

Strategic Market Segmentation: Improving The Focus of Strategic Marketing Research In New Product Development

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Abstract: Previous work by Maclennan and Mackenzie indicated that while top executives in the pharmaceutical industry often advocate being market oriented and customer focused, few companies (large or small) use market segmentation to its maximum potential. Against the backdrop of an evermore demanding marketplace and many advances in strategic marketing planning technology, a majority of pharmaceutical companies were base their product development and commercialisation plans on cursory, incomplete, or intuitive marketing analysis with the resultant marketing strategy, missing fundamental opportunities and delivering incomplete or inappropriate strategies. Such a lack of rigour may be explained by a number of factors: need to reduce time to market, reducing levels of expertise in marketing, a less than optimal medical marketing interface, and the poor or ineffective leverage of information.

Used effectively, strategic market segmentation can provide a point of consensus for all stakeholders and a more robust foundation for creating advantage(s) that will lead to increasing sales and improving overall marketing performance. Strategic market segmentation is necessary to provide a commercial orientation to product development right from the earliest stages of the drug discovery process. It leads to creative advantage, and improved resource allocation and decision making because it enables the company to be customer facing and to reflect this in the approach to development and marketing of the drug.

In many cases the practice of segmentation remains largely data-driven resulting in segments which are increasingly divorced from segmentation theory 14. It was proposed that one might also take a more 'Delphi' approach to developing strategic market segmentation. Starting with a hypothesis, one would seek to validate, through a series of iterative steps towards a strong conceptual model for the segmentation.

The authors in their marketing research practice have increasingly applied this approach. Used implicitly it can improve the quality and focus of problem definition, while explicitly it provides a template for isolating critical decision points and information needs in support of those decisions. At this stage any systematic analysis of the process on comparative product performance and the marketplace would be premature. However following our initial hypothesis early indicators suggest that such an approach to strategic segmentation, at the very least can produce higher of levels client satisfaction and enhanced market understanding. Perhaps more significantly we have seen product clinical development priorities reviewed as a result of leveraging information needs more effectively

Is there a need to reassess current practice?

In the relentless search for the necessary critical mass to ensure survival and the next blockbuster, the last 10 years have seen significant consolidation within the pharmaceutical industry with most sources expecting more in the future. Analysts believe that this trend will continue and will eventually involve some of the largest pharmaceutical companies in the world. According to analysts, 'companies with \$75 billion to \$200 billion market value will not be able to deliver return to their shareholders via mere organic growth' .1

Pharmaceutical companies invested \$24bn to research and develop new' products in 1999, a 14 per cent increase compared with the \$21 bn spent in 1998 and almost double that of their 1990 research and development expenditure when collectively they spent \$8.42bn². While consolidation allows greater investment in drug discovery and some streamlining of the process, experience suggests that this in itself does not lead to a full and successful pipeline. In Rod McNeil's words: 'There are however signs of growing unease. The debate on whether added size enhances or belittles discovery research expertise remains unresolved.'³

The last decade has also seen a radical change in the research and development strategy followed by the major pharmaceutical companies. In January and February 2000, *Pharmaceutical Executive* published a special two-part feature under the title 'Executive prophecies: Pharmaceuticals in the new millennium'.⁴ The key aspects of this shift in strategy reported by the top industry executives who contributed to this article are summarised as:

- The number of research and development (R&D) collaborations will increase
- Risk sharing for the launch of products will be extended to interchanging products to streamline the companies' indication areas
- Small and medium-sized companies that do not have the critical mass to regularly develop new products will be faced with the need either to merge or to build up collaborations beyond their country borders to reduce their cost burden
- Everything will be organised around being market driven.

The key drivers will be the need to reduce R&D spend, shorten the time for a compound to reach the clinic, and thus to launch an increased number of high-value products in terms of duration of peak sales. The reality of drug discovery and development is a situation of controlled attrition where 10,000 potential drug candidates become reduced to 15 at entry to phase I, and to 5 at end of phase III resulting in a single commercial success at the end. The later in the drug development process a candidate fails, the more expensive that failure is to the drug company.

Thus, the pressure to shorten the time for a compound to reach the clinic is countered by the pressure to ensure that a promising candidate does get the opportunity to become a commercial success. This may involve undertaking studies, which in turn delay market introduction. A study by McKinsey reported by Tellis and Golders demonstrates that a six-month delay in market introduction results in one-third loss of potential profits. In contrast, a study by Urban *et al.*⁶ demonstrates that, at the level of product brands, later entrants are able to keep their options open in terms of product positioning and promotion. Such factors are often more likely to result in a sustainable market share than early market entry.

Either way, our argument is that *in order to enhance commercial success, there needs to be an increased emphasis in the use of strategic segmentation from the earliest stages of the discovery process*. Why do we say this? The need for clearly differentiated products meeting customer need is and probably always has been accepted. Diminishing returns from the development and marketing of me-too compounds has forced companies to re-engineer their research focus.

