

**IDENTIFICATION AND EVALUATION OF THE KEY FACTORS
AFFECTING THE SUSTAINABLE EXPORT OF CLAY
PRODUCTS BY SOUTH AFRICAN CLAY BRICK
MANUFACTURERS.**

By

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'CONFIDENTIALITY CLAUSE'

25 May 2003

To whom it may concern

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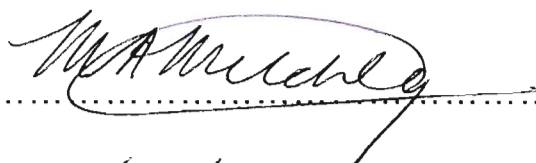
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DECLARATION

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I, Mark Allan Mitchley, student number 201 509 470, final year MBA student at the University of Natal, Graduate School of Business, confirm that the work contained within this document is my own and that all references used are accurately reported.

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This dissertation is dedicated to all those affected by it, in particular my loving wife, Tania and my children, Jamie Lee and Taine Allan.

ABSTRACT

The South African Clay Brick Industry has experienced major change in the last 9 years. Industry driving forces such as globalization, low industry growth rates and government policy changes have affected the local industry as have the bank interest rates and the relative weakness of the SA currency. These industry-driving forces have resulted in a number of local producers undertaking exports of products.

The research underlying this report had a threefold objective:

- a) To identify the key factors affecting the sustainable export of clay products by SA producers.
- b) To evaluate the key factors affecting the sustainable exports of products by SA producers.
- c) To utilize the information gathered to identify the critical success factors that support or discourage export development in the Clay brick Industry. The key factors were also used to develop a export success model and assist the aspiring exporter through the process.

In order to research the key success factors, it was necessary to firstly analyze modern business strategy and evaluate the chosen strategy. Thereafter, an industry analysis was carried out and the present situation within the industry evaluated. Research was conducted by means of a questionnaire and selected interviews with the industry.

The results from the research make it possible to reach conclusions regarding critical success factors and specific factors that will assist the industry in its export drive. The research also identified a host of government –sponsored export incentives that will support the industry in growing exports. Finally, a number of recommendations were made that will go a long way in addressing industry challenges.

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CHAPTER ONE

1.1 Summary of the Proposal

South Africa is a major producer of fired clay products such as bricks, quarry tiles and pavers. More than 3.5 billion are produced annually in RSA by over 220 brick and tile manufacturers countrywide. Due to its reliance on the South African economy and primarily the local construction industry, clay brick and tile manufacturers experience recurring cycles of excess demand or industry recession.

As one of the largest employers of unskilled and semi-skilled labour in South Africa and an industry that is noted for its high capital requirements, more stable markets and demand would assist in ensuring a sustainable industry within the borders of South Africa. This research proposal endeavors to identify and evaluate critical factors that affect the export of fired clay products manufactured in South Africa.

Recommendations can then be made to producers to assist in their export plans. The research has the expressed support of the South African Clay Brick Association and its membership.

1.2 Background Review

The objective of this study is to investigate what factors impact on the potential for clay product manufacturers to export their products to other countries, thereby ensuring a wider exposure to less cyclical demand. By undertaking the study, the expectation is to be able to not only identify the positive and negative factors affect export potential, but also to evaluate these factors and hopefully make recommendations that will contribute towards the industries sustainable growth.

An early interview with the Executive Director of the Clay Brick Association identified that although there are only a handful of producers presently exporting

products, that many manufacturers have considered the potential of exporting in the last 3-5 years. Unfortunately, at present less than 1% of the countries production is exported by less than 4 companies. The CBA has also requested that the role that they play in the future of clay product exports also be evaluated.

1.3 Problem Statement

The problem statement can be defined as follows:

" What are the major factors that impact on the sustainable export of fired clay products by RSA producers and evaluate each factor according to its level of importance?"

1.4 Research Objectives

The objectives of this research dissertation are defined as follows:

- ◆ Undertake an analysis of the clay brick export industry and identify which factors are expected to impact on sustainable exports.
- ◆ Analyze the current situation within the industry.
- ◆ Determine key factors that effect exports of fired clay products manufactured in South Africa.
- ◆ Evaluate the impact that these factors have on exports of fired clay products from South Africa.
- ◆ Make recommendations and draw conclusions based on the analysis of the information received.

Although the potential to export fired clay products (FCP's) such as face bricks, quarry tiles and pavers appears to hold out many opportunities for entrepreneurial S.A. manufacturers, very few producers actually successfully export product on a

regular or sustainable basis. To date, no formal studies have addressed the potential to export, available opportunities or even undertaken an exploratory study of the subject. This study intends to use a cross-section of clay brick manufacturers to identify which factors play a role in the export of burnt clay products and then to rank these factors relative to the importance that they play in exporting. The evaluation of the major factors will provide the researcher with insight that will allow for certain recommendations to be made to the South African Clay Brick Association regarding future steps to be undertaken by the industry to promote the development of exports.

1.5 Literature Review

Exports have played an increasingly important role in the South African economy since 1994. Over this period they have grown in real terms by 41% and their share in the GDP has increased to 19% from 13,5%. Exports help to overcome the inherent size limitation of the relatively small South African domestic market and are our most important source of foreign earnings. Through competition and specialization, exports increase the general competitiveness of the economy. Factors that are responsible for the increase in exports include the depreciation of the Rand, more competitive prices for manufactured and agricultural goods and the effect of the EU trade agreement. Main export partners of South Africa are:

<u>Continent</u>	<u>R's billion</u>	<u>% of total</u>
Europe	70,315	39,32%
Asia	45,525	25,46%
America	31,015	17,34%

(Internet 1)

Free trade results in countries specializing in the production of those goods and services that they can produce most efficiently. (Hill, Int Business , 2002)

Comparative advantage arises from differences in national factor endowments (Heckscher-Ohlin Theory, 1933). Countries will export those goods that make intensive use of those factors that are locally abundant.

Porters thesis is that 4 attributes of a nation shape the environment in which local firms compete and these attributes promote or impede the creation of competitive advantage. They are factor endowments, demand conditions, related and supporting industries and firm strategy, structure and rivalry (Porters Diamond, The competitive advantage of nations, 1990). Porter argues that nations firms gain a competitive advantage if their domestic consumers are sophisticated and demanding. Vigorous domestic rivalry induces firms to look for ways to improve efficiency, which makes them better international competitors.

Containerization has revolutionized the transportation business, lowering the costs of shipping. When transport costs are added to cost of production, it becomes unprofitable to ship products that have a low value-to-weight ratio over a large distance. (Hill, Int. Business, 2002). Employment effects of exporting are the potential for the creation of jobs directly and indirectly via suppliers. Sustainable exports contribute towards the creation of currency inflows into the country. In exporting, the major drawback is the high cost of transport. However, the firm will want to export into selected regions where rates are lowest.

The export market is generally so much larger than the local market, that exporting is nearly always a way of increasing the revenue and profit base of the company. Typically, reactive firms do not even consider exporting until the domestic market is saturated and the emergence of excess productive capacity at home forces them to look for growth opportunities in foreign markets.

Firms need to be proactive in seeking export opportunities. Simple ignorance is a huge barrier to exporting (Hill, 2002).

An industry's key success factors are those things that affect industry member's ability to prosper in the marketplace. KSF's by their very nature are so important that ALL firms in the industry must pay close attention to them - they are the prerequisites for industry success. Only rarely does an industry have more than 3 or 4 key success factors at any one time. The purpose of identifying KSF's is to make judgements about what things are more important to competitive success and what things are less important. At the very least, managers need to understand the industry situation well enough to know what is most important to success. (Thompson & Strickland, 2001) The most common key success factors are:

Manufacturing - related KSF's

- Low cost production efficiency
- Quality of manufacture
- High utilization of fixed assets

Distribution - related KSF's

- Strong network of wholesalers / dealers
- Low distribution costs
- Short delivery times

Marketing - related KSF's

- Accurate filling of buyers orders
- Breadth of product line and selection
- Attractive and quality packaging
- Clever advertising

Skills - related KSF's

- Superior workforce talent
- Quality control know-how

Other types of KSF's

- Convenient locations
- Access to financial capital

There are a few critical factors that will affect the export readiness of your business. (Internet 2). They are:

- I. Management's commitment to exports
- II. Management skills in international business
- III. Financial resources
- IV. Technical know-how
- V. Capacity to supply
- VI. International marketing intelligence and know-how
- VII. Readiness of product to export
- VIII. Market potential
- IX. Product adaptability to suit export markets
- X. Cost structure
- XI. Competitors products

Export strategy can build on these 5 main principles;

- 1) Enter on a small scale to reduce risks
- 2) Add additional products once successful
- 3) Hire locals to promote the firms products
- 4) Initially focus on one market or a handful of markets
- 5) Hire an export co-ordinator to manage exports.

All companies aim for revenue growth, profitability and creation of value as their objectives. A grand strategy of market development (selling present products in new markets) or opening additional geographic markets is the least costly and least risky of the grand strategies.(Phillip Kotler, marketing management analysis,1999).

This strategy needs to be evaluated based on suitability, acceptability and feasibility. From a suitability perspective, why is this a good idea? Cyclical nature of domestic market, inflow of hard currency, sustainable market, market size and future growth potential. From an acceptability perspective, are the expected performance outcomes such as profitability (ROCE), financial risk and breakeven covered. Is the project feasible? Do we have the resources and competencies to deliver the strategy? (Johnson & Scholes , Strategy evaluation and selection, 2002).

