models; a single step selection model, a two step selection model and a multiple step selection model.

In the single step model the industrial marketer chooses a useful base for segmentation and then uses one or more of these. There are numerous examples of this model in the literature. The two step model was suggested by Wind and Cardozo (1974). It essentially involves developing macro-segments similar to those of the one step model and then within those segments to establish micro-segments based on characteristics of the buying centers of the firms in question. Wind, Grashof, and Goldhar (1978) and Choffray and Lilien (1978) are empirical demonstrations of the two step approach. The multiple step nested model was developed by Bonoma and Shapiro (1982) and identifies five levels of segmentation with the possibility that the user could go through all five levels. This approach has not had an empirical test to date.

A broadened perspective of industrial market segmentation following Schiffman and Kanuk (1984) requires the identification of the various needs of the user before actual consideration of the process of segmentation. The strategic planning process provides a potential framework which can be used to understand user needs. The strategic planning process will be briefly discussed and the relationship of this process to market segmentation will be explored.

The Strategic Planning Process

Strategic planning has become an important concept in todays large organizations. Its essence suggests that the overall corporate planning process be linked to the decision of what markets the company is to pursue and to compete in. Conceptually the process has been defined in terms of four interrelated steps of defining the business, determining the mission, formulating functional strategies, and budgeting. (Abell and Hammond 1979) These authors define market segmentation in terms of a series of what, why,who, when, where and how questions. They suggest that it is one of the most important aspects of strategic market planning and that it may be the most difficult.

It is clear that the concept of market segmentation is critical at the initial step of the planning process, defining the business. Markets may be chosen in terms of the entire market or in terms of pursuing just a portion of it. An examination of the strategic planning process, however, indicates the breadth of information regarding these markets that must be developed in order to carry out the process in a successful manner. The goal setting process requires a wealth of information regarding each and every potential market. Target markets must be chosen before accurate goals can be developed. The strategic planning process is iterative in the sense that functional strategies must, to some degree, be developed before final goals can be set. Budgeting and implementation are linked to the functional strategies developed. Strategic planning is clearly a time consuming iterative process with information filtering up and down the organization. In order to carry out this process diverse information regarding markets must be collected and analyzed.

As has been previously noted it does appear that suboptimization occurs when one separates the issue of dividing markets from that of allocation of resources. (Mahajan and Jain 1978) This is not surprising, intuitively, when examining the strategic planning process. The problems with the strategic planning process including its implementation are well documented, obviously complex, and will not be discussed at length here.

What is being suggested is that the strategic planning process defines what information is needed to carry out a successful marketing program. The broadly defined market segmentation process conceptually provides the linkage between the various components or issues dealt with in the strategic planning process. While market segmentation could be considered a research process, it should be understood that the information developed does more then segment and profile, but also designates and allocates. It performs an integrative function within the strategic planning process and as such can contribute to solving some of the more pressing problems, notably the planning/implementation interface.

International Industrial Market Segmentation

Industrial market segmentation may be defined in a broad manner as follows;

"A research oriented process of dividing business to business markets into subsets so that market targets may be identified and selected, marketing strategies developed, and resources allocated."

Industrial market segmentation on an international scale adds a degree of complexity. The marketer faces an additional level since now more then one country or national boundary will have to be dealt with. In addition that level may confound the rest of the process in that what might provide an excellent discriptor of implementation aid does not do the same in other national markets. There has been little work done dealing with either of these problems. Chiesl and Lamb (1983) have looked at segmentation in Japan and attempted to develop a means for segmenting markets. Unger (1974), in what was essentially a reply to Wind and Cardozo (1974), discussed macro-segmentation application in Europe. Finally, Johnson and Flodhammer (1980) look at industrial market segmentation in general terms, but with a European perspective.

International market segmentation, in general, has been viewed in terms of developing market clusters, those clusters being countries or other national boundaries that group together on some set of variables. The work of Sethi (1971) and Frank, Massy, and Wind (1972) is indicative of this approach. The following discussion will integrate this approach with that of a broadened definition of industrial market segmentation in terms of the user needs as defined by the tradtional strategic planning model.