A study estimating the effects of actual and potential rivalry on profitability of firms in the US pharmaceutical industry during the 20-year period 1963-82 showed that during the 1960s actual rivalry among the sampled firms did not materially affect their profitability. But during the 1970s actual competition did have an increasingly adverse effect on profitability. The results also showed that 'potential' competition significantly reduced drug firms' profitability during the entire 20-year period.⁷ Ray Gilmartin, Chairman of Merck & Co. believes: 'Competition places a premium on each new

product being the first entrant in its class. That is why we emphasise an organisation that can respond quickly. Speed is important here. It is even more important to differentiate the product right from the start.⁷

A market segment is a group of customers with similar needs and requirements. Given that market segmentation is the starting point of the marketing process, and that one of the most important advantages of good segmentation is competitive advantage i.e. differentiation,⁹ the following hypothesis is postulated.

Historically, the industry has been able to sell poorly differentiated products. This will become increasingly difficult to do, as healthcare systems are cash-constrained. Tough choices need to be made. Only those drugs that can demonstrate value over and above that offered by existing treatments are likely to have a role to pay.

If, in the rush to get a 'compound' to the market, the needs of different patient populations and the physicians serving these populations are ignored (i.e. strategic market segmentation), then this might have several implications. It could mean that:

- A promising candidate won't get to market because
 - the design of the clinical trial program failed to identify the discrete population in which it might have demonstrated value
 - the potential target patient populations were not well defined when the dose ranging studies were undertaken.
- The potential value of the drug is never fully realised because
 - it gets to market without the data and evidence that it needs to compete in all market segments
 - the design of the clinical trials resulted in an 'undifferentiated' market offering
 - the marketing program is not tailored to the different needs of the segments.

This paper sets out to build on the author's previous work¹⁸, reinforcing the potential benefits of strategic segmentation, but additionally discussing the possible steps to ensure a more effective translation of the principles of strategic to practical application in the process of strategic marketing research planning.

What is meant by strategic market segmentation?

A range of definitions can be found in the major marketing texts. As far back as 1956, Smith¹⁰ first defined market segmentation as:

“a rational and more precise adjustment of the product and marketing effort of consumer or user requirements, it consists of viewing a heterogeneous market (one characterised by divergent demand) as a number of smaller homogeneous markets”.

In a more recent text, McDonald¹¹ defines a market segment as:

“a group of customers or consumers who share the same or similar needs”.

These definitions have at their core one crucial element of segmentation: an examination of customer needs and/ or requirements. This focus on needs is crucial to the understanding of segmentation.

Strategic marketing theory has provided an abundance of literature on pioneering advantages under high uncertainty. Pioneering advantages occur primarily during the initial stages of the product life cycle and generate a substantial amount of company profit. These profits result from early market share gains that make it difficult for competitors to catch up during later stages of the product life cycle. Malcolm McDonald, Professor at Cranfield School of Management writes: 'Most business people already understand that there is a direct relationship between relatively high share of any market and high returns on investment.'¹² Strategic market segmentation offers companies a pioneering advantage.

'Strategic market segmentation' is the phrase that we have coined for the process of developing an in-depth understanding of and insights into a therapeutic area such that the company can both segment the therapeutic area in a practical yet creative way, and develop a strategy that provides a differential advantage over the competition.

The segmentation process requires an understanding of how the prescriber/decision-maker divides, or could divide, the patient population into populations with different needs and characteristics.

Specifically the segmentation process:

- *can be used to ensure an appropriate focus of research activities* as it provides a framework for opportunity identification and an understanding of the product profile that will be required to take advantage of the opportunity
- *can be used to facilitate candidate selection* as the product profile (ie one that will satisfy customer needs and requirements) is crucial to decision making at this stage; it needs to be robustly evaluated and market segmentation facilitates this
- *is required to support the decision to commit to phase III:* a rigorous assessment of the opportunities and threats and potential sales that will be achieved given a target profile is required before a company makes the substantial investment commit to phase III
- *is required to support the decision to launch once the phase III results are available:* given the target product profile, the launch plans and associated resource commitments and sales forecasts need to be deemed acceptable before a commitment to launch the product is made.

What are the issues to address?

The authors' collective experience from over 25 years in the pharmaceutical industry provides a perspective on the question of strategic marketing, and on the role of strategic market segmentation within that. While top executives in the pharmaceutical industry often advocate being market oriented and customer focused (*Pharmaceutical Executive*, 20008), we have found that few companies (large or small) use market segmentation to its maximum potential.

Previous research identified some of the key issues.¹⁸ Overall, what emerged was that the lack of application of strategic segmentation appeared to have little to do with a lack of motivation, understanding or appreciation of its value. Despite an appreciation of the importance of strategic market segmentation, its application is generally very variable and less creative than it could be.

