

## **Segmentation: An Inductive, Intuitive Approach**

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### **Introduction**

Segmentation is seen as one of the most critical tasks for business-to-business marketers. The literature provides ample justification for segmentation and numerous techniques by which segmentation can be undertaken. There is much less guidance on how the task can be undertaken within an organisation and subsequently in order to create competitive advantage.

The paper identifies four main barriers to implementation; the context dependent nature of segmentation, the dynamic interaction between products, customers and the marketplace, the difficult and demanding nature of the process and the importance of implementation.

A methodology for segmentation is demonstrated utilising the notion of intuition, knowledge gained by experience. A case study demonstrates the successful development and implementation of a customer and market based segmentation.

### **Segmentation as a Concept**

The importance of segmentation in both established and emerging conceptions of marketing is widely acknowledged (Anderson & Narus, 1999, McDonald & Wilson, 2002). It is seen as being largely derived from a consumer perspective (Sollner & Rese, 2001), where the practice of segmentation is made easier by the availability of data, the large number of consumers and the consequent commercial imperatives for success (eg Todd & Lawson, 2001).

Segmentation can be seen as being derived from an underlying economic rationale, either from a micro perspective based around price elasticities or alternatively from a macro perspective using the concept of industry groups (Sollner & Rese, 2001). LaPlaca (1997) discusses how increasing levels of sophistication can be achieved in the segmentation of industrial markets as more variables are introduced. A good example of this would be the founding work of Shapiro and Bonoma (1984) who propose the combination of hard, industry-wide data with soft, customer specific data in order to incorporate a range of variables into segmentation practice. In practice these conceptual bases underlie the main variables that are used in business-to-business segmentation; industry sector, product type and buyer characteristics.

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The justification for undertaking segmentation is that it is seen as key to achieving superior competitive advantage (Sudharshan & Winter, 1998). Segmentation aids in understanding customers (Albert, 2002), the allocation of resources (Freitag & Clarke, 2001), the adaptation of the product mix and the development and evaluation of new approaches with respect to products and markets (LaPlaca, 1997).

Conceptually therefore segmentation is seductively attractive, in fact one of the most important concepts with respect to industrial marketers. It is the basis whereby market analysis and a deeper insightful understanding of customers can be developed into an organisational response that yields sustainable competitive advantage. The "what" and "why" of segmentation provides strong justification for its practice.

In considering the "how" of segmentation the literature suggests at a generic level the opportunity to use a number of criteria, or levels as LaPlaca (1997) refers to them, that provide an increasingly fine tuned analysis of the market place. This is applied in the well known approach of Shapiro and Bonoma (1984) who proposed the "nested approach", whereby these variables or levels are combined. The literature also offers a range of other ways in which markets can be segmented using criteria such as product usage (Nakip, 1999), market behaviour (Dibb & Simkin, 1994), an understanding of customer needs (Albert, 2002), and a psychographic approach to give insight into motivations, attitudes and values (File & Prince, 1996). In addition to customer and market-based criteria it has also been proposed that segmentation can be based around the variables of the strategy of the firm (Verhallen et al, 1998) or the strategy put in place by competitors (Sollner & Rese, 2001).

Emerging methodologies that can be used as a basis for segmentation include managerial intuition (Millier, 2000) and the role of artificial neural networks (Fish et al, 1995). Millier (2000) suggests that managerial intuition, which he defines as data collected through experience, can also be used in the segmentation process, with particular application to the marketing of technologically driven, new products for which markets have yet to emerge.

As discussed in the following section managers find the practice of segmentation difficult and confusing. The objective of this paper is to develop a methodology that allows managers to build on their intuition, knowledge gained by experience, in order to produce an implementable and managerially relevant outcome.

### **Segmentation as a Managerial Practice**

Practising managers find the achievement of even the most important of strategic marketing tasks difficult (Millier & Palmer, 2000). However the practice of segmentation appears to be at least as challenging as other important marketing priorities. Nearly 20 years ago Shapiro and Bonoma (1984) noted that segmentation was used more as a way of explaining and understanding marketing outcomes rather than as an important component of planning for the future. At a general level the divergence between the academic and practitioner domains has been extensively discussed (eg Carson and Gilmour, 1998), so how much support and guidance can the industrial marketer expect with this most of important of tasks?