The first need to be addressed is that of which market or segments of markets are to be targeted. This in effect defines the nature of the business the firm chooses to be and whom they choose to compete against. Sethi (1971) has argued for the concept of country clusters. He suggests that a company decide on a set of factors that they should use in judging the viability of a particular country market. Clustering refers to the grouping of countries based on these factors. Goodnow and Hanz (1972) collected a set of 59 factors which they then factor analyzed into a defined group of seven different general variables. Using this set they defined a group of countries into three clusters.

Thus, the marketer has an additional step at the beginning, that of deciding in which countries to do business in. The factors that are used at this stage are apt to vary by company and situation. The factors may or may not be the same as in later analysis, but some overlap is likely. Thus, the choice at this stage of the analysis has to be preliminary. It would seem likely that the choice of a target market would revolve around, not only these conditions, but a number of other necessary conditions which are dealt with later in the process. A major issue has to be whether we can separate the country decision from the rest of the process. As alluded to above the answer is clearly no. Any decision made to enter a particular country at this level must be preliminary and subject to other conditions and factors.

Once the country issue has been preliminarily dealt with the marketer can then begin to think about the remaining issues of defining their business. Within a group of potential countries, markets could be examined and compared in such a way as to determine the target markets and thus define the business. Segments which meet the requirements of effective segmentation, measurability, accessability, substantiality, and actionability can then be assessed in terms of their contirbution to the overall mission of the firm. For the most part this appears to be the tradtional approach to market segmentation. Yet there are two other areas which must be addressed within the context of a broadened definition of market segmentation. Each strategic business unit (SBU), as defined in the definition of the business must have one or more functional marketing strategies. The objectives of these stratgies would be expected to correlate with and provide the where-with-all to achieve corporate goals overall. Each functional unit also allocates resources to reach those defined objectives. These tactical concerns include advertising campaigns that must be developed, packages designed, selling issues that must be dealt with, and a host of other marketing concerns.

Upon reflection it is easy to see that the requirements for effective segmentation can not be dealt with by just segmenting markets and then profiling them. If the segmentation activities do not lead to the development of sound functional strategies that can be implemented to provide competitive advantage, then these actvities are of minimal use. In general the actionability requirement refers to the development of workable functional strategies and tactics. With this in mind a discussion of the development of a normative model will continue.

Toward a Normative Model

What has been suggested is that market segmentation can and should be the focal point of the strategic planning process. The strategic planning process provides a framework for defining the needs of the user of the market segmentation process. The market segmentation process has been defined as a research process which is concerned, not only with providing information to classify markets, but also to target and allocate resources. This is in reality, not inconsistent with normal segmentation thought since it is noted that segments must meet the requirements of measurability, accessability, substantiality, and actionability. While all of these requirements are important in that if any one is not apparent, the others are meaningless, actionability takes on a special meaning and purpose. Actionability can be defined in terms of the development and sustainment of a long run competitive advantage to the firm in question. If the firm does not feel it can do so then it is probably in their best interest to avoid that particular market and/or business. Given this conceptualization the idea that market segmentation must concern itself with targeting and allocation decisions is clear.

How should an industrial marketer go about segmenting, targeting, and allocating resources when faced with marketing products or services internationally? Unfortunately there is no even close to definitive answer to that question. Using the strategic planning model as a basis for defining the needs of the marketer a suggested approach to the problem will be outlined briefly. It should be noted that this is one of many possible views of the problem. What in fact this proposal becomes is essentially a framework for research into the problem. Upon completion of an explanation of the proposed framework a number of caveats will be discussed which will, hopefully, illuminate some of the problems.

Strategic market planning revolves around defining the efforts of the company around the market to be served. Industrial market segmentation seeks to define those markets, select targets for actual effort, and give guidance to the development of functional strategy and tactics. We can conceptualize a set of levels of inquiry with each level providing certain types of information needed for the problem at hand. Levels will be defined in terms of the potential served market with each level going into a deeper analysis of the market. Five levels will be defined.

The first level to be examined deals with the country. Consistent with the work of Sethi (1971) the country (s) must be identified. The second level is termed the industry level and corresponds to the macro level as defined by Wind and Cardozo (1974). The third level is the interfirm level and corresponds to the micro level of Wind and Cardozo (1974). The fourth level is the intrafirm level. At this level an attempt is made to identify differences within firms, but across the interfirm level. The fifth level is interpersonal. At this level an attempt is made to identify differences both within the firm and within the person or small group. The essence here is that people and/or small groups of people may play different roles or have different views at different times in a long involved purchasing process.