These responses indicate that responses to the question about the benefits of segmentation are 'theoretical'. In our opinion, this is one of the reasons why segmentation, and strategic segmentation in particular, is not used more widely. This was reinforced with the identification of a number of possible variables that might be considered in developing segmentation. Few found that they were able to practice anything other than a rather traditional univariate or at best bivariate segmentation of the market (typically using disease and demographics as the key variables -not needs).

This move to using descriptor variables to define segments rather than differences in need has naturally resulted from the attention being given to measurability and actionability. Our concern is that these variables are being used as bases to so-called segment markets regardless of whether or not they are highly associated with different customer requirements,

The key areas highlighted for 'improvements' in strategic marketing planning differed according to the respondent's role and responsibility:

- Global marketing personnel highlighted market segmentation
- At an affiliate level, improvement in strategic thinking won the day, followed by the need to develop plans earlier than is currently the case for new products (consequently also bring in up-front marketing expenditure).

These views are aligned to our recent experience. First, that at the centre, strategic market segmentation is acknowledged as the way forward, and secondly at an affiliate level that the burning desire is to be more effective at implementing strategies. Strategic thinking is associated with 'improving effectiveness' as is planning earlier

The conclusions from the previous investigation **internal resistance and resources** represent the major barriers to preventing otherwise accepted best practice

In our view: what should companies be doing to counter these barriers?

Research phase: Formulating the market segmentation approach

Market segmentation is at the heart of what will enable the drug industry to continue to be profitable. It will ensure that the drugs coming through satisfy customer needs. Early in the R&D process, a decision about segmentation needs to be made. The key question is. Which variables to use? Any of the variables in Figure 2 could be used.

The challenge is to develop a segmentation approach that is creative, has maximum utility, and makes sense to all the stakeholders (marketing, clinical, health outcomes and external physicians), and needs and requirements should be at its heart.

Ideally the segmentation approach should be research-based. The research alternatives are:

- To formulate a hypothesis and then to research/test this hypothesis
- To undertake a formal segmentation study that requires the use of analytical techniques to derive the segments.

Where segmentation is applied, the most common variable used are disease and demographics. The use of these variables as a base to segment markets is often regardless of whether they are highly associated with different customer needs or requirements. This defeats the point of segmentation. Can the use of less commonly used variables be used to determine groups of patients with different needs and, in so doing, provide competitive edge?

We are faced with a variety of research methodologies and analytical techniques with which to arrive at market segmentation. Some common themes emerge as a guide to formulating approach

Time and resources allowing a combination of approaches is likely to be optimal, beware large one off solutions and can be perceived as low value if inappropriately positioned.

- Whatever the starting point, there should be a solid understanding of the market from a variety of perspectives: an understanding that not only encompasses facts and data but also any prejudices that exist. This requires not only a robust database of information as a starting point but also experience of the market needs and aspirations. This information needs to be gathered from a variety of sources: primary and secondary sources, internal and external, patients, physicians and payors, formal and informal. The more multifactorial the better.
- Each segmentation exercise needs to be considered on its own merits, and the applicability of each approach will depend on the profile of the marketplace or disease in question. Retail and hospital markets may need a different approach, while highly developed markets (eg hypertension) will differ in their requirements from emerging or less understood markets (eg Alzheimer's disease) and so on.
- Avoid exclusively data-driven exercises. Consider a more 'Delphi' approach to complement strategic market segmentation, starting with a hypothesis, one would seek to validate, through a series of iterative steps towards a strong conceptual model for the segmentation. The major criticism of data-driven approaches is that they result in segments, which are increasingly divorced from segmentation theory.¹⁴ They tend to be less successful in recruiting a sustainable level of internal support, overcoming points of resistance, collecting a wide range of internal knowledge and experience. Few approaches are mutually exclusive, however their role needs to be fully understood if a rich and robust segmentation solution is to be created.

A preliminary assessment of a more "Delphi" approach to strategic segmentation is encouraging suggesting that this approach may provide a greater opportunity for creativity in strategic segmentation and with it a greater opportunity for delivering competitive advantage within the marketing strategy.

It appears to address some of the key issues highlighted in the authors earlier work. Not necessarily producing a reduction in overall consumption of resources but improving the sense of the value that strategic segmentation can provide. We would hope that this increased perception of value will address the question of resources, or lack of value. We do however see some evidence of Newton's

3rd law, with a resistance to change giving existing structures and practice the greatest challenge in terms of recommendations and communication.

Obtaining maximum value from applying strategic market segmentation Our recommendation is that this should be considered as six discrete but inter-linked phases (Figure 3).

Evaluation phase: Opportunity analysis A key influence on which segment(s) a company might decide to attack is how attractive they are, or could become in the future. Thus, at this point the effort would be directed towards providing such a picture: a comprehensive understanding of the opportunities and threats (barriers) that might be faced in each market segment.

Research phase: Identifying the ideal product profile

Providing direction for candidate selection and the phase III trial design, requires that there is an understanding for each segment in terms of:

- areas of satisfaction and dissatisfaction today and how this might change in the future
- areas of unmet need.

The ideal product profile will include recommendations on the 'points of parity' (ie those features, attributes and benefits that the product needs to demonstrate to 'play' in this market) and also the possible 'points of difference' (ie those features, attributes and benefits that would put you ahead of the competition).

Evaluation phase: Competitive analysis

As soon as there is an understanding of the profile that is emerging in the clinical environment, this needs to be evaluated in the light of the segment's needs and in light of the customer's perception of how well placed the competitors are at satisfying those needs.

Decision phase: Positioning

Once the product profile is confirmed, a decision needs to be taken with regard to where it is going to participate, ie in which segments, and what lever should be used to differentiate the product from existing and future players in these segments.

Research phase: Customer segmentation

In this context, customer segmentation differs from market segmentation. Customer segmentation is the process of sub-dividing the key players in a market segment (ie patients, physicians, payors etc.) into homogeneous sub-sets of customers, that is customers who are alike in some way or another. The implication being that we would apply a distinct marketing and/ or promotional mix to each sub-set of customers. The argument goes that with a more relevant mix, you will improve your penetration of a given market segment and the increased volume will payoff any additional costs incurred. Research into the 'relationship needs' of the customers that will have a key influence on what information is needed, when and how it should be provided etc. needs to be undertaken. The end result is customer segmentation: an understanding of the relationship needs and characteristics of these segments.

Research phase: Communications and branding

Once the strategy is formulated, and the customer segmentation complete, the communications and brand development strategy can also be defined. Clearly, the earlier research findings will help formulate these strategies. The intention at this stage would be to 'test' brand and communication proposals to ensure that they support the defined positioning; these need to be tested with the different customer segments. This is because although what needs to be said remains the same, how it is said might need to be different for the different customer segments.

Even in those organisations where there is understanding of and agreement with the concept, there are too few people with the competence to lead the strategic market segmentation process. Competence is having the skills to translate ideas into applications, to execute segmentation to the highest standard. In a review of the subject, Wind writes 'despite the general acceptability of segmentation and its value, too many firms are not segmenting their markets effectively and are not basing their strategies on the needs of target segments.¹⁸ Other authors have also noticed this tendency. The challenge of implementation has naturally resulted in much attention being given to measurable and actionable descriptor variables such as geo-demographics and sociodemographics, which substantially assist the implementation process.

It is necessary to have the right connections. That is, to have alliances with the agencies that understand and can support strategic segmentation.

Unwillingness to finance a formal segmentation study

The pharmaceutical industry is confronted with increasing speed of technological change as well as change in the underlying market dynamics and worldwide competition. These factors contribute to a high degree of uncertainty surrounding investment decisions. A global market segmentation study generally entails substantial investment; unfortunately, too few companies are prepared to make this commitment. The industry on the whole does not understand the need for a marketing investment strategy that supports the R&D strategy, despite the staggering sums devoted to R&D.

We advocate strategic marketing investment. Companies can gain a competitive advantage over more established rivals by treating their marketing expenditure in the same way that they treat capital outlays: as investments that lead to future share and profit gains. What matters is not how much companies spend over the course of the product life cycle, but how they spend it. Smart companies can gain leverage from even modest investments by embracing strategic market segmentation.

Conclusion

The industry needs to have the right data for the right population to support the positioning of the product.

In conflict with this goal, is the eagerness to shorten time to develop and win approval from the Food and Drugs Administration (or equivalent) for new products; this is why companies devote the vast majority of their spend to product innovation. In our view, strategic segmentation offers a different and not mutually exclusive route to the required innovation.

Investing strategically to create the blockbuster that each company is striving to achieve means bringing marketing expenditure into the R&D phase. It also requires that the goals of these two departments be closely aligned. Strategic segmentation is a very powerful vehicle for ensuring that:

- everyone in the organisation is building their understanding of the customer on the same ground
- the company is a customer-facing organisation
- irrespective of teams and/ or departments, contact and communication with the customer is a priority

Finally, once in the market, successful new products are two-edged swords. On the one hand, they create new markets, attract buyers willing to pay premium prices and enable the company to generate significant profits. On the other, the better and the more successful the product, the more competitors strive to imitate it. Here, strategic segmentation provides a company with the knowledge to put strategies in place to defend the business against competition while continuing to grow the business.

In conclusion, the decision to undertake a market segmentation study even under circumstances of high uncertainty we believe is crucial.

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