Despite the proliferation of advice on techniques for segmentation, there is much less guidance in the literature on how to undertake this task. A number of complications have been identified. At a fundamental level the issue of strategic homogeneity arises, in that first the market, customers and competitors must be defined (Sollner & Rese, 2001) yet in the complex business environments of today such issues may be significantly more challenging than they first appear. Sollner & Rese (2001) also identify that segmentation is a largely static process and is carried out at a point in time, yet in a dynamic and ever-changing world the timeframe is important (Nakip, 1999, Freytag & Clarke, 2001), reflecting the dynamics of the business environment. In practice therefore, no sooner has a segmentation study been conducted, than it is out of date and continues to decay.

This assumes that the information required can actually be obtained to enable the study (Sudharshan & Winter, 1998) but such information may be unobservable or unobtainable, and even if it is available its meaning may also be ambiguous (Verhallen, Frambach & Prabhu, 1998). This may be because in reality customer firms in the marketplace may be pursuing strategies which are not clear to themselves, let alone the interested observer (Verhallen et al, 1998). As Verhallen et al observe (1998.312) "*strategy based segmentation is a potentially more effective approach..... its implementation poses apparently greater problems*".

Turning to the literature for managerial guidance is unlikely to be fruitful. Many papers conclude by noting the limited nature of the work, the specific nature of the investigation or the fact that the work reported whilst interesting at the general level is unlikely to provide specific guidance. In the unlikely event that practising manager will review the literature (Brown, 1996), such a manager is unlikely to find anything other than general or even anodyne guidance, for example (Verhallen et al, 1998.312) "*They (industrial marketers in segmenting firms) merely need to keep in mind that potential buyers differ in their strategic type and orientation and, as a consequence, are likely to respond in different ways to marketing plans and strategies*". Even having identified and implemented an appropriate method for segmentation; *The existing literature offers only sparse guidelines on how to evaluate and select segments*" (Freytag & Clarke, 2001.480). Dibb and Simkin (1994) note the importance of offering guidance with respect to the implementation of academic schemes for segmentation, but this need has yet to be fully addressed.

From a practitioner perspective Millier (2000) compares and contrasts the theoretical approach to segmentation with that found in industrial companies. In these circumstances such companies are "*miles away from putting in practice these linear and well run in methods*" (Millier, 2000.147). following this discussion we conclude this section by noting that in practice segmentation is a challenging and difficult task for the practising manager to undertake for the following reasons: -

*Context Dependent* - Generalised and prescriptive guidelines may be inappropriate in specific circumstances and conditions. Simply adding more criteria to reflect the complexity observed does not simplify the task for the manager concerned.

*Interactive* - Both supplier and buyer are in a constantly changing environment. The application of complex, linear and step-by-step guidelines for managers may be inappropriate (Millier & Palmer, 2000). In the circumstances of his/her specific

organisation the manager concerned may have more contextually relevant and appropriate information but be unable to utilise it due to inappropriate or irrelevant frameworks.

*Difficult and Demanding* - Segmentation has been identified as a key strategic element of the marketing activity. As such it demands time and attention, when managers may be diverted by urgent but less important and short-term issues. This combined with lack of understanding as to how to undertake the task can lead to displacement behaviour where the task is simply avoided because managers do not understand how to approach it.

*Implementation* - Having arrived at an appropriate segmentation the practising manager must then rely on colleagues in other departments to implement the actions arising. The barriers to implementation have been identified (Dibb & Simkin, 2000), with internal marketing, communication and co-ordination within the organisation being identified as the most significant. Dibb & Simkin (2000) emphasise the importance of both an appropriate culture and processes to bring about effective implementation.

In order to address these issues we present a case study, and discuss the methodology and findings arising from the work.

## **Case Study**

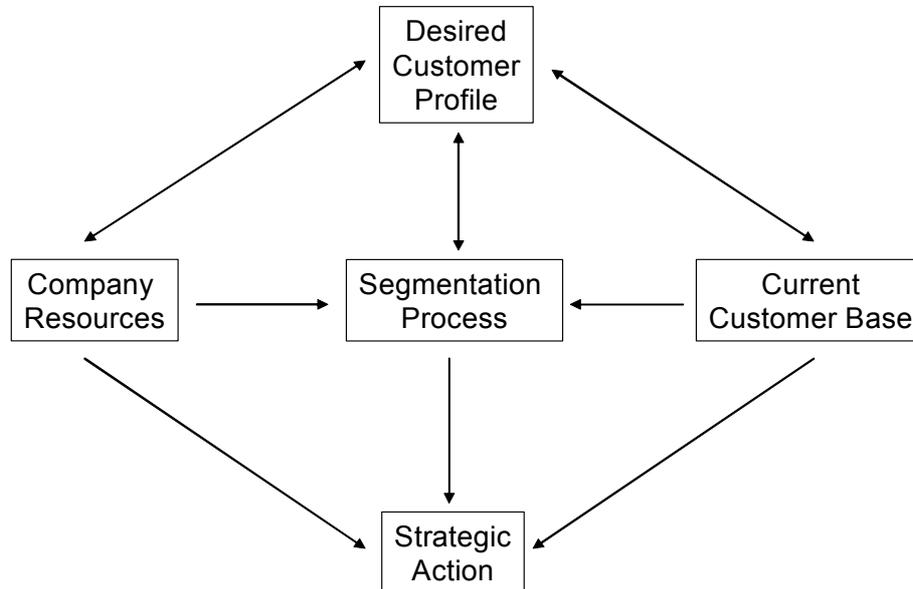
### **Methodology**

In order to address the issues of segmentation specific to the firm and subsequent implementation of the output, a programme was undertaken in conjunction with an industrial co-operator. Belmay UK Ltd (see [www.belmay.com](http://www.belmay.com)) is a manufacturer of fragrances and flavours for a wide range of industrial applications, this case concerns the flavours division and their product, flavour components used in the manufacture of carbonated soft drinks.

This methodology builds on the model for implementation described by Simkin (1996), and uses an action learning methodology (Weinstein, 1995). The model that evolved is described in Figure 1 below. The co-operating firm was well known to the researcher (Palmer, 2001), and vice versa, and had a strong interest and commitment to segmentation as a means of driving strategic change in the organisation.

Figure 1

### Segmentation Derivation and Implementation



The programme took place over a period of three months and comprised two, two-day managers workshops. The staff attending were cross-functional and from middle and senior management levels in the firm.

#### **Workshop One**

This comprised of a half-day tutorial on the subject of segmentation in order to ensure that all managers were at the same level of understanding. There then followed a period of intense discussion as to how these general principles could be specifically applied within the context of the firm. This was a wide-ranging and vigorous discussion which resulted in a series of consistently defined criteria relevant to both the customer base and the firm.

The final step in this workshop was to agree a series of scales which would apply to the criteria (Table 1). At the conclusion of the workshop it was agreed that the marketing department would then take responsibility for testing the criteria against a range of customers.

Table 1

Segmentation Criteria, Definitions and Scales

<b>Criteria</b>	<b>Definition</b>	<b>Scale</b>
RELATIVE SPEND	<i>A measure of the total amount spent on flavours and the proportion of that spend captured by Belmay</i>	<i>Revenue captured as a proportion of total spend expressed as</i> <b>LOW or HIGH</b>
SERVICE REQUIREMENTS	<i>The requirement for product support services seen as order fulfilment, development support and advice on legislation</i>	<b>LOW - MEDIUM - HIGH</b>
BUYING STYLE AND PROCESSES	<i>The degree of formality and structure of the buying process</i>	<b>LOW, HIGH or HIGH CENTRALISED</b> <i>formality of buying process</i>
COMMERCIAL APPROACH	<i>Traditional (so transactional) all relational attitude to business and supply chain</i>	<b>RELATIONAL</b> <i>or</i> <b>TRANSACTIONAL</b>
TECHNICAL SUPPORT	<i>The level of technical support required</i>	<b>LOW - MEDIUM - HIGH</b>
FUTURE ORIENTATION	<i>Attitude and commitment to industry leading innovation and business growth as defined by R&amp;D, capital investment and new customer gain</i>	<b>LOW - MEDIUM - HIGH</b>