The first level provides important information to the firm regarding the nature of the countries that they may choose to market their goods and services in. The work of Goodnow and Hanz (1972) is notable for its comprehensiveness and probably identifies most of the variables that would be of interest to the typical firm. It is important to note that much of this data is available on a secondary data basis and that is is relatively easy to systematize it. Extensive and expensive primary research is not apt to be necessary.

The second or industry level attempts to divide the market into groups of businesses or industries. It is referred to as the industry level because of the use of SIC codes as a major segmentation base. The other commonly used segmentation bases include the end use of the product or service and heavy versus light user issue. Many others are possible. This level is useful in helping to identify the nature of the business and would interact heavily with the first level, especially in determining which countries might be viable for entry. It should be noted, however, that information at this level is not always consistent across all countries. This information is relatively easy to develop in the United States and some other countries, but is very difficult to develop in third world nations that do not have as well developed information collection systems.

The third or interfirm level searches for differences or simularities within the firms of each previously chosen market segment. As Wind and Cardozo (1974) have suggested, the primary segmentation bases that would be used at this level revolve around the characteristics of the decision making unit. This could include such issues as centralized versus decentralized purchasing, size of the decision making unit, and other similar issues. This information is collected and compared on a firm to firm basis. Upon introspection it appears that this information is particularly useful in developing functional strategies and also in the tactical area.

In the fourth or intrafirm level the analysis is directed at looking at individual firms, specifically for differences and then summing that data across firms looking for simularities. This level of analysis provides information that is especially useful at the tactical or implementation stage. As both Weitz (1978) and Plank and Dempsey (1980) have noted, the salesperson needs to be aware of the differences within firms and if the opportunity presents itself, to be able to make different sales presentations reflecting these differences. As an example it is common for different members of the buying group to desire different benefit mixes of the product or service. The purchasing agent may be more concerned with the price and delivery aspects while the engineer is more concerned with the technical specifications and/or level of technology, while the production manager is more concerned with the effect on current production processes. Thus the salesperson may wish to present the sales proposal in a different manner to each of the types, emphasizing one or another of the benefits to fit the situation. Advertising and other promotional efforts can also be more precisely targeted given this type of information.

The fifth level is the interpersonal level. It focuses on each individual or small group in the organization and their roles as they change over the course of a buyer-seller interaction. In long complex buying situations it is highly possible that one person or group may have multiple roles to play and that their perspectives may change as their role does. Recognizing this situation has a certain amount of intuitive value, but this level is not likely to be very important in most of the typical buyer-seller interactions. The longer the negotiation process and the more complex it would tend to be would enhance the possibility of this level being useful.

The previous brief discussion has defined a set of levels that can be addressed in a market segmentation process. It is important to realize that each level provides information that can not be gathered or analyzed in the same way at other levels, but is complentary to the other levels. Wind and Cardozo (1974) have defined a process of steps. This model suggested here is not a step model since it has been argued that the iterative nature of the process makes it impossible to have distinctive steps.

While this model delineated here is a suggested prescriptive model, its real value lies not in directing a course of action, but as a framework for developing a series of generalizations that may eventually lead to a more fruitful prescriptive model. Wind (1978) has reviewed the literature on market segmentation in general and has noted a host of problems and major gaps in our knowledge. Plank (1985) has used the same framework to review the work in industrial market segmentation and has come to a similar conclusion. Thomas and Wind (1982) have noted the almost total lack of generalizations with regards to industrial market segmentation.

There are a number of reasons that have been put forth for the lack of knowledge in this and other marketing areas. Poor theory development or none at all, lack of programmatic research, poor measurement could all be called in to play here. This author would deny none of these , but suggests that poor conceptualization of the process and its relationship to industrial marketing management is a prime contributing factor.

Conclusion

The prescriptive model that has been suggested here should be viewed as essentially a framework for further thought and development. The model has a degree of conceptual viability because it does attempt to define the process of market segmentation in terms of the needs of the user of the process. It provides a base for theory development to begin in terms of determining which basis to use in what situations and all of the other issues that must be dealt with. Again it should be noted that this is only one of many possible ways to conceptualize the segmentation process and its relation- to marketing management and as such provides only one possible framework for research.

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