Davies, Theresa-Anne

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South African Journal of Business Management

Provided in Cooperation with:
University of Stellenbosch Business School (USB), Bellville, South Africa

Suggested Citation: Davies, Theresa-Anne (1997) : New product strategy: Key characteristics that distinguish leading innovators in selected large South African manufacturing industries, South African Journal of Business Management, ISSN 2078-5976, African Online Scientific Information Systems (AOSIS), Cape Town, Vol. 28, Iss. 4, pp. 129-137, https://doi.org/10.4102/sajbm.v28i4.798

This Version is available at:
https://hdl.handle.net/10419/218178

New product strategy: key characteristics that distinguish leading innovators in selected large South African manufacturing industries

Theresa-Anne Davies
Entrepreneurial Studies Unit, Technikon Natal, P.O. Box 953, Durban, 4000 Republic of South Africa

Received October 1997

Product innovation has to be universally recognized as a central strategy for building market share and securing business success. The purpose of this exploratory research study was to attempt to identify key characteristics that distinguish leading innovators in selected South African Industries. Based on the findings from both the qualitative and quantitative studies, a profile emerges of successful companies that appears to distinguish them from less successful companies, and some guidelines are suggested in terms of the types of strategies that appear to be effective, the type of leadership required, and the skills needed to get product development undertaken successfully. One of the most interesting findings from the research is the observation that the large South African companies surveyed are not very innovative. The study concludes with some recommendations for further research into the strategic factors that contribute to innovation success.

Strategie vir nuwe produkte: kerneienskappe om leiers in innovering te onderskei in geselekteerde groot Suid-Afrikaanse vervaardigingsindustrieë. Produkinnovering moet algemeen aanvaar word as 'n sentrale strategie in die bou van 'n markaandeel en versekering van sakesukses. Die doel van hierdie verkennende navorsingstudie was 'n poging om kerneienskappe te identifiseer waardeur leiers in innovering onderskei kan word in geselekteerde Suid-Afrikaanse industrieë. Gebaseer op bevindings uit beide kwalitatiewe en kwantitatiewe studies het 'n profiel tot stand gekom wat klaarblyklik suksesvolle en minder suksesvolle ondernemings onderskei. Ook word riglyne geopper vir moontlike effektiewe tipe strategieë, die vereiste tipe leierskap en vaardighede wat nodig is in suksesvolle produkontwikkeling. Een van die interessantste bevindinge wat deur die navorsing uitgewys is, is dat die groot Suid-Afrikaanse ondernemings nie baie innoverend is nie. Die studie sluit af met sekere aanbevelings vir verdere navorsing oor strategiese faktore wat bydra tot suksesvolle innovering.

Introduction

There has been a major evolution in global industry structures and competitive behaviours over the past two decades, reflecting the transition from a relatively stable business environment to an increasingly volatile one. In response to these changing circumstances, a plethora of advice on the subject of corporate success and its determinants has emerged. To attribute competitive success to marketing factors alone is unsatisfactory, because the reasons for the performance of a company are likely to be multidimensional. Inspection of the literature reveals many factors shown to influence competitive performance (Asbury & Ball, 1989; Pascale & Athos, 1982; Peters & Austin, 1985; Peters & Waterman, 1982). Most writers nevertheless agree that to succeed – whatever the market – you need to be able to offer something different, or something better. The principle of sustainable competitive advantage argues that a firm can only be successful in the marketplace if its products and services have a competitive edge over those of its rivals. This edge should be one that is both important to customers and sustainable by the firm in the long run. It is in this context that it can be said that innovation is essential to corporate survival and growth.

> 'Above all the innovative company organises itself to abandon the old, the obsolete, the no longer productive' (Cravens, 1990).

Of all the different types of innovation, *product innovation* presents a particularly rich variety of competitive options.

> 'Product innovation can be counted among the key factors contributing to the success of an enterprise. Developing and introducing new products is one important and widely used strategy for building market share and increasing business performance. The importance of this strategy becomes increasingly obvious in light of the many stagnant and shrinking markets. In many industries, the realisation of growth and profit goals has become largely dependent on product innovation' (Fritz, 1989).

Product innovation has to be universally recognized as a central strategy for building market share and securing business success – in both expanding and mature markets, and in small firms as well as in large firms. To be successful, a company has to be good *inter alia*, at developing new products. It also has to be good at managing them in the face of changing tastes, technologies, and competition. However, given the accelerating pace of change, firms with little or no experience of regular product development are faced with the following three important questions:

a. What kind of strategies will be effective?
b. What kind of leadership is required of senior management?
c. What skills are needed to get product development completed quickly? (Johne & Snelson, 1990).

What is needed in these circumstances – and the practice that usually prevails – is to consider the characteristics of successful organizations with a view to adopting or adapting their winning formulae. Consequently this research, undertaken in 1992, was aimed at identifying key characteristics that distinguish leading innovators in the South African context.

Importance of the study

South Africa has recently been rated as one of the least competitive countries in the world. It has slipped seven positions to 42nd in the 1995 World Competitiveness Reports rankings (*Financial Mail*, November 1995). Over the past four years, South Africa's ranking has declined in six out of

the eight categories measuring competitiveness. South Africa is ranked last in terms of its human resources, 43rd on its level of internationalization, and 28th on science and technology. These categories have all shown a declining trend over the four years (*Financial Mail*, November 1995). It is in this context that it is said that South Africa is neither competitive nor innovative. Innovation and competitiveness are often expressed in terms of rates and types of new product development. There is consequently an urgent need for South African managers to learn more about the intricacies of product development – to meet the challenge of foreign competition, and to respond effectively to the changing needs of an economy and society in transition.

The need for South Africa in particular, to pay more attention to benefication, is also now well recognized (Ebersohn, 1995; *Financial Mail*, September 1994). This will require increased manufacturing activity, which in turn will result in increased focus on product development. Consequently, manufacturing firms which are faced with the prospect of having to make more frequent changes to their products require clear information on how the process and necessary tasks can be managed effectively. To date, most academic research has concentrated on specific sub-activities within the span of product development tasks. There have been studies into new product idea generation techniques (Sowrey, 1990); into screening procedures and practices (Lambkin, 1988); into alternative management structures (Edwards, 1989); and into different ways in which the newly developed products might best be launched (Dunn, 1977; Takeuchi & Nonaka, 1986). However, very few academic researchers have considered all the elements involved in an integrated way. (The notable exceptions are Booz, Allen & Hamilton, 1982; Cooper, 1984b; and Johne & Snelson, 1990.) Furthermore, whilst there have been a number of widely publicized studies purporting to identify correlates of success in high performing companies (e.g. *In search of excellence*, Peters & Waterman, 1982; *The winning way*, Asbury & Ball, 1989) there appear to be few studies exploring the specific relationship between products, strategy, practice and procedure and corporate performance. The McKinsey Group is notable in this regard for their development of the McKinsey 7s model (Pascale & Athos, 1985). The 7s 'framework' is based on the work done by Pascale & Athos (1985) and adapted by Peters & Waterman (1982) to explain organizational effectiveness. Their claim is that effective organizational change is really the relationship between structure, strategy, systems, style, skills, staff and superordinate goals. Their framework, graphically depicted in Figure 1, suggests several important ideas:

First is the idea of a multiplicity of factors that influence an organization's ability to succeed and its proper mode of change. Second, the diagram is intended to convey the notion of the interconnectedness of the variables – the idea that it's difficult, perhaps impossible, to make significant progress in one area without making progress in others as well.

The McKinsey model is highly regarded:

> 'At its most trivial, when we merely use the framework as a checklist, we find that it leads into new terrain in our efforts to understand how organisations really operate or to design a truly comprehensive change program. At a minimum, it gives us a deeper bag in which to collect our experiences. At its most powerful and complex, the framework forces us to concentrate on interactions and fit. The real energy required to redirect an institution comes when all the variables in the model are aligned' (Cunningham & Lischeron, 1991).

While this model was developed originally to appraise the workings of a total organization, it has been adapted for the purpose of examining specific product innovation activities, detailed in Table 1.

In the South African context – where the development of successful small businesses is seen as a critical factor in achieving both growth in the economy and a reduction in the level of unemployment – guidelines that will limit the cost and level of business failure need to be developed for, and adopted by, the emergent entrepreneurs. Consequently, research into the key characteristics of leading innovators – using the adapted 7s framework to identify product development factors influencing corporate success – would be most appropriate as a role model for small enterprises (provided the necessary adjustments are made from the big business to small business contexts).

Research design and methodology

The study needed to examine seven areas of impact on strategy, many of which are interrelated. Furthermore, such a study had not been undertaken previously in a South African context, where population growth is a dominant market characteristic influencing strategy. Consequently, issues pertinent to the European study (on which this research was based) may not have been aposite. Due to the complexity of these issues, a two-stage research programme was used.

First stage

A qualitative exploratory study to assess management's perceptions and attitudes to the role of product development within large South African industries. This stage was used to

Table 1 Principle factors underlying efficient product development in the form of relevant questions

Strategy	Is there a product development strategy which defines the sort of old and new products to be developed and the resources to be released for this product?
Shared values	Is there a shared belief in the need to pursue product development for the purpose of growing the business?
Style	Does top management provide active support for those involved in key product development tasks, or is a 'divide and rule' management style practised in which individual functions are left to slog it out between themselves?
Structure	What types of formal organization structures are used to implement old and new product development tasks?
Skills	What specialist knowledge and techniques are there for executing old new product development tasks?
Staff	What types of functional specialists are there for executing old and new product development tasks?
Systems	What type of control and co-ordination mechanisms are used for executing old and new product development tasks?

Source: Adapted from Pascale & Athos, (1982) and Peters & Waterman (1982) and Johne (1990).

check the relevance of issues (obtained from the literature review) in the South African context.

Second stage

A quantitative follow-up study that subjected the findings in the first stage to empirical testing, amongst a large sample of South African industries. Both stages used the McKinsey 7s framework as the basis for examining the relevant issues.

Qualitative study

The population sampled for the purposes of this research was defined as large, successful South African manufacturers of both industrial and consumer goods. The top 100 industrial groups and manufacturing companies in South Africa were identified by consulting *Top Companies*, a *Financial Mail* supplement published annually, and a list of companies, ranked according to market capitalization, provided by the Johannesburg Stock Exchange. The various sectors involved in the study are Engineering, Electronics, Industrial Holdings, Beverages, Chemicals and Oil, Food, Motor, Paper and Packaging and Pharmaceutical and Medical. These sectors were selected on the grounds that they are all technology based, and therefore characterized by more frequent new product introductions. These sectors also cover the manufacturing of both consumer and industrial goods, and account for an important proportion of national economic output, export and employment. Service Industries were excluded as a category because of the intangibility of products associated with this sector.

Sample

It was decided to base the study on a sample of 42 large South African companies. This sample was drawn using a stratified random sampling procedure to comply with the requirements for a valid sample. (Nine of the 28 *Financial Mail* categories were selected for inclusion in the sample. Using a list of random numbers, companies were selected within each of the nine categories). Table 2 identifies the companies who were approached for interviews in the first stage.

Table 2 Companies selected for inclusion in the first stage

Chemicals/Oils	SASOL, AECI, Sentrachem
Electronics	Altron, Altech, Tedelex, Reunert, Elcenter
Food	ICS, Tiger Oats, Rainbow, CGS Food, I & J, Premier
Engineering	AFROX, Dorbyl, RIH, NEI Africa
Beverages	ABI, SA Breweries, SFW
Motor	TOYOTA, SAMANCOR, SAFICON
Paper/Packaging	SAPPI, Nampak, Kohler, Consol
Pharmaceuticals	SA Drug, Adcock
Industrial Holdings	Inboard, Pichold, BTR Dunlop, D & H, Cullinan, FSI, Barlows, W & A, SA Bias, HLH, Plate Glass, CG Smith

(It must be noted that only 11 of the 42 companies actually granted interviews.)

Methodology

The descriptive survey approach was used whereby key managers were subjected to in-depth interviews using a semi-structured, open-ended questionnaire based on the Pascale & Athos (1982) and Peters Waterman (1982) model adapted by Johne & Snelson (1990). Variables for each of the seven categories were based on key issues raised by notable researchers, in a comprehensive review of the literature: these were then sorted into the categories of 7s framework. The specific contributions from previous international research in the field of product development/new product strategy are detailed in Table 3. The Unilever Group (specifically Lever Brothers, Elida-Ponds and Hudson and Knight) and Beacon Sweets were used to pilot the questionnaire.

Interviews were granted by 11 of the 42 firms approached. In each case, the entire interview (on average two hours in duration) was recorded and later transcribed. The transcriptions were then content analyzed and the research report developed.

Findings – qualitative study

The profile that emerges of the *Financial Mail* top performing companies is shown in Table 4. The qualitative stage was intended to guide the inclusion of variables in the subsequent quantitative stage. As all the variables had been drawn from a review of literature derived from international studies, it was deemed necessary to test the relevance of these variables for inclusion in the South African study. To this extent, the qualitative study did in fact affirm the need to explore all the variables selected. Interestingly, the qualitative study also exposed a number of differences in strategic focus that needed to be confirmed by the quantitative study. These in-

Table 3 Variables checked in qualitative study

Issues with respect to strategy:	**Contributed by:**
Offensive orientation	Cooper (1984a)
Business relevance	Baker *et al.* (1988)
Ansoff's grid	Ansoff (1987)
Categories of new products	Booz Allen & Hamilton (1982)
Integration of strategies	Booz Allen & Hamilton (1982)
Strategic roles assigned to new products	Booz Allen & Hamilton (1982)
Definition of successful innovations	Johne & Snelson (1990)
Three dimensions of performance	Cooper (1984a)
Long, formal process of development	Booz, *et al.* (1982), Baker *et al.* (1988)
Issues with regard to shared values:	
All statements	Asbury & Ball (1982)
	Pascale & Athos (1982)
	Peters & Waterman (1982
	A. Manning (1988)
Balanced programmes	Johne & Snelson (1990)
Issues with respect to style:	
Degrees of innovativeness	Crawford (1980)
Levels of involvement	Johne (1984)
Issues with respect to structure, skills, staff, systems:	
How experienced innovators organize	Johne (1984)

Table 4 Profile of top performing companies

Strategy	Corporate strategy is not the sole responsibility of a single individual. A participative approach predominates which includes senior management.
	Corporate strategy is simultaneously offensive and defensive, as circumstances dictate.
	Return on investment is the main issue taken into account in the strategic planning process and provides the major yardstick for the assessment of programme performance.
	Product development is the most favoured method of achieving corporate growth. Market development runs a close second.
	Product innovation is seen as the key to survival. However, the focus in the majority of organizations is on the redevelopment of old products. (Consequently there is a lack of truly innovative product development programmes in the top companies with only 10–15% of current top ten products developed in the past five years.)
	The most common strategic role assigned to new products is to defend existing market positions.
Shared values	The top companies have a formal strategic plan in place, use mission statements to guide operations, but do not have company manuals detailing product development practice and procedure.
	The concept of corporate culture is widely understood but not easily articulated. No common culture can be identified as contributing to the success of the organizations surveyed.
Style	Responsibility for new product development is a top management function. However, the extent of involvement of top management in the product development programmes varies.
Structure	There is no recognition of the need for more flexible structures to accommodate new product development.
Skills	Ideas are sourced from all levels in the organization, and collaborative use is made of external agencies.
Systems	Little formal guidance is given in the sort of new product the company is seeking.
	Teamwork activities are pursued in parallel.

cluded the higher priority placed by South African firms on return of investment in the strategic planning process, and the emphasis by South African firms on the re-development of old products (rather than innovative new product development). As the qualitative stage did not suggest further revision, the quantitative instrument was developed and precoded for self completion by the sample in the second stage of the study.

Quantitative study

Sample

The sample comprised all members of each of the nine categories in McGregor's 'Who owns whom' that corresponded to the earlier study – this is detailed in Table 5. The analytical survey approach was used whereby a structured questionnaire was mailed to each of the 251 members in the population for self completion. (Of these, only 87 companies responded to the request to participate in the survey.) The quantitative questionnaire used the modified 7s model as a framework. Variables were developed for each of the seven categories after a careful review of the literature and confirmed for retention by the qualitative study.

Table 5 Companies selected for inclusion in second stage

Chemicals and Oils	9	Beverages	8
Industrial Holdings	69	Motors	20
Electronic	51	Paper and Packaging	24
Engineering	41	Pharmaceutical	12
Food	17		
		Total sample size	**251**

Data analysis

Factor analysis was used to explore interdependencies and structure in the set of quantitative variables, but proved to be inconclusive, despite rotations. In an attempt to further describe the data, discriminant analysis was undertaken. Respondents were classified into two groups namely: successful companies (those which had three of their top ten products introduced/developed in the past five years or 30% of current sales volume being made up of new products introduced over the past five years) and less successful companies. Again, the findings did not allow for prediction based on this classification as there was insufficient discrimination between the two groups. This could be explained in terms of the following:

a. The sample size was relatively small (the size of the 'successful' group in particular was small).
b. The sample was itself representative of large companies for which success is already implied: trying to distinguish levels of success in the new product context was thus challenging (new product development being but one indicator of success in the South African context).

Findings – quantitative study

Having made these qualifications it is nevertheless worth noting the specific variables in which key differences between the groups were observed. Chi-square tests of association revealed a significant relationship between the following variables and success in product innovation:

Utilization of excess/off-season capacity

More successful companies were less likely to utilize off-season capacity as a strategic option. Companies with a strong focus on new product development tend also to be market orientated, with new production plants and processes being adapted/adopted to meet the specific needs of the market place. Consequently, a strategic imperative to utilize

off-season capacity would prove to be constrictive in this context. Consequently, it is not surprising that the more successful companies in this study were less likely to utilize off-season capacity as a strategic option.

Existence of a formal mission statement

Those companies who claimed to have a formal mission statement were likely to be more successful. Mission statements tend to reflect the universal values of an organization. Companies that have undergone a formal process of developing their mission are also likely to put in place the structures and processes required to give effect to the mission statement. With the current cultural transformation of South African companies this finding lends support to the observations made by Manning (1988) and Asbury & Ball (1989) namely that the top performing companies in South Africa invest a lot of time and effort in articulating their *raison d'être* and role in society.

Extent of involvement by top management in the product development programme

Where top management is involved in most issues, there is a higher likelihood of success. The style of management that distanced the Chief Executive Officer from the production floor and operational detail has long been regarded internationally as counter productive (Peters & Waterman, 1982; Johne & Snelson, 1990). In the South African context where an autocratic and patriarchal mode has been characteristic of corporate behaviour, it is interesting to note that the research confirms lower levels of success being associated with this style of management.

Types of functional specialists available for carrying out old and new product development

The use of Research and Development managers is positively correlated with success. This finding is not surprising: the appointment of Research and Development Managers reflects a serious commitment to the new product development process. Based on the effects of the experience curve, this commitment results in greater frequency of success in developing new products (Booz & Hamilton, 1982).

Clearly, these issues would need to be incorporated in the development of a new model for further research. Although statistically significant relationships could not be established outside of these four variables, summary statistics aided in the development of a set of characteristics for leading South African innovators. This profile is reflected in Table 6. These findings are very similar, in the most important aspects, to the findings of Johne & Snelson (1990).

Conclusions

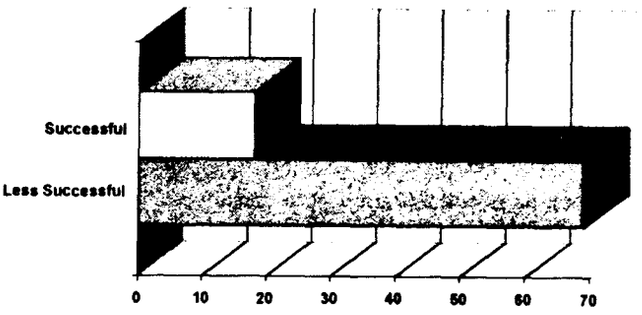
Is there anything that can be learnt from this research by South African firms with little or no experience of product development?

Most effective strategies

The research would suggest that aggressive/offensive strategies that are derived to capitalize on market opportunities are likely to be successful. Furthermore, product development programmes should 'stick to the knitting' (that is, stay close to home), and be technologically aggressive. A first to the market approach is favoured where the firm seeks technological leadership. Furthermore, new product development needs to be reviewed as being the more important means for growing the business, and new product strategies need to be integrated into the formal planning process. Specifically, new product objectives need to be set.

Kind of leadership required

The research suggests that leadership of successful companies have a 'hands-on' approach, they get involved in most

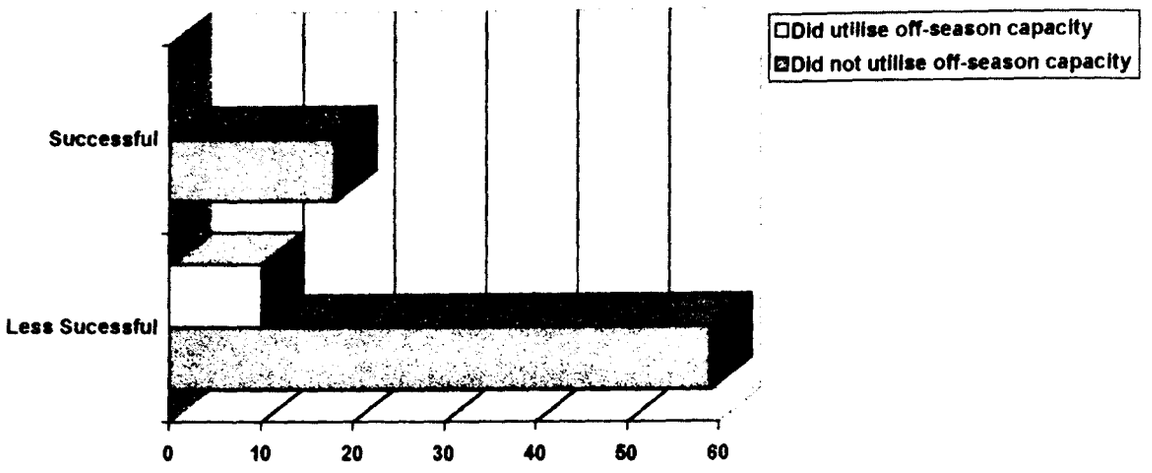


	Frequency	Percentage
Successful	18	20.7
Less successful	69	79.3

Figure 1 Companies categorized by successful/less successful

Table 6 Characteristics of leading South African innovators

Strategy	Top management, using a group approach, determines explicit plans for development work and sets broad objectives for organic growth.
	Aggressive/offensive strategies are utilized, favouring market penetration and market development for corporate growth.
Shared values	Top management fosters understanding of the need for product evolution and the need for really new products. A key cultural requirement for success is the tolerance of failure.
Style	Top management evidences a hands-on approach, is supportive but does not interfere in product development projects. Progress is checked regularly. Top management is intimately involved, often on a day-to-day basis in new product development. The approach to product innovation is offensive.
Structure	Top management uses the existing organization. Limited use is made of new organizational forms, such as business teams, to nurture important developments outside the mainstream organization.
Skills	There is efficient product planning using sophisticated market analysis techniques. Very little collaboration with specialist agencies is evident.
Staff	Emphasis is placed on the use of internal research and development managers for carrying out old and new product development.
Systems	A simultaneous or rugby approach is used.



	Did not utilize	Did utilize	Total
Successful	100% (18)	0% (0)	18
Less successful	85.5% (59)	14.5% (10)	69
Total	77	10	87

p-value = 0.086, 0.1= = Significance level

Figure 2 Utilization of off-season capacity

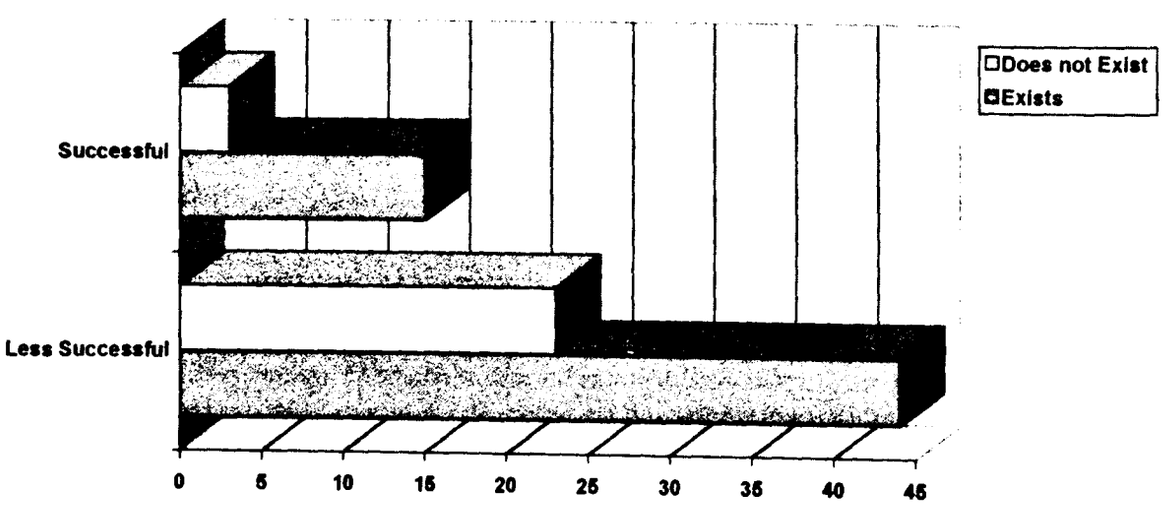
issues, are primarily responsible for setting explicit budgets and plans for development work and use a group approach for formulating corporate strategy. They reflect a bold attitude to risk and an offensive approach to product innovation. They draw on ideas from all levels in the company and delegate responsibility to departmental executive level.

Skills needed to undertake product development effectively

A marketing advantage is seen as a key prerequisite for new product success. Internally, clear guidance on ideas and the development process are characteristics of successful innovators, as is collaboration with consumers, the retail trade and scientific/technical establishments. Skill in the development of both old and new product development is evident in the successful companies. Again the emphasis is on skills internal to the company, for example market research, research and development, with little use being made of external agencies.

Where to from here

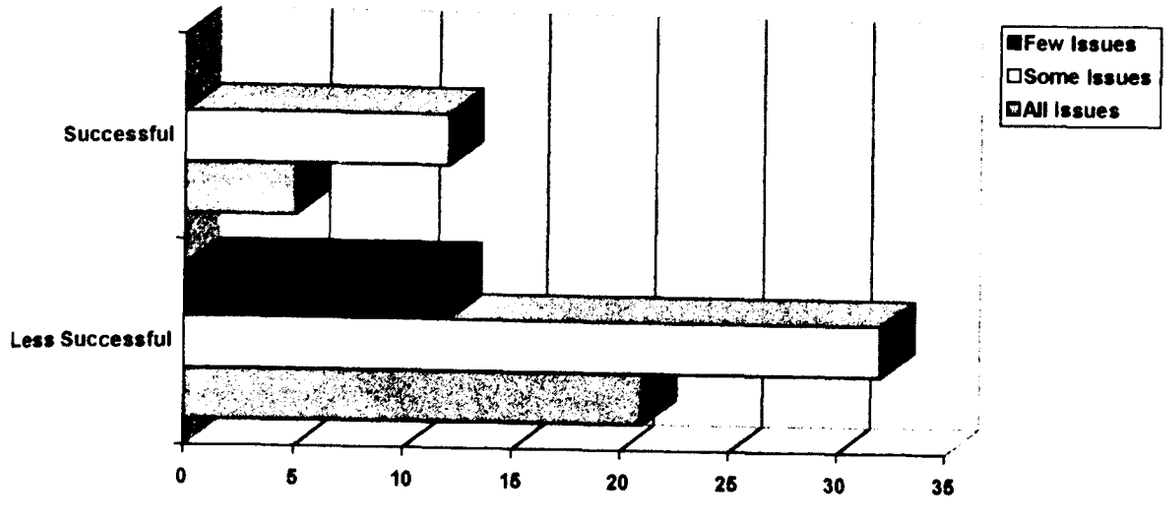
It must be noted that the research also revealed that South African companies, although successful when measured in terms of market capitilization, are not leading innovators. The definition of successful innovators used for this research was not a challenging one – yet very few of the companies



	Exists	Does not exist	Total
Successful	83.3% (15)	16.7% (3)	18
Less successful	65.7% (44)	34.3% (23)	67
Total	59	26	85

p-value = 0.149 > 0.1 = = Significance level < 0.15

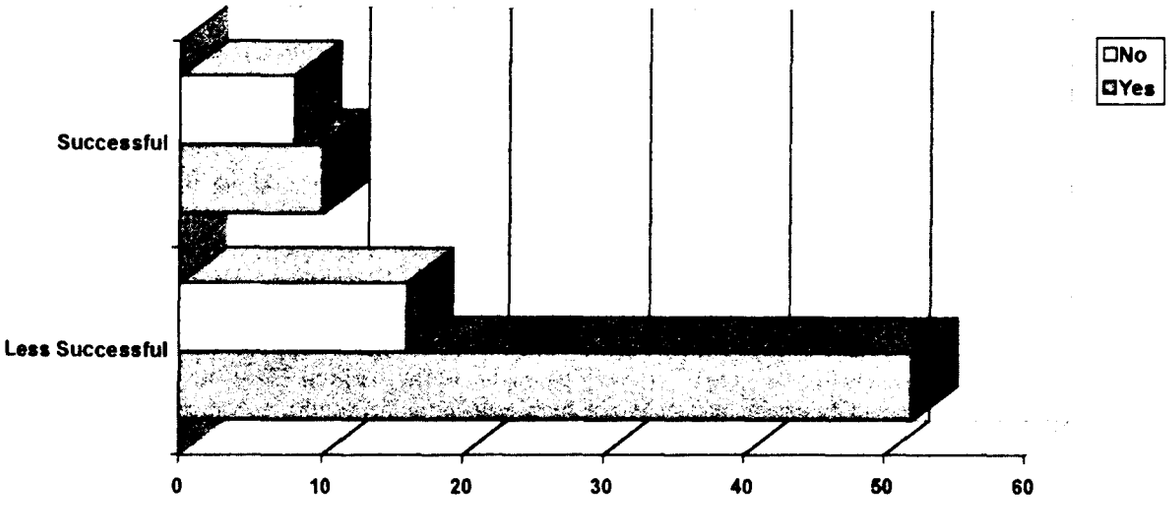
Figure 3 Existence of a formal mission statement



	All issues	Some issues	Few issues	Total
Successful	29.4% (5)	70.6% (12)	0% (0)	17
Less successful	32.3% (21)	49.2% (32)	14.6 (12)	65
Total	26	44	12	82

p-value = 0.115 < 0.1 = = Significance level < 0.15

Figure 4 Extent of involvement by top management



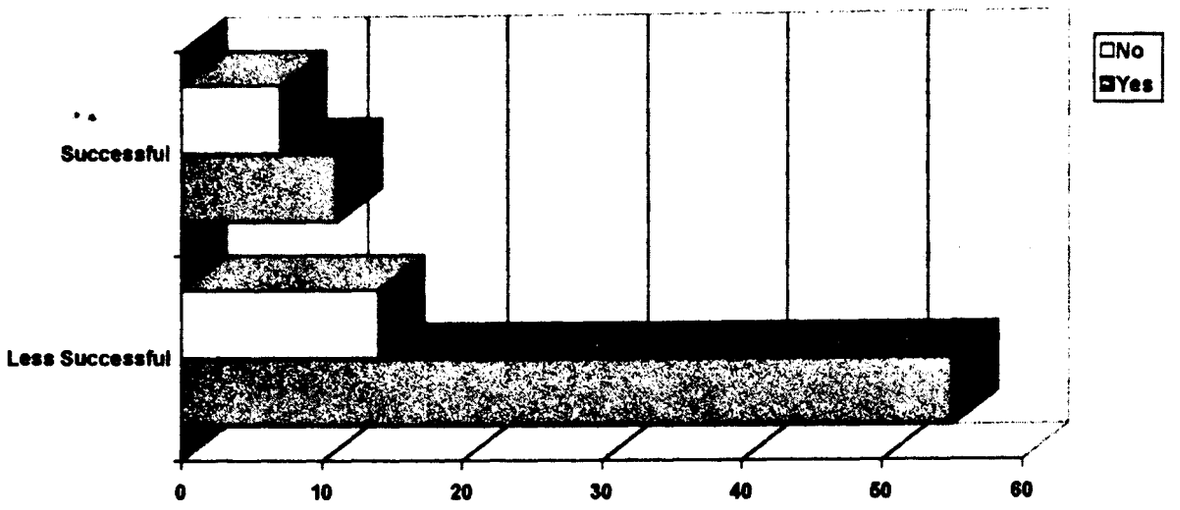
	Yes	No	Total
Successful	55.8% (10)	44.4% (8)	18
Less successful	76.5% (52)	23.5% (16)	68
Total	62	24	86

p-value = 0.08, 0.1= = Significance level

Figure 5 Use of R&D managers (old)

surveyed actually qualified for this category. On the basis that only 18 out of the companies surveyed could be categorized as being successful *innovators*, logic would suggest that the 'success' of the remaining firms must be attributed to factors other than product innovation. This is supported by the research findings which revealed that, for these firms, old product development accounts for the largest part of their development activity. This is explained in large part by the nature of our markets: for decades, volume growth in many markets in South Africa has been virtually guaranteed by the high rate of population growth, taking the edge off the need to innovate. This however presents a number of problems: from a manufacturing perspective South Africa is slipping behind in terms of overall competitiveness (*Financial Mail*, 1994). This is largely due to a lack of investment in manufacturing plant and equipment over the past decade, and lower productivity coupled with higher costs. It is also believed that our lack of responsiveness to market needs has contributed to our relatively low level of competitiveness internationally (World Competitiveness Report, 1995). From this weak base, South African business is now faced with ever increasing domestic competition from the international companies as they venture back to South Africa: these companies cannot afford to be complacent.

The usual response to such criticism is to call for another economic think-tank. This is not the answer: rather, the individual companies need to re-look their cost structures and their responsiveness to the market place. More emphasis



	Yes	No	Total
Successful	61.2% (11)	38.8% (7)	18
Less successful	80% (55)	20% (69)	68
Total	66	21	87

p-value = 0.95, 0.1= = Significance level

Figure 6 Use of R&D managers (new)

needs to be placed on market research and research and development. More collaboration with external agencies is also needed. A balance needs to be created between old and new innovation activity.

There are several factors that influence success in respect of product innovation:

a. The amount of funding given to research and development.
b. The 'success rate' of the product development programme, that is, the extent to which the final figure (quoted by companies in the study) reflects just the commercialized products and not the failures that precede this stage.
c. The product life cycle: which will influence the innovation programme of a particular company in a particular product market. (The stage at which you capture the company's performance will influence its categorization as a successful or less successful company.)
d. The business cycle will have a generalized effect on the level of the product innovation: during a recession, the amount of resource devoted to product development is more limited, and issues of liquidity, return on investment, cash flow, *et cetera* become more critical. This provides disincentives to new product development.
e. The level of investment in research and development during a recession: companies that continue to invest despite the recession are usually in the best position to capitalize in the business recovery period.
f. Recession may be 'global' from the national economic point of view, but this does not mean that there are no niches where opportunity exists. Some companies (the successful ones) actually look for opportunities for growth niches within the recessionary climate, and actually develop products for these niches to sustain them through to the period of general business recovery.

Some variables have been identified in this research (for example: culture, use of mission statements): these need to be refined and expanded into a model that could possibly predict success. To do this, a broader sample base is required that would look at a larger range of successful *versus* less successful companies.

If the need for further research along the lines outlined above is accepted then the question arises how such further research can be pursued. For developed countries there are likely to be considerable advantages in studying closely the practices of British, Japanese and American businesses which are successful in retaining and building on a position of success in particular world markets. These advantages however do not apply equally in the South African context, where the economy is in rapid and fundamental transition. The structural distortion of our economy will need to be redressed by placing a spotlight on small and medium businesses, to fuel growth into the 21st century. As small firms contribute disproportionately to the levels of innovation in a nation, this should contribute to an improvement in our competitive position. Furthermore, with increased stability in terms of fiscal and monetary policies, as well as a return to social stability, business confidence will seek investment with longer time horizons, and this will foster a more innovative approach to development programmes. Research in the field of product innovation in South Africa therefore requires a different approach. Medium-sized and small firms should be examined, in countries where a similar magnitude of change has taken place. It is in this context that further research is recommended into new product strategy in Brazil or selected Pacific Rim countries. This may not be practical given the distance and the language or cultural impediments. The alternative would be to seek comparison between successful South African medium to small firms and those of our more immediate neighbours namely Malawi, Botswana and Zimbabwe.

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