**Segment Development and Data Generation**

The marketing team identified a number of customers as being diverse in their buying behaviour and requirements. They then facilitated the scoring of these customers by the management team against the criteria identified and moderated the results in order to arrive at an agreed series of scores. These scores were recorded on a spreadsheet, Figure 1.

Figure 1

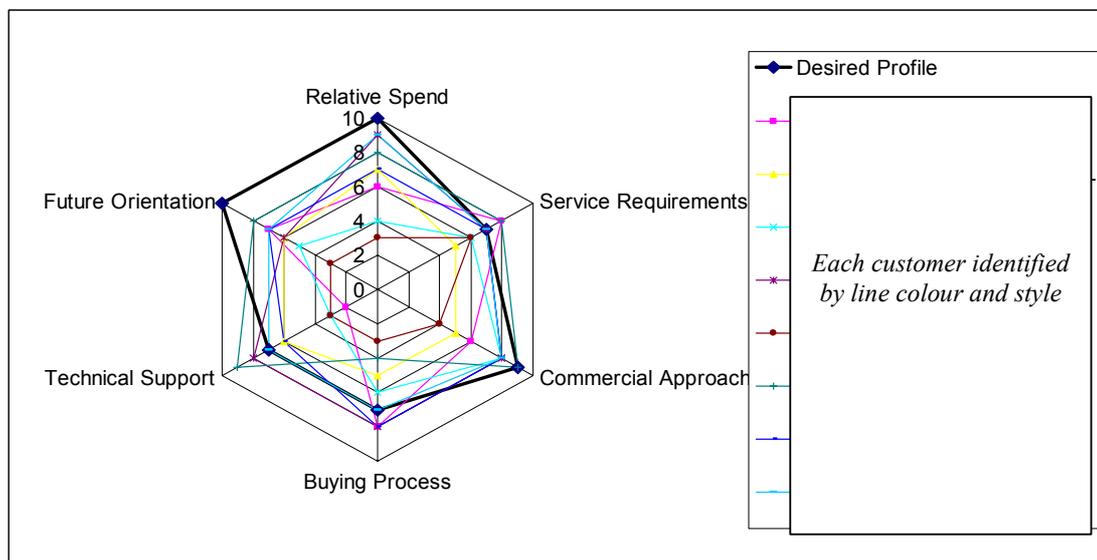
Segmentation Data Capture & Array – Spreadsheet Format

		<i>CUSTOMER</i>				
CRITERIA	SCALE	A	B	C	D	E
<i>Relative Spend</i>	Low S/Low C Low S/High C		X X (med)		X X (med)	High
<i>S/Low C</i>	High S/High C	X				
<i>Service Requirement</i>	L M H	X	X	XX	X	X
<i>Commercial Approach</i>	R T	X	X	X	X	X
<i>Buying Process</i>	Low Formal Hi Formal	X	X X		X	X
<i>Technical Support</i>	L M H	X	X	X	X	X
<i>Future Orientation</i>	L M H	X	X	X	X	X

The marketing team then sought ways of comparing and contrasting the information in order to eventually arrive at an agreed view of the segmentation. This was undertaken using a pattern matching process (Miles & Huberman, 1994) in which the scores for the various criteria were plotted on a radar diagram (Figure 2). This then gave a visual basis for comparison between different customers.

Figure 2

Data Array - Radar Diagram



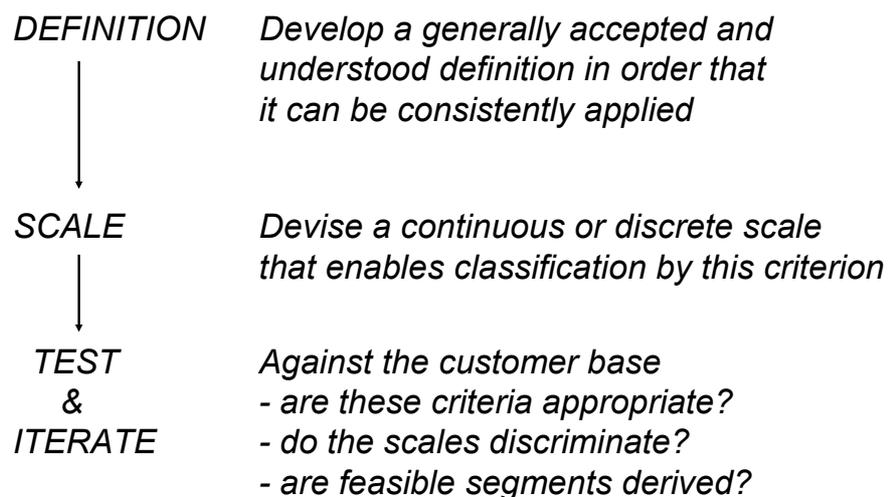
In addition the management team devised a profile for the most desirable type of customer, and this is also displayed on the radar diagram. This gave the management team a datum point against which they could judge the desirability of customers when considering the grouping of customers on the basis of their profiles into segments.

## Workshop Two

At the second workshop these findings were then presented back to the management team together with a discussion of the pattern matching process. There then followed considerable debate during which the management team arrived at a profile for the ideal customer and also aggregated the findings of the pattern matching study into five segments. The characteristics of each segment were identified and checked by iteration against the managers understanding of the customer base (Table 2).

Table 2

### The Segmentation Process



Finally, each of the segments identified was given a name in order that this would symbolically capture the essence of the segment and act as a mental image characteristic of that segment of customers. These segments and some details of their characteristics are shown in Table 3.

Table 3

## Segments and Their Characteristics

<b>Segment Name</b>	<b>Distinctive Characteristics</b>
<b><i>Hippos</i></b>	<i>High growth potential, low capture of spend, require technical expertise, low price sensitivity, long-term perspective.</i>
<b><i>Lions</i></b>	<i>High spend and relatively high capture, independent, price-conscious, aggressive style, poor planning leads to high service requirements.</i>
<b><i>Future Milkers</i></b>	<i>Low growth potential, low service requirements, price-conscious but not aware, technically orientated, often family-owned, lifestyle and relationships important.</i>
<b><i>Sitting Ducks</i></b>	<i>Low growth potential, high service requirements, sole traders or family firms, relationships important, reliable.</i>
<b><i>Sharks</i></b>	<i>Low growth potential, very price-conscious, highly transactional, poor facilities and low quality, service hungry, small businesses.</i>

The naming, and associated qualitative understanding of segments, was considered important in acting as a shorthand within the firm in order to communicate to staff the features of a particular customer or group of customers. The workshop concluded by agreeing how the product mix should change in response to the identified needs of the different segments, and which segments should be prioritised for managerial action. Various priorities are placed on each of the segments depending upon the long-term objectives and short-term performance of the business. An example of this is illustrated in Table 4.

Table 4

Definition of Product Offering by Segment

<b>Marketing Mix Element</b>	<b>Lion - product offering</b>	<b>Hippo - product offering</b>
<b><i>Products</i></b>	Customised/specific Core product base Move to branded/higher value products	Basic, simple but powerful Emphasis on the masking of notes Highly concentrated Of long shelf life
<b><i>Product Related Services</i></b>	Interaction with technical representative thru Npd process Dedicated support based on understanding specific expectations & needs	Legislative support Marketing presentations Longer term orientation
<b><i>People</i></b>	Diamond contacts where appropriate Face to face Account Manager co-ordination	1 dedicated technical contact Planning thru Account Manager for long term
<b><i>Pricing Policy</i></b>	Competitive to market conditions Very margin conscious	High margin available Lock in to flavour via certification process
<b><i>Promotion</i></b>	Performance related rebate Agreed specific campaigns Npd presentations	Innovate thru taste masking Provide regular global trend analysis
<b><i>Place</i></b>	Traditional straight line supply chain management	Product requires long shelf life

**Discussion**

Segmentation has been identified as an important, if not one of the most important tasks that industrial marketers can undertake. Whilst there is a strong case to be made for segmentation, managers in practice find it difficult and confusing. This paper therefore seeks not to discuss methods of segmentation further, there are numerous schemes already available in the literature, but to discuss how all this can be taken forward within a business-to-business organisation. The foregoing sections noted that there were four main challenges arising at the interface between the academic output of schemes of segmentation and the practitioner based tasks of implementation.

An action learning approach was adopted in order to take the subject into the practitioner domain and engage with managers working within their business and market place, actively attempting the task of segmentation. In this way all four of the challenge is identified could be addressed.

By working within an organisation generic issues of segmentation are made much more specific when set within context. The knowledge that managers have of their business, customers and the marketplace means that they can actively consider the interaction between the opportunities for segmentation against the feasibility of implementation, and in terms of the business environment in which the segmentation strategy is to be used to develop competitive advantage.

That is a difficult and demanding process is apparent from they workshops that were conducted. The workshops started with a presentation of the principles of

segmentation and managers were then asked to consider how to apply them in their own organisations. By facilitating managers through this process managers were "learning by doing" and also generated worthwhile and pragmatic business solutions.

Finally the fourth challenge that was identified, that of implementation, was addressed in the second workshop session. Here the segmentation eventually arrived at was used as the basis for redefinition of the marketing mix. Subsequent to the circumstances described in the case study, Belmay has fully implemented the output of the segmentation process within the company.

Millier (2000) proposed the use of managerial intuition as a valid component of a segmentation process. This was essentially with respect to emerging markets for new technological innovations, as a way of rationalising markets that were yet to be established. This paper has built on the notion of intuition with respect to current rather than new markets. In doing so it can be seen how the unique input of managers engaged with their products, customers and the marketplace can help to overcome the four major challenges identified.

Such a technique however is not without its limitations. If the process is over dependent on the intuitive knowledge and insight of managers it runs the risk of ignoring marketplace data that is available and which may suggest alternative solutions. Unsubstantiated opinion could gain precedence over judgements around informed uncertainty.

In addition managers within one company participating in an industry will almost inevitably have a partial view of both customers and the marketplace. The process therefore relies on the facilitator to challenge the justification for the topics discussed. Part of this partial view is composed of the over-reliance of this method on making a typology of customers rather than on segmenting markets.

Consequently an equal challenge is to take the segmentation that has been developed further into the market place and to test the rationale against those customers with whom the company is not currently trading. However any process of this nature that attempts to make sense of complex and sometimes contradictory market-based information involves a process of data reduction. When that data reduction takes place this relies on the judgment and experience of those involved. Hence it is suggested that it is very appropriate to balance the role of the management team against the alternative view and experience offered by a (relatively) impartial facilitator.

## **Conclusions**

Segmentation, although superficially seen as a consumer technique, is a critically important issue for business-to-business organisations. There are numerous conceptions of segmentation and many suggestions as to the criteria and approaches that can be used to segment markets.

However turning the output of the academic work into the reality of implementation is met with a number of critical challenges which are: -

- That segmentation is context dependent.
- There is interaction between the customer base, the marketplace, the product range and the feasibility of what can be achieved.
- It is a difficult and demanding process and managers often have little direct experience and expertise in segmentation.
- Even having decided on a segmentation approach and having actually overcome the technicalities of segmentation, building competitive advantage is critically dependent upon implementation

This paper has proposed the role of intuition and informed intervention as a way of bridging the gap between academic schemes of segmentation and the day to day reality of the practitioner. Managers and academics working together can inductively develop pragmatic and workable solutions to difficult problems. As Dibb and Simkin (1994.62) state *"when new segmentation solutions are sought, the importance of readily implementable, clear, and understandable schemes should not be obscured by the desire for an academically valid solution that is justified by all the formal statistical routines"*. As ever in marketing, judgement and experience is required in managing the trade-off between rigour and relevance.

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