1.6 Research Design and Methodology

1.6.1 Sample Design

Due to the large number of brickwork's countrywide and the diversity of their product ranges and economic resources, it would be a futile exercise to accept that this would serve as a reliable and truly representative population. The S.A Clay Brick Association has a membership of more than 72 companies countrywide that constitutes more than 85% of the countries production and are fairly representative of the industry in South Africa. I have taken this collection of companies as my population.

The low cost, regional, commodity nature of non-facing plaster bricks (NFP's) excludes producers of these products from any export potential. This is a known and thus all NFP - producers have been excluded from the sample selection. The size of the producer also plays a role in their ability to supply products on a sustainable basis to any markets and because of this, only producers of 3 million or more bricks per month have been used to produce a sample.

Segregation of the population into a mutually exclusive subpopulation has been implemented based on the following characteristics:

1. Member of the South African Clay Brick Association
2. The company produces a minimum of 3 million bricks per month
3. The producer manufactures facing bricks, pavers and / or quarry tiles.

From this subpopulation, a random sample has been drawn. The sampling selection is a random sample using a probability sample.

1.6.2 Sampling Size and Selection

The size of the sample has been decided on based on the relative homogeneity of the population and the fact that the sample size exceeds 5% of the population. The population is 44 companies and we have chosen a sample size of 12 respondents, which will be randomly selected from among these producers. Each population group has been given a number and the sample has been drawn using a random number generator.

1.6.3 Data Collection

Data collection is in the form of limited personal interviews and the instrument is self-administered questionnaires. The choice of personal interviews was based on the depth of information and the level of detail that is required. Interviewing has also provided opportunity to gather supplementary information. Respondents are limited to senior management staff including owners, CEO's, General Managers and Sales and Marketing Directors. The questionnaire commences with administrative questions, followed by view-type questions and then specific questions.

In order to structure and easily quantify dimensions of the interview, rating scales are used. A combination of simple category scales, single response scales, Multiple choice and multiple rating list scales are used.

1.6.4 Data Analysis

After editing, the resulting data will first be entered into a cross-tabulated form to ascertain statistical relationships using Excel spreadsheets. The results will be tabulated or represented graphically and reported on accordingly.

1.7 Significance of the Study

- To highlight the most significant contributing factors that impact upon the exporting of burnt clay products from South Africa, irrespective of whether the contribution is positive or negative.
- To evaluate which factors have the greatest influence upon the exporting of burnt clay products, irrespective of whether the influence is positive or negative.
- Recommendations on overcoming or circumventing the factors that negatively impact and outlining methods in which the positive factors can be formalized to assist in creating greater export opportunities.

To enable the Clay Brick Association and its members to use the findings from the study to adopt a more structured approach to the exporting and use the study recommendations as a guide. The beneficiaries are the Clay Brick Association and its members and the major benefit is in the completion of the first leg of a study to evaluate export as a potential and sustainable outlet for the sale of clay products manufactured in South Africa.

1.8 Limitation of the Study

The scope of this research project is limited to the identification and evaluation of the factors that impact on the sustainable export of fired clay products. The project will then take these factors and will make recommendations and draw conclusions. This research dissertation is in no way a final report on the subject. It is expected,

that the findings will open up further areas that require research to be done and that this will lead to the establishment of an export council within the CBA and that this council will be in a position to lobby the Department of Trade and Industry for support in developing exports on a continuous basis.

A further limitation of the study is that the project only evaluates the most critical factors that impact on exports. The study does not carry out any further work on the reasons for these factors affecting exports or alternatively, measure the effect that these factors have on exports. The level of importance of each factor is based purely on the inputs from respondents and is not measured for accuracy in the field.

1.8.1 Assumptions

The implementation of the interviews and data collection is based on the following basic assumptions:

- That respondents answer honestly
- That the interviewer is trained to carry out the interviewing
- That an accepted measurement scale will be utilized on the questionnaires

1.8.2 Structure of the Research

Chapter 2 considers the applicable theory of strategy and analyses issues such as the factors that affect a choice of strategy, PEST analysis, SWOT analysis, driving forces, Key Success Factors, Porter's diamond and generic and grand strategies. The chapter concludes with a discussion on evaluating strategy.

Chapter 3 attempts to overview the present situation within the Clay Brick Industry in SA. This chapter analyses the external environment and profiles the dominant economic factors within the industry. It also analyses the competitiveness of the

industry and overviews the strengths, weaknesses, opportunities and threats facing companies within the industry.

Chapter 4 discusses the driving forces that are changing the conditions within the Clay Brick Industry, the motive behind pursuing an export strategy and then evaluates an export strategy as one of the Grand strategic choices according to suitability, acceptability and feasibility. Chapter 4 analyses the results of the research project and clearly identifies and evaluates the factors affecting the sustainable export of clay products.

Finally, Chapter 5 proposes an approach to undertaking exports of clay products by local producers and introduces a generic business model that aspiring exporters can follow.

1.9 Conclusion

This research dissertation will provide a conclusive report of factors that affect exports of clay products. The report will also evaluate the factors according to their level of importance and then based on this evaluation, recommendations will be made drawn from conclusions made of these factors. The research program and its findings will also serve as the foundation for further research work on the subject or related issues by the Clay Brick Association of South Africa.

CHAPTER 2

"Strategy in context"

2.1 Introduction

Among all the things that business managers and owners do, nothing affects a company's or industry's ultimate success or failure more fundamentally than how well its management sets the company's long-term direction, develops competitively effective strategic moves and implements what needs to be done to produce good strategy execution. Although good strategy combined with good execution does not guarantee that a company or an industry will prosper, it is certainly more likely that the company or industry will perform better and exhibit a more focussed approach to its business.

It is a well known fact that the strategic process includes, adopting a strategic vision, establishment of a set of performance expectations or objectives, the design of a suitable strategy to achieve these outcomes and then the implementation or execution of the strategy. Generally, the above functions are also evaluated on an ongoing basis to highlight the necessary changes required and to make provision for changing internal and external environmental conditions. (The concept of corporate strategy, K.Andrews, 1987)

A company's strategy consists of the competitive efforts and approaches that are employed to compete successfully and achieve organizational or industry objectives. Strategy making brings into play the critical management issue of how to

achieve the targeted results in light of the organizations or industry's situation and prospects. (Corporate Strategy, Richard Lynch, 2000)

Generally, organizations have both financial and strategic objectives. The financial objectives include issues such as earnings growth, return on capital employed, beating the cost of capital, improving cash generated and the like. Strategic objectives include such things as a growth in market share, gaining a sustainable competitive advantage, overall growth, adopting new technologies and improving the long term business standing of the company or industry. (Competing for the future, Harvard Business School Press, Hamel & Prahalad, 1994)

There are both short and long-term performance objectives. Short-term strategy involves changes that need to be made immediately by the organization to improve outcomes that are below par or need specific attention. Long-term strategies ensure that manager's and owners are paying attention to what can be done now to position their companies or industries to be competitive in the long term. Strategy development is typically a blend of:

- I. Deliberate and purposeful actions.
- II. Reactions to market conditions and competitive pressures.
- III. Collective learning by the organization or industry over time.

Strategy tends to be company specific, customized to suit the company's own situation and performance objectives. As generic competitive strategies some companies pursue low cost leadership, others focus on differentiating their offerings, others focus on narrow market segments, while some compete only locally, while others compete globally or internationally. For a company or industry to be successful, its strategy and business model have to be well matched to the present and future environment.

Both external environmental and industry factors result in ongoing changes that make strategy making an ongoing process. (Organization Strategy, Structure and Process, Miles & Snow, 1978)

Developing a strategic vision and mission, establishing a set of objectives and deciding on a strategy are basic direction-setting tasks. They map out where the organization is headed, short and long-term performance goals and the external moves and internal actions that are required in achieving the targeted results. This effectively constitutes a strategic plan for coping with industry and competitive conditional changes actions of competitors and obstacles that might impede the company's growth or development.

It is common for the strategic plan to be a document that describes the industry economics, key success factors and change drivers along with the plan for dealing with the external and internal environment.

Implementation of the strategy generally entails the preparation or building of an organization capable of carrying out the proposed strategy, allocation of the required resources, providing operating procedures, creation of a culture that can support the strategy, installation of operating systems that make implementation possible and leadership. Finally, it is imperative to evaluate the performance, monitor changing or new developments and implement corrective adjustments.

2.2 Factors that shape a company's strategy

There are a host of factors that shape a company's or industry's strategic approaches. Thus, the starting point in crafting strategy is by undertaking an analysis of all the external and internal environmental factors. All organizations operate within the broader community of society. Figure 1 indicated below, graphically outlines the factors that shape the choice of strategy.

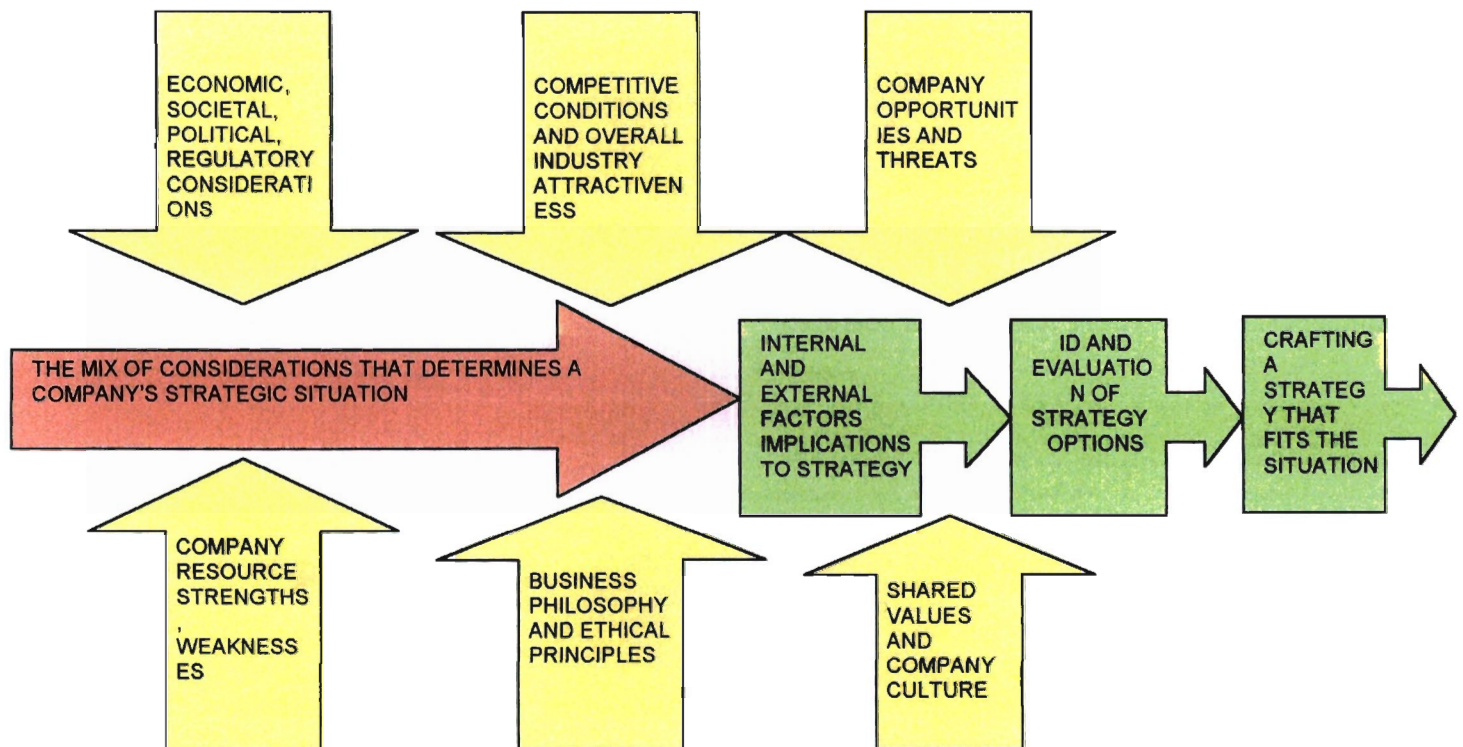


Figure 1.

Strategy formulation is constrained by legal, what complies with government policies and regulations, as well as what is considered ethical and what meets with society's expectations. Factoring in societal values and priorities, business ethics and regulatory requirements is a common and important part of external situation analysis.

An industry's competitive conditions and overall attractiveness are large strategy – determining factors. The industry environment, as it exists now and is expected to be in the future, has a direct bearing on the choice of best competitive strategy and the choice of strategy has to fit the 'real' industry and competitive situation or it is doomed to failure.

Before considering the industry and competitive analysis, there are crude tests to access the best strategic option for a company and they are:

- ❑ **The Goodness of Fit Test** – unless a strategy exhibits tight fit with a company's external situation and internal circumstances, it is likely to produce less than the best results.
- ❑ **The Competitive Advantage Test** – a good strategy leads to sustainable competitive advantage. The bigger the competitive edge that a strategy helps build, the more powerful and effective it is.
- ❑ **The Performance Test** – A good strategy boosts performance, namely, gains in profitability and gains in long-term market position.

The strategic option that best meets all three tests can be regarded as the most attractive option. There are other criteria, such as completeness, internal consistency, degree of risk involved and flexibility.

It is useful to think of the company as a value chain composed of a series of distinct value creation activities that include, production, marketing, materials management, research and development, human resources and information systems. The primary activities of the firm have to do with creating the product, marketing and delivering the product to customers and provision of after – sale service to the buyer of the product.

Efficient production reduces the cost of creating value and can add value, when product quality is increased. Efficient marketing can help the firm reduce its production costs and add value by helping the firm customize its product to meet consumer's requirements and differentiate it's products from that of competitors.

Strategy is often concerned with identifying and taking actions that will lower costs of value creation and / or differentiate the firm's product offering through superior design, quality, service or functionality. (Charles W.L Hall 2002).

The crafting of a strategy needs to flow from a solid analysis of:

- 1) The external environment.
- 2) The organization's internal situation.
- 3) Industry and Competitive conditions.
- 4) An organization's own capabilities, resources, strengths and weaknesses.

All organizations operate in a macro – environment consisting of the economy, societal values, government and industry legislation, technology and the industry competitive environment. The macro-environment includes all forces outside a company that have a bearing on the decisions that a company will make about its future.

There is a defined process in sizing up a company's overall situation and then deciding on a suitable strategy. The analytical sequence is from an analysis of the company's external and internal situation, to evaluation of alternatives, to choice of strategy. (Crafting & Executing Strategy, Thompson & Strickland, 2001)

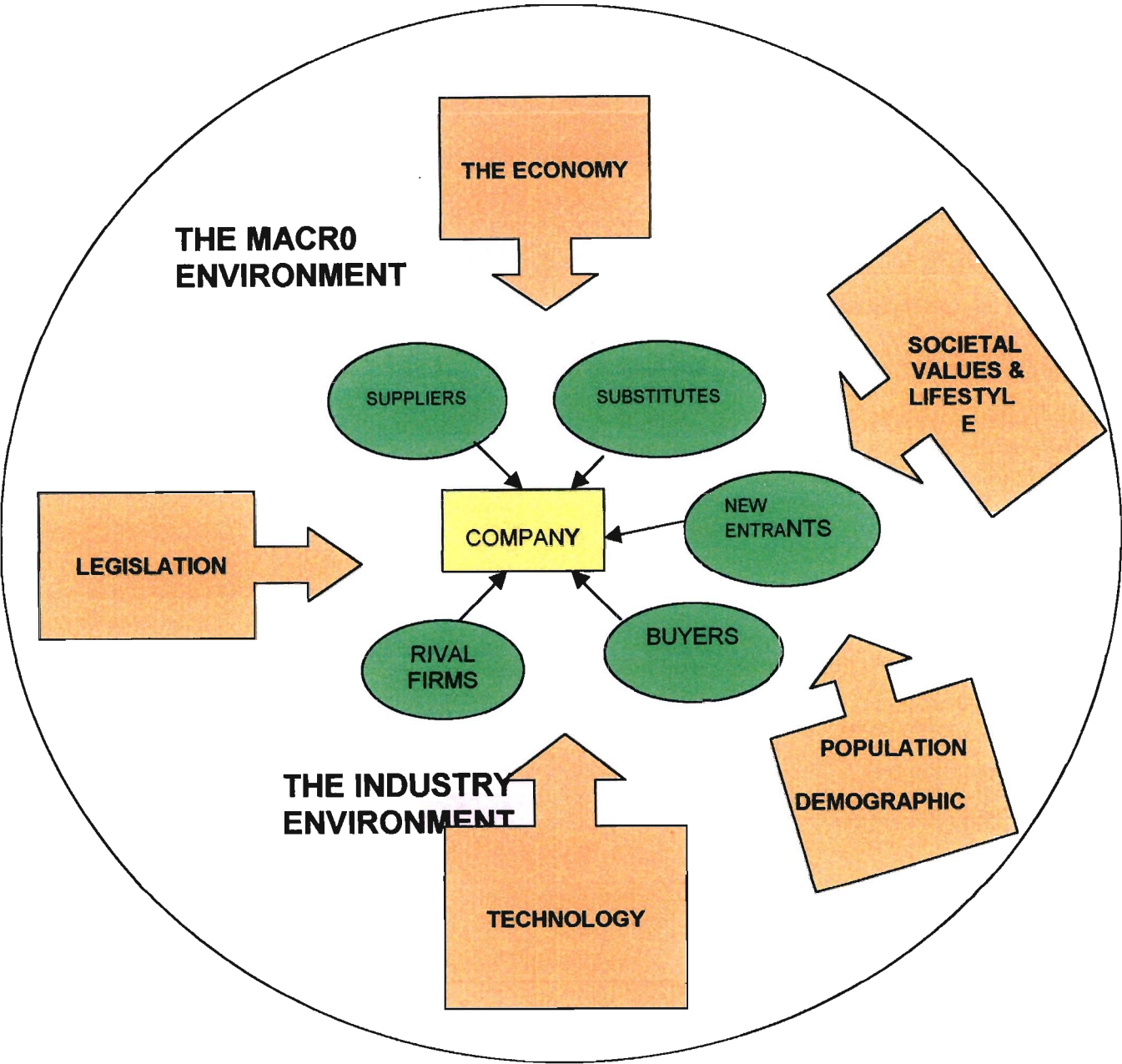


Figure 2 . A company’s macro – environment

2.3 P. E. S. T. Analysis

This is effectively a checklist of the **Political, Economic, Social-Cultural** and **Technological** aspects of the environment. Figure 3 presents some of the main items that should be considered when undertaking a PEST analysis.

Checklist for a PEST analysis (Corporate Strategy, Richard Lynch, 2000)

2.3.1 Political Future

- Political parties and alignments
- Legislation e.g. taxation and employment law
- Relations between government and the industry
- Government ownership of related industry and attitude towards monopolies

2.3.2 Economic Future

- Total GDP and GDP per capita
- Inflation
- Consumer expenditure and disposable income
- Interest rates
- Currency fluctuations and exchange rates
- FDI
- Cyclicity
- Unemployment
- Energy costs , transport costs , raw material costs and communication costs

2.3.3 Socio- Cultural Future

- Shifts in values and culture

2.3.3 Socio- Cultural Future

- Shifts in values and culture
- Change in lifestyle
- Green environmental issues
- Attitudes to work
- Education and health issues
- Demographic changes
- Distribution of income

2.3.4 Technological Future

- Identified new research initiatives
- New patents and products
- Level of expenditure on R&D

Another popular analysis of external environmental changes is the Scenario-based analysis. A scenario is a model of a possible future environment for the organization, whose strategic implications can then be investigated.

2.4 The Internal Situation Analysis and Identification of a company's competencies, weaknesses, opportunities and external threats.

A well-utilized model in the analysis of strengths and weaknesses (internal) and opportunities and threats (external) is the SWOT analysis. As a starting point for the development of strategic options, Professor Kenneth Andrews first identified the importance of connecting the organization's mission and objectives with its strategic options and subsequent activities. His claim was that a SWOT analysis of the organization – its strengths, weaknesses, opportunities and threats – is a useful way of summarizing the current status of the organization. This approach follows from the distinction drawn by Andrews between two aspects of the organization:

1. Strengths and Weaknesses – resource based analysis
2. Opportunities and Threats – environment based analysis.

In the SWOT analysis, it is important to relate strengths and weaknesses to critical or Key Success Factors (KSF's). Analysis should clearly distinguish between where the company wishes to be and where it is now (gap analysis)

Some factors to be taken into account in a SWOT analysis

Strengths

- Market dominance
- Core Strengths
- Economies of Scale
- Low cost producer
- Management skills
- Financial resources
- Manufacturing abilities
- Innovation
- Reputation
- Differentiated products
- Service and Product quality

Weaknesses

Few core strengths
Old Plant and high costs
Poor cashflow
Financial weakness
Leadership lacking
Poor record of innovation
Weak organization
Low quality and reputation
Undifferentiated products

Opportunities

- New markets
- New products
- Market growth
- Competitor weakness

Threats

New market entrants
Increased competition
Substitute products
Low market growth

- | | |
|-----------------------------------|---------------------------------|
| • Demographic change | Economic cycle downturn |
| • Change in political or economic | Technological threat |
| • Economic upturn | Demographic change |
| • International growth | International barriers to trade |

(Corporate Strategy, Richard Lynch, 2000)

Industries differ greatly in their economic characteristics, competitive situations and future prospects. The economic character of industries varies according to factors such as overall market size and growth, pace of technological change, geographic boundaries of the markets number and size of buyers and sellers and types and number of distribution channels. It is important to examine an industry or business in the context of a much wider environment. The strategist seeks to answer the following:

1. What are the industry's dominant economic factors?
2. How strong are the competitive forces within the industry?
3. What is causing change within the industry?
4. What strategic moves are competitors expected to make next?
5. What are the key factors for competitive success?
6. Is the industry and attractive one and what are the profit prospects?

In order to attempt to answer the above questions, it is necessary to have a sound understanding of a firm's environment. A good way to start is to build up an overview of the industry's dominant economic features or in simpler terms, a profile of the industry dominant economic factors. (Thompson and Strickland , 2002) The factors to consider are:

- Market Size
- Scope of competitive rivalry (local , regional , national , international)
- Market growth rate and position in the business life cycle.

- Number of competitors and their relative sizes.
- Number of buyers and their relative sizes.
- Are industry rivals integrated backward or forward?
- Types of distribution channels
- Pace of technological change
- Whether products and/or services are highly differentiated
- Can companies realize economy of scale benefits
- Rates of capacity utilization
- Capital requirements
- Whether industry profitability is above or below par.

Economic factors have a major impact on choice of strategy, as does the competitive environment within the industry. Professor Michael. E. Porter of the Harvard Business School indicated in “ How Competitive Forces Shape Strategy “, dating back to 1979, that the state of competition within an industry is a composite of five competitive forces:

1. The rivalry among competitors within the industry
2. The potential new entry of new competitors
3. Attempts by companies in other industries to win customers over with substitute products.
4. Competitive pressures from supplier – seller collaboration and bargaining
5. Competitive pressures from seller – buyer collaboration and bargaining.

Porter’s five forces model has become a business standard for systematically identifying the main competitive pressures in a market and assessing how strong and important each one is. The major contribution of the five-forces model is the thoroughness with which it exposes what competition is actually like. As a general rule, *the stronger the collective impact of the sum of the competitive forces the lower the overall profitability of competing firms.*

The competitive structure of an industry is clearly “unattractive” from a profitability perspective if rivalry among sellers is very strong, low barriers to entry allow new rivals to gain a foothold, competition from substitutes is strong and both suppliers and customers are able to exercise considerable bargaining leverage. One cannot expect to develop a successful strategy without first identifying what competitive forces exist and gaining an understanding of the industry’s whole competitive structure. Therefore, the five-force model, is a powerful tool for giving strategy makers the competitive insights they need to craft a strategy that ensures a sustainable competitive advantage.

2.5 Driving Forces

All industries are characterized by trends and new developments that produce changes that require attention by competing firms within the industry. It is important to identify the factors causing the industry or competitive changes. Sometimes these changes occur at a rapid speed and other times, they occur gradually, either way, these dominant forces create either incentives or pressures to change. These forces are termed “**driving forces**” and their importance lies in the need to not only identify which driving forces are playing a role, but also to assess the impact that they are having on the nature of the industry. (Crafting & Executing Strategy, Thompson & Strickland, 2001)

The most common driving forces are:

- **The Internet and e-commerce** – the Internet changes business boundaries and opens up business – to – business opportunities. In a number of industries, the role and impact of the Internet is critical and in many cases, e-commerce has reshaped the whole competitive environment of an industry.
- **Increasing globalization of industry** – there are a number of factors which have led to an increase in globalization and they are:

Tariff reductions, deregulation, technology change, significant differences in labour costs and other factors of production, multi-national companies looking to gain dominant global positions outside their traditional geographic markets.

- **Changes in long-term industry growth** – a shrinking market heightens competitive pressures as growth triggers a struggle for market leadership. Often, industry growth changes lead to consolidation within an industry in the form of mergers or acquisitions or the exit of some companies from the industry.
- **Product Innovation** – this often leads to a broadening of the customer base within an industry and a widening of the product differentiation among rival producers.
- **Technological Change** – results in new and better products at lower cost and changes capital requirements. Often requires changes to distribution channels and logistics and opens up new geographic markets.
- **Entry and Exit of major firms** – exit of major firms changes the overall competitive structure by reducing the number of market leaders and causing a rush to capture the exiting firms customers.
- **Changes in cost and efficiency** – widening or shrinking differences in the costs and efficiencies among key competitors tends to dramatically alter the state of competition.
- **Regulatory influences and government policy changes** – deregulation has led to the growth of many industries and the speeding up of globalization.
- **Changing societal concerns, attitudes and lifestyles** – consumer concerns safety and social concerns have forced industries to change their marketing and products to suit the changing requirements from consumers.

The causes underlying the emergence of new competitive conditions are a fundamental part of industry analysis. It is important to note that not all forces of change within an industry qualify as “driving forces”. A driving force can be labeled

a major determinant of why the industry is changing. There are generally only a handful of three or four driving forces that impact on the industry.

2.6 Analyzing the Key Factors for Competitive Success

An industry's key success factors are those things that affect industry member's ability to prosper in the marketplace. KSF's by their very nature are so important that ALL firms in the industry must pay close attention to them - they are the prerequisites for industry success. Only rarely does an industry have more than 3 or 4 key success factors at any one time. The purpose of identifying KSF's is to make judgements about what things are more important to competitive success and what things are less important. At the very least, managers need to understand the industry situation well enough to know what is most important to success. (Thompson & Strickland, 2001)

The most common key success factors are:

Technology - related KSF's	<ul style="list-style-type: none">• Technical capability• Production innovation capability• E-commerce skills
Manufacturing - related KSF's	<ul style="list-style-type: none">• Low cost production efficiency• Quality of manufacture• High utilization of fixed assets• Low cost plant locations• Access to skilled labour• Customized production ability
Distribution -related KSF's	<ul style="list-style-type: none">• Strong network of distributors• Low distribution costs• Short delivery times

Marketing - related KSF's	<ul style="list-style-type: none">• Courteous customer service• Breadth of product line and product selection• Attractive packaging• Clever advertising
Skills - related KSF's	<ul style="list-style-type: none">• Superior workforce• Quality control know-how• Ability to develop new products
Organizational Capability	<ul style="list-style-type: none">• Ability to respond to shifting market conditions• Managerial experience
Other Key Success Factors	<ul style="list-style-type: none">• Favorable reputation with buyers• Overall low cost producer• Convenient plant locations• Access to financial capital

Table 1.

The South African Department of Trade and Industry has identified a few generic critical factors that affect the export readiness of a business. They are as follows:

- Management's commitment to exports
- Management's skills in international business
- Financial resources
- Technical know-how
- Capacity to supply
- International marketing intelligence
- Readiness of the product to export
- Export market potential

- Product adaptability to suit export markets
- Cost structure
- Competitor products

(Internet 2)

The Department of Trade and Industry has also identified 5 key factors that companies need to implement in order to successfully export. They are:

1. Enter the new market on a small scale to reduce risks.
2. Add additional products only once successful
3. Hire locals to promote the firms products in the export country
4. Initially focus on only one market or a handful of markets
5. Employ and export co-ordinator to manage the firms exports

The answers to three questions help to identify industries key success factors:

- On what basis do customers choose between competing brands?
- What attributes of the product are crucial?
- What resources and competitive capabilities does a seller need to be successful competitively?
- What does it take for sellers to achieve a sustainable competitive advantage?

The overall purpose of identifying key success factors is to make judgements about what things are more important to competitive success and what things are less important. KSF's are common to all the major organizations in the industry and do not differentiate one company from another. To identify the KSF's in an industry, it is therefore usual to examine the type of resources and the way that they are employed in an industry and then to use this information to analyze the environment outside the organization.

2.7 Porter's Diamond

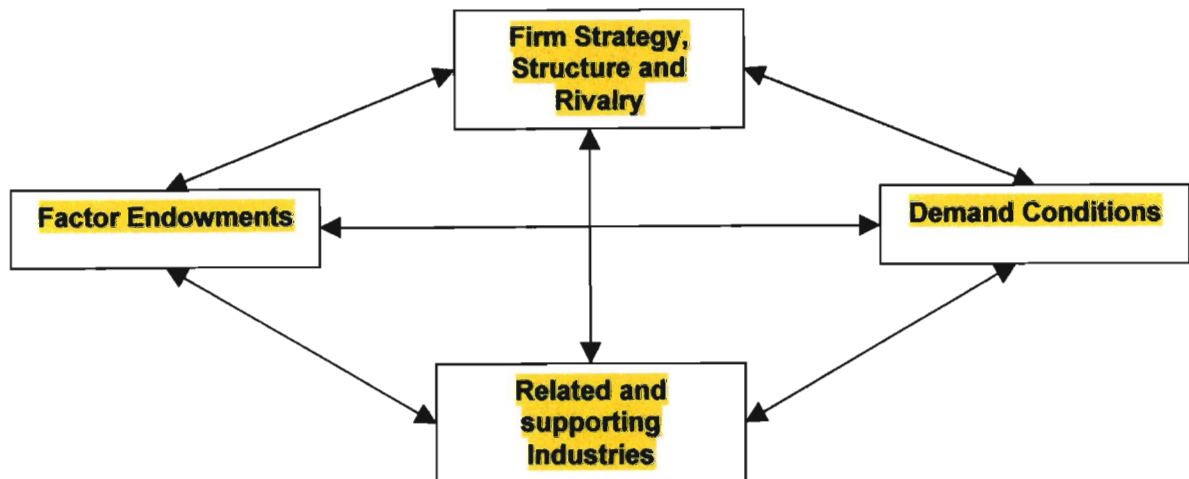
A generic model of critical success factors is that of Porter (1990), who sees key factors for industrial competitiveness as:

- Demand conditions - the nature of home demand for the industry product.
- Local factor conditions - the nations position in factors of production such as labour, or the necessary infrastructure necessary to compete in an industry.
- Structure and strategy of local firms - the conditions in the country which govern how companies are organized and managed and the nature of domestic rivalry.
- Related & supporting industries - the presence or absence in a nation of supplier industries and related industries that is internationally competitive.

For Porter, the essential task was to explain why a nation achieves international success in a particular industry. Porter speaks of these four attributes as constituting the diamond. The effect of one attribute is contingent on the state of the others. As an example, Porter argues that, favorable demand conditions will not result in a competitive advantage unless the state of rivalry is sufficient to cause firms to respond to them.

Porter also argues that government by its choice of policies (as we discussed in the environmental analysis) can detract from or improve national advantage. Regulation can alter home demand conditions and change factor endowments.

Figure 3: Porter's Diamond



Determinants of National Competitive Advantage: Porter's Diamond

2.7.1 Factor Endowments

Porter distinguishes between basic factors, such as natural resources, location and demographics and advanced factors, such as communications infrastructure, skilled labour and technological know-how. He argues that advanced factors are the most significant for competitive advantage. Unlike basic factors, which are effectively natural endowments, advanced factors are a product of investment in time, money and innovation by individuals and companies. The basic factors might have provided an initial advantage and might provide advantage in the domestic market, but global competitive advantage is only achievable by investment in advanced factors.

The impact that the application of advanced factors has on a company can be seen by the fact that only brickyards that have invested in advanced factors have been

able to successfully export on a sustainable basis. They have implemented e-commerce, trained and developed their semi-skilled labour to become skilled and invested in technology. The converse of this is that many SA brick producers have focussed on only the basic endowment factors such as securing deposits of clay and keeping labour costs to a minimum. The result of this is that quality is low and these producers are presently not competitive globally.

2.7.2 Demand Conditions

The characteristics of home demand are important in shaping the attributes of locally made products and in creating pressures for innovation and quality. Porter argues that a nation's firms gain competitive advantage if their domestic consumers are sophisticated and demanding. They pressure firms to meet high standards of quality and customer service and to be innovative in producing new products.

2.7.3 Firm Strategy , Structure and Rivalry

Porter's point is that there is a strong association between vigorous domestic rivalry and the creation and persistence of competitive advantage in an industry. Vigorous domestic rivalry induces companies to look for ways to improve efficiencies, which makes them better international competitors. Domestic rivalry creates pressures to innovate, to improve quality, reduce costs and invest in upgrading advanced factors. We have already identified that the domestic SA industry lacks rivalry, resulting in an overall lack of quality focus and limited implementation of advanced factors such as e-commerce and technology.

Porter's theory suggests that it is in a firm's best interests to upgrade advanced factors of production; for example to invest in better training for its employees and to increase its commitment to R&D. It is also in the best interests of the industry to

lobby the government to adopt policies that have a favorable impact on each component of the national 'diamond'. (International Business, Hill, 2002)

2.8 GENERIC STRATEGIES

Professor Michael Porter first outlined generic strategies (cost leadership vs. Differentiation vs. Focus) in 1980 in his book, *Competitive Strategy*. However, generic strategies are simply a means of generating basic strategic options in an organization or firm's seeking to gain a competitive advantage, based on the 3 generic strategies:

1. Striving for overall low-cost leadership in the industry.
2. Create and market unique products through differentiation.
3. Striving to have special appeal to one or more groups of buyers, focussing on their cost or differentiation concerns.

Low cost leaders depend on things such as: secure supply of raw materials, dominant market share, high degree of capitalization and excel at cost reductions and high levels of efficiencies. They maximize economies of scale, stress reductions in overheads and use volume sales to increase earnings.

A low cost leader is able to use its cost advantage to defend itself in price wars and attack competitors on price to gain market share. (Competitive Strategy, M.E.Porter, 1980)

Differentiator's stress the attribute above quality and price and attempt to build customer loyalty. In this way the firm is able to charge a premium price for its product. Competitors often face "perceptual" barriers to entry.

A focus strategy attempts to attend to the needs of a particular market segment. A firm pursuing a focus strategy is willing to service isolated geographic areas, to satisfy the needs of customers with specialized financing, inventory or service

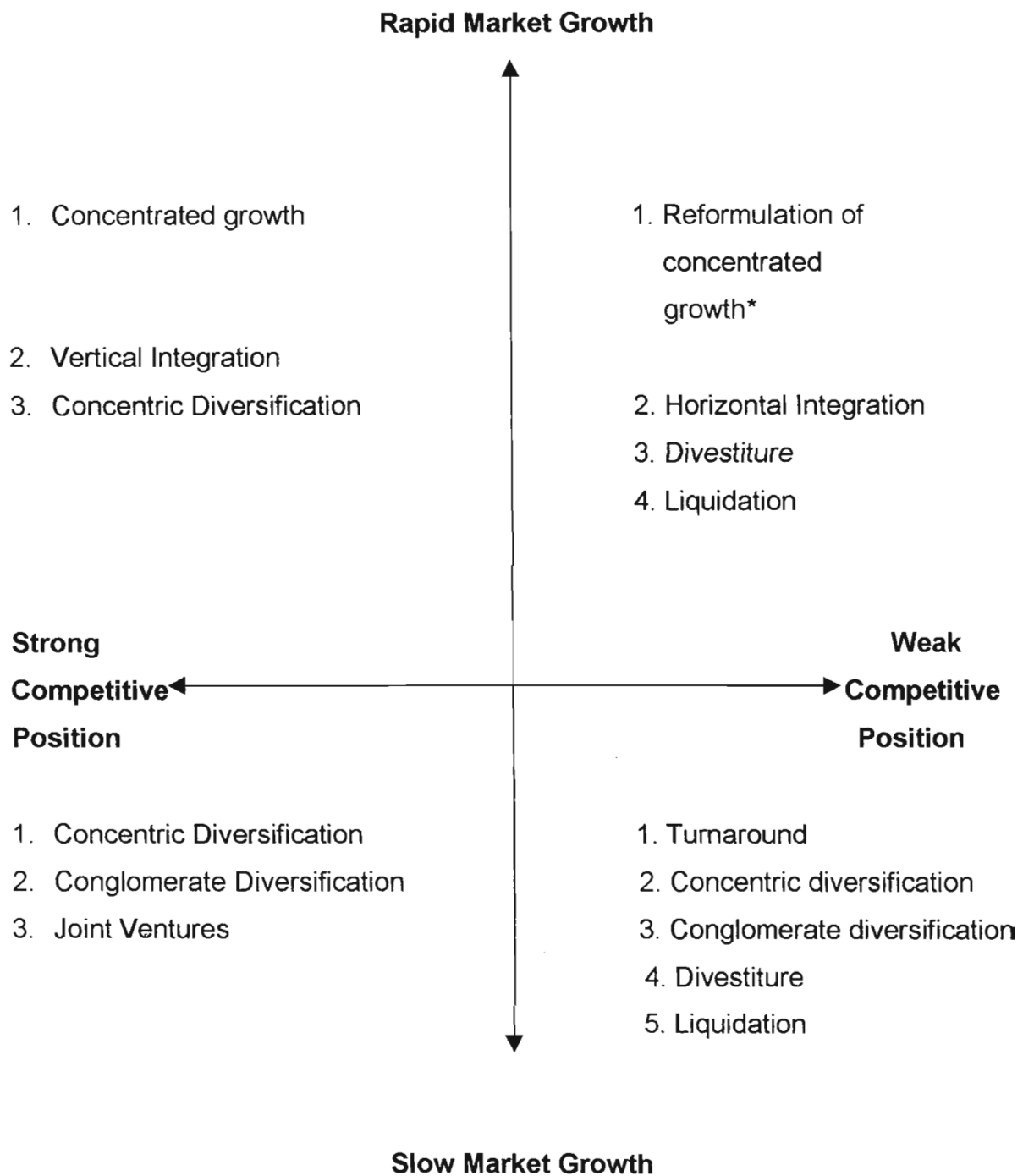
problems or to tailor the product to their unique demands. (Competitive Advantage, M.E.Porter, 1985)

All three generic strategies carry their own inherent risks. Competitors imitate each other and technology regularly changes. The target segment might become less attractive for a firm that has a focussed strategy. Demand might drop or totally disappear or the segment might even be further sub-segmented by competitors.

2.9 GRAND STRATEGIES

Grand strategies provide basic direction for strategic actions and are the basis of co-ordinated and sustained efforts directed towards achieving the firm's long term business objectives. The 15 principal grand strategies are: *concentrated growth, market development, product development, innovation, horizontal integration, vertical integration, concentrated diversification, conglomerate diversification, turnaround, divestiture, liquidation, bankruptcy, joint ventures, strategic alliances and consortia.*

Figure 4 indicates a model of Grand Strategy Clusters and Figure 5 outlines the specific options under the Grand Strategies



* This is usually via market development, product development or a combination of both.

Figure 4. Grand Strategy Clusters

Figure 5. below, adapted from Phillip Kotler , Marketing Management Analysis , Planning and Control , highlights specific options under the Grand Strategies.

2.9.1 Specific Options under the Grand Strategies

There are 14 options available which make up 'Grand Strategies', namely concentration, market development, product development, innovation, horizontal integration, vertical integration, concentric diversification, conglomerate diversification, turnaround, divestiture, bankruptcy, joint ventures, strategic alliances, consortia. Each of these are considered below:

2.9.1.1 Concentration (increasing use of present products in existing markets)

1. Increasing the present customers rate of purchase :

- a) Increasing the size of purchase
- b) Increasing the rate of product obsolescence
- c) Advertising other uses
- d) Giving price incentives for increased use

2. Attracting competitors customers:

- a) Establishing sharper brand differentiation
- b) Increasing promotional effort
- c) Initiating price cuts

3. Attracting non-users to buy the products:

- a) Induce trial through sampling
- b) Pricing up or down
- c) Advertising new uses

2.9.1.2 Market Development (selling present products in new markets)

1. Opening additional geographic markets :
 - a) Regional expansion
 - b) National Expansion
 - c) International Expansion
2. Attracting other market segments :
 - a) Developing product versions that appeal to other segments
 - b) Entering other channels of distribution
 - c) Advertising in other media

2.9.1.3 Product Development (developing new products for ex. Markets)

1. Developing new product features :
 - a) Adapt
 - b) Modify
 - c) Magnify
 - d) Minify
 - e) Substitute
 - f) Rearrange
 - g) Reverse
 - h) Combine
 - i) Develop additional models and sizes

2.9.1.4 Innovation

1. New or improved products
 - a) Create new product life cycle.
 - b) Make old products obsolete.

2.9.1.5 Horizontal Integration

1. Acquisitions :

- a) A single firm operating in the similar industry
- b) More than one firm operating at the same stage of the production-marketing chain.

2.9.1.6 Vertical Integration (also called backward & forward integration)

1. Acquisitions :

- a) Backward integration into firms that supply it with inputs
- b) Forward integration into firms that are its customers.

2.9.1.7 Concentric diversification

1. Departure from the firm's existing base of operations :

- a) Acquisition of a separate business, related to existing operations.
- b) Internal generation of a separate business with synergistic possibilities

2.9.1.8 Conglomerate Diversification

1.Acquisition of a business because it is the best investment available:

- a) Seek financial synergy
- b) Balance portfolio
- c) Balance cyclical business cycles of established businesses

2.9.1.9 Turnaround

1. Cost reduction :

- a) Decrease workforce
- b) Lease rather than purchase

- c) Extending life of machinery
- d) Reduce less profitable product lines
- e) Discontinue low margin customers

2. Asset reduction :

- a) Sale of land, buildings and equipment.
- b) Elimination of company perks

2.9.1.10 Divestiture

- 1. Sale of a firm or major unit within the firm.

2.9.1.11 Liquidation

- 1. Firm is sold in parts, not as a going concern.
- 2. Extract maximum value from sale of tangible assets

2.9.1.12 Bankruptcy

- 1. Firm ceases trading and closes doors.
- 3. Distribution of assets to creditors.

2.9.1.13 Joint Ventures

- 1. A single commercial company created by two co-owners
 - a) Joint ownership
 - b) Acquired minority / majority shareholding

2.9.1.14 Strategic Alliance

1. Unlike a JV , the parties do not take an equity stake in a new business:
 - a) Partnerships for a defined period.
 - b) Licensing agreements
 - c) Franchising
 - d) Outsourcing

2.9.1.15 Consortia

1. Relationships between businesses in an industry :
 - a) One - off projects
 - b) Support of a large trading company

Grand Strategies are defined as comprehensive approaches guiding the major actions designed to achieve long-term objectives. The manager needs to try to forecast whether an available grand strategy can take advantage of preferred opportunities so those objectives can be met. A firm rarely can make a strategic choice only on the basis of its preferred opportunities, long-range objectives, or grand strategy. These three elements need to be considered simultaneously, because only in combination do they constitute a strategic choice. (Reimann, B.C , Corporate Strategies that Work , Feb 1992)

2.9.2 EVALUATION OF BUSINESS STRATEGY

Strategy can neither be formulated nor adjusted to changing circumstances without a process of strategy evaluation. Strategy evaluation forms an essential step in the process of guiding a business.. The critical factors determining the quality of current results are often not directly observable or easily measured, and that by the time the strategic opportunities or threats do affect results, it may well be too late to respond.

Thus, strategy evaluation is an attempt to look beyond the obvious facts and appraise instead those more fundamental factors and trends that govern success in the chosen field of endeavor. (Richard Rumelt , 1990).

In order to evaluate a business strategy, it is wise to attempt to answer the following three questions:

- 1) Are the objectives of the business appropriate?
- 2) Are the major plans appropriate?
- 3) Do the results obtained to date confirm or refute critical assumptions on which the strategy rests?

In the book, "The Strategy Process" by H. Mintzberg & J.B Quinn, of the many tests which can justifiably be applied to a business strategy, most will fit within one of these broad criteria:

- *Consistency*: The strategy must not present mutually inconsistent goals and policies.
- *Consonance*: The strategy must represent an adaptive response to the external environment and to the critical changes occurring within it.
- *Advantage*: The strategy must provide for the creation and / or maintenance of a competitive advantage in the selected area of activity.
- *Feasibility*: The strategy must neither overtax available resources nor create unsolvable problems.

2.9.3 Consistency

Even strategies that are the result of formal procedures may easily contain compromise arrangements between opposing power sources. A key function of strategy is to provide coherence to organizational action. If senior management

does not enunciate a clear consistent sense of where the corporation stands on these issues, there will be continuing conflict between departments and units.

2.9.4 Consonance

The first aspect of "fit" deals with the basic mission or scope of the business and the second, with its special competitive position. The notion of consonance or "matching" focuses on generic strategy. It is imperative to examine the basic pattern of the economic relationships that characterize the business and determine whether or not sufficient value is being created to sustain the strategy.

2.9.5 Advantage

Competitive strategy is the art of creating or exploiting advantages that are:

- 1) The most enduring
- 2) Most difficult to duplicate
- 3) The most telling in a firm's make-up.

Competitive strategy focuses on the differences among firms rather than their common missions. Competitive advantages can normally be traced to one of three roots:

- Superior Resources
- Superior Skills
- Superior Position

The types of positional advantage that are most well known are those associated with size or scale. As the scale of operation increases, most firms are able to reduce both marginal and total cost of each individual unit produced. By engaging in

more R&D, being first to export or go abroad, having the largest advertising budget, the dominant business is rechanneling the gains obtained from its advantages into activities designed to support and maintain those advantages.

Other position-based advantages follow from such factors as:

- The ownership of special raw material sources or long-term supply contracts.
- Being geographically located near the market or key customers in a business involving high transport costs.
- Being a full-line producer in a market with heavy trade-up phenomena.
- Having a wide reputation for providing a needed product trait reliably and dependably.

2.9.6 Feasibility

The final broad test of strategy is feasibility. Can the strategy be attempted within the resources available? Has the organization demonstrated that it possesses the problem-solving abilities / or competencies demanded by the chosen strategy? Has the organization demonstrated the degree of coordinative skills necessary to carry out the strategy? Does the strategy challenge and motivate key personnel and is it acceptable to those who must lend their support?

Johnson and Scholes, Strategic HRM, Chapter 8, Strategy Evaluation and Selection, discuss how strategic options can be evaluated. They state that there are three types of evaluation criterion, which can be used:

- **Suitability** is a broad assessment of whether the strategy addresses the circumstances in which the organization is operating. E.g. the extent to which new strategies fit the future trends and changes in the environment; or how the strategy might exploit the core competencies of the business.

- **Acceptability** is concerned with the expected performance outcomes, if the strategy was implemented and the extent to which these would be in line with stakeholder's expectations.
- **Feasibility** is concerned with whether the strategy could be made to work in practice. Assessing the feasibility includes emphasizing more detailed often quantitative assessment of the practicalities of resourcing and strategic capability.

2.9.7 SUITABILITY

Concerns whether a strategy addresses the circumstances in which the organization is operating. Here, options can be screened before greater, more detailed analysis is undertaken. Does it make strategic logic and is it rational? Why is this a good idea?

Assess the extent to which the proposed strategy:

- Exploits the opportunities and avoids the threats.
- Capitalizes on the organizations strengths and core competencies and remedies the weaknesses.
- Addresses the cultural and political context.

2.9.8 Testing suitability

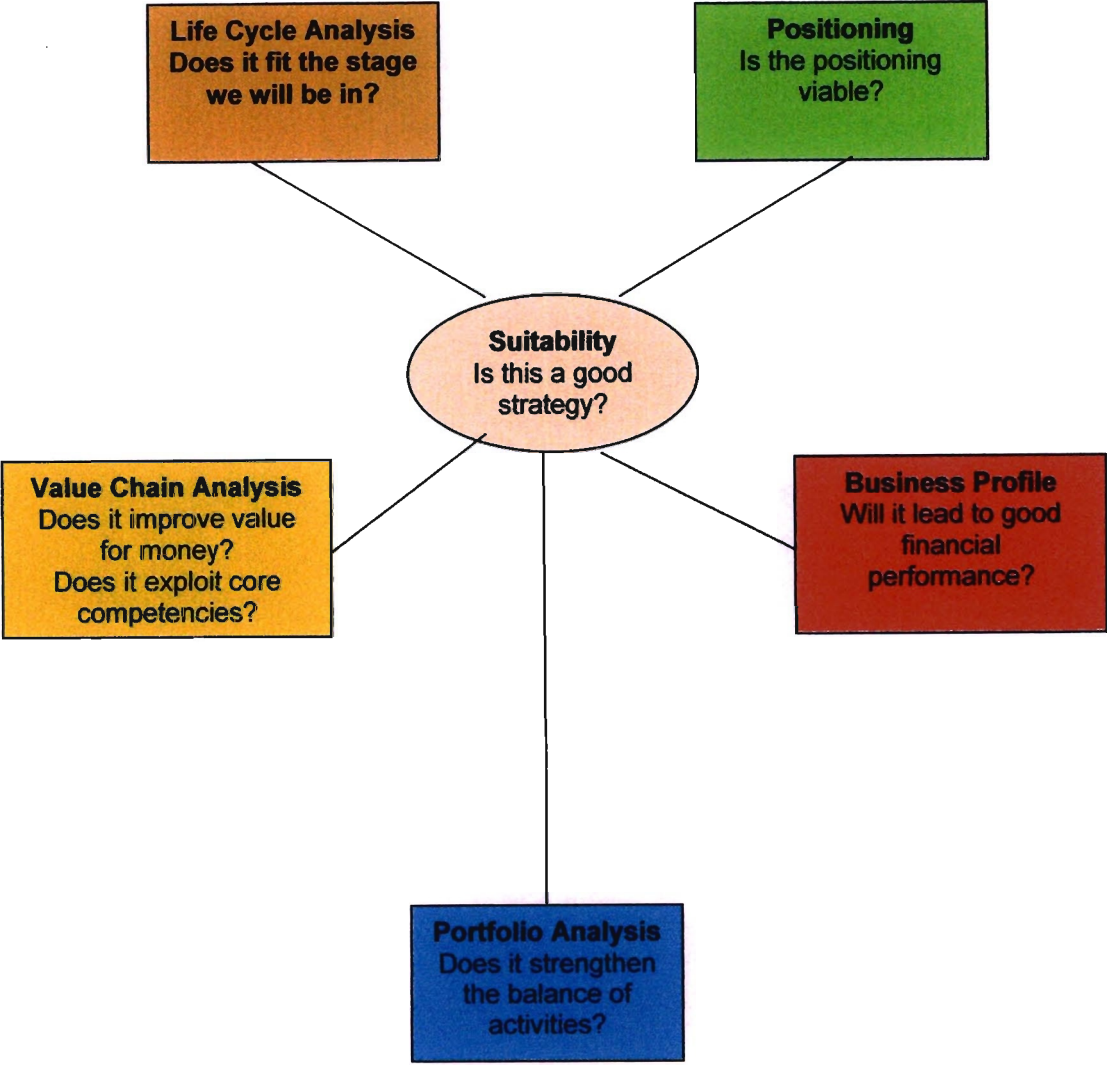


Figure 5 : Testing suitability

2.9.8.1 Life Cycle Analysis

This analysis endeavors to assess whether a strategy is likely to be appropriate given the stage of the product life cycle. The position within the life cycle can be determined in relation to eight external factors or descriptors of the evolutionary

stage of the industry. These are market growth rate, growth potential, breadth of product lines, number of competitors, spread of market share between competitors, customer loyalty, entry barriers and technology. It is the balance of these factors, which determines the life-cycle stage. (Johnson and Scholes, Strategic HRM, Chapter 8, Strategy Evaluation and Selection)

2.9.8.2 Positioning

Assessing whether the current and future positioning are viable is completed by asking whether demand is likely to grow or decline. Analyzing the degree of competitive rivalry, which exists, and the relative competence of the organization in facing these competitive rivals. Analyzing the extent, to which the organization unit costs are lower than the competitors, will help determine the long-term viability of a low-price positioning.

2.9.8.3 Value Chain Analysis

This analysis describes the activities within an organization and relates them to an analysis of the competitive strength of the organization. Analysis of the linkages between value activities and the way the chain is configured can improve the competitive position of the organization. A reconfiguring of the linkages in the value chain can lead to synergies being made available that creates extra benefit or values that were previously not identified.

2.9.8.4 Portfolio Analysis

Analysis of the balance of an organizations strategic business units and evaluates specific options for the future. The Boston Consulting Group Analysis (BCG matrix) can be used to plot the current business and future business and the long-term rationale of business development can be highlighted.

The following questions can then be raised:

- Will the strategy move the company into a dominant position in its markets?
Which strategies are most likely to ensure a move from question marks to stars and eventually cash cows?
- Are there sufficient cash cows to provide investment funds?

2.9.8.5 Business Profile Analysis

This analysis shows the extent to which a strategy matches the favorable performance parameters from PIMS analyses. The strategic position is scored against eleven parameters such as relative market share, quality, capital intensity, capacity utilization, productivity, real market growth, new products, marketing intensity, bargaining power and logistics.

There are a number of further ways of analyzing the merits of specific strategies to establish *suitability* and these are:

Screening - the process of comparing the relative merits of different strategies.

Ranking - of options against a set of predetermined factors.

Decision Trees - elimination and acceptance of factors leading to refined decision-making.

Scenarios - analyzing a range of possible future outcomes and deciding on what options to choose to suit these scenarios. Strategic options can be screened by matching them to possible future scenarios. This allows for contingency plans to be drafted, which utilize the preferred option for each possible scenario.

2.9.9 ACCEPTABILITY

Acceptability is concerned with the expected performance outcomes, such as return, if the strategy is implemented. The acceptability of strategies can be assessed in three broad ways, namely, return, risk, stakeholder reactions.

Table 2 : Assessing the acceptability of strategies

APPROACH	USED TO ASSESS	EXAMPLES	LIMITATIONS
Analyzing Return Profitability Analyses	Financial return on investments	Return on capital Payback period Discounted cashflow	Apply to discrete projects
Cost – benefit analysis	Wider costs / benefits (incl. Intangibles)	Major infrastructure Projects	Difficulties in quantification
Shareholder value analysis	Impact of new strategies on shareholder value	Mergers and takeovers	Technical detail often difficult
Analyzing Risk Financial ratio projections	Robustness of strategy	Break-even analysis Impact on gearing and liquidity	
Sensitivity Analysis	Test assumptions / robustness	What if? analysis	Test factors separately
Simulation modeling	Aggregate impact on many factors	Risk analysis	Quality of data on causal relationships
Stakeholder Reactions	Political dimension of strategy	Stakeholder mapping Game theory	Largely qualitative

Table 2.

Traditional financial analyses have been used extensively in the evaluation of the acceptability of strategies. Three of the most common are return on capital, payback period and discounted cashflow. In many situations, the analysis of profit alone is too narrow an interpretation, particularly where intangible benefits are a major

consideration. Cost - benefit analysis attempts to put a monetary value on all the costs and benefits of a strategic option. Shareholder Value Analysis (SVA) contribution is to emphasize how important managing value drivers is to making strategic decisions. The risk, which an organization faces in pursuing a particular strategy, can be assessed by projecting financial ratios, undertaking a sensitivity analysis or what if? analysis or simulation modeling.

2.9.9.1 FEASIBILITY

Feasibility is concerned with whether an organization has the resources and competencies to deliver a strategy. A number of analytical approaches can be used to access feasibility.

A valuable piece of analysis is the *funds flow analysis*, which identifies the funds that will be required and the likely or available sources of these funds. It is then easy to analyze whether the strategy is feasible in financial terms and assist in identifying the timing of funding requirements.

Resource deployment analysis makes a wider assessment of the resources and competencies of the organization in relation to specific strategies

2.9.9.2 Processes for Selecting Strategies

Essentially, there are four generic approaches, which are assumed in selecting a strategy. They are:

- The planned approach - formal evaluation
- Enforced choice
- Learning from experience
- Command

2.9.9.3 The planned approach

Here the organization objectives are used as direct yardsticks by which options are assessed. The result is a 'rational' selection of the future strategy. The various evaluation techniques, covered earlier, are centrally utilized in the process and are expected to yield 'quantified' answers regarding the relative merits of the different strategies. Formal planning and evaluation are a useful means of raising the level of debate among the decision-makers during the selection process.

2.9.9.4 Enforced Choice

Sometimes, the strategic development of the company is externally imposed. Major changes in the environment, such as a technological breakthrough, may overshadow other considerations. A particular set of circumstances may dictate the immediate pressurized priority and the organization thus becomes a victim of circumstance. In this case, *scenario planning*, can be helpful in reminding managers of the need for contingency plans, if enforced choices are faced.

2.9.9.5 Learning from experience

Strategy is often viewed as a fragmented process occurring in different levels of the Organization as they endeavor to react and adapt to a changing environment. However, if this "evolutionary" process is not managed, it can result in inefficiencies as different parts of the organization pull in different directions, and this leads to strategic drift.

It is important that the organizational learning occurs throughout the organization in a way that leads to innovation and positive change. New developments are encouraged within local divisions and this is where most evaluation of strategic

options occurs and innovative solutions are designed and tested. (Limits of the learning curve, Abernathy & Wayne, Harvard Business Review, 1974)

2.9.9.6 Command

In some companies, the dominant process for the selection of strategies is *command*, since the decision is taken at the highest level with involvement and advice from inside the organization. It is imperative that strategies selected in this way are workable in practice. A dangerous combination can be powerful visionary stakeholders who are able to dominate the processes of strategic choice, but who are ill informed about the practicalities of making them work.

2.9.9.7 Adhering to good strategic principles

1. *Place top priority on crafting and executing strategic moves that enhance the Company's competitive position for the long term.*

Ensure that short term financial performance do not rule out strategic initiatives that will strengthen the company's long term competitive position and competitive strength.

2. *Promptly adapt to changing market conditions, unmet customer needs, buyer wishes for something better, emerging technological alternatives and any new initiatives of competitors.*

Responding late or with too little often puts a company in a position where it has to catch up. Adapting a strategy to changing circumstances is necessary. Generic strategic commitments to improved quality or lowest cost need to be implemented relative to competitor moves and customers needs and expectations.

3. Invest in creating a sustainable competitive advantage.

Having competitive edge over rivals is the single most dependable contributor to above-average profitability.

4. Avoid strategies only capable of succeeding in the most opportunistic circumstances.

Expect times of unfavorable market conditions and plan for these. A good strategy still works and produces acceptable results even in the worst of times.

5. Do not underestimate the reactions and commitment of rival firms.

6. Consider that attacking competitive weakness is usually more profitable and less risky than attacking competitive strength.

Attacking resourceful rivals is likely to fail unless the attacker has a solid base for competitive advantage and deep financial pockets.

7. Be judicious in cutting prices without an established cost advantage.

Only a low cost producer can win at price-cutting over the long term.

8. Strive to open up meaningful gaps in quality or service or performance features when pursuing a differentiation strategy.

Tiny differences between product offerings, service or quality may not be important to buyers.

9. Avoid "stuck in the middle strategies".

Compromise strategies rarely produce sustainable competitive advantage. Companies with compromise strategies end up with average costs, average differentiation, average reputation and little prospect for industry leadership.

10. Moves to wrest market share away from rivals will provoke retaliation in the form of a price war or a marketing race – to the detriment of everyone's profits.

Aggressive moves to capture a bigger market share invites cutthroat competition, particularly when the market is plagued with high inventories and excess production capacity.

In conclusion, it is important to remember that some strategic options are better suited to certain specific industry and competitive environments than others and that it is imperative to match a strategy to a firm or industry's external and internal circumstances. Aligning a company's strategy with its overall situation starts with a quick diagnosis of the industry environment and the firm's competitive standing in the industry.

1. What basic type of industry environment does the company operate in (emerging, rapid growth, high velocity, mature, global, commodity product)? What strategic options and strategic postures are usually best suited to this generic type of environment?
2. What position does the firm have in the industry (leader , runner-up or also ran ;strong / weak or crisis ridden)

Next, it is important to factor in the primary external and internal situation considerations. The final step is to custom – tailor the chosen generic strategic

approach (low cost, differentiation, and focussed low-cost, focussed differentiation) to fit both the industry environment and the firm's competitive standing.

In order to commence the drafting of a strategy for the clay brick industry in South Africa and to identify the Key Success Factors affecting the sustainable export of products, we need to analyze the present situation within the industry, diagnose the industry environment and identify the external and internal situation.

Chapter 3 attempts to analyze the present situation within the industry.

CHAPTER 3

“ The present situation within the Industry”

3.1 Introduction

The South African Clay Brick industry is one of the largest in the world with annual production in excess of 3.5 billion units per annum. (CBA newsletter, 1999) Traditionally, the industry has always been subject to the cyclical nature of the local building and construction industry. The fluctuating nature of the local economy has also resulted in the industry experiencing a roller - coaster ride over the years. When interest rates are low, developers and speculators invest in new residential, commercial and industrial developments. When the interest rates are raised (generally to stem money flow and curb inflation), it becomes too costly to build and this drops the demand for any construction - related products.

The pre-1994 apartheid government committed large sums of money to capital projects and infrastructure development. Developments such as schools, colleges, clinics and prisons required millions of high quality building products such as bricks, pavers and quarry and roof tiles. In contrast, present government spending on such projects is limited which has dramatically reduced the demand for high quality clay products.

Another major factor, which has negatively impacted on the domestic demand for clay bricks, has been the growth in the acceptance and use of cement bricks. Growing demand for low-cost construction materials, primarily for use in low cost black housing has assisted these low quality, low cost cement products in receiving approval as an alternative material to clay bricks on low cost housing developments.

This acceptance has led to a proliferation of precast yards which produce low grade, low cost products, which have in many cases replaced the high quality, burnt clay products. (Concrete Society Newsletter, 2001)

The overall impact of this has been a drop in the demand for high quality facing clay bricks in South Africa. A classic example of this is the fact that a well-known producer in SA owned more than twenty-four brickyards countrywide in 1991, with an annual production of well in excess of one billion bricks. By 2002, only eleven years later, the same enterprise owned only twelve yards with annual production below 500 million units.

This is a prime example of the impact that a weak domestic economy, high bank interest rates and low cost alternative products can have on an industry of this nature. This situation has driven a minority of the larger producers in South Africa to investigate or implement exports of their products.

As one of the largest employers of unskilled or semi-skilled labor in South Africa and an industry that is noted for its high capital requirements, exports have often presented the only positive opportunity to supply markets where demand is relatively stable. The South African clay brick industry is fragmented with just more than 220 brickyards spread all over the country. Most of these brickyards are small or medium-sized, mostly privately owned and very few with a substantial share of total industry sales. (CBA, 2002)

Domestic demand is so extensive and diverse and geographic locations so widespread, that the industry is highly fragmented. The industry is a low technology one, resulting in very little new product development and a general acceptance of 'questionable' quality products. The result is an industry that lacks both focus and a defined strategy to ensure sustainable growth and profitability for its members. (Hill, International Business, 2002).

The local Clay Brick Association (CBA) is made up of largely production driven members, many of whom, for good reason, are preoccupied with the state of the markets around their own localities. The Clay Brick Association itself, does not have an outward looking, market driven culture and is not equipped to search beyond the interests and mandates provided by the general members body.

A few of the larger members of the CBA have contacted the Department of Trade and Industry (DTI) on a variety of levels and via various incentive schemes for exporters, have received subsidies for selected market development activities. Unfortunately, the D.T.I has also advised the industry as a whole that, such financial support will not be forthcoming in the future, except under exceptional circumstances.

3.2 External Environmental Analysis (P E S T)

South Africa has faced a host of political changes over the course of the past 10 years, arguably both positive and negative in nature. Notable, is the government's adoption of specific policies and strategies to encourage FDI and exports. The government has also endeavored to foster an environment in SA that encourages companies to expose themselves to international trade, rather than adopt an inward looking trade policy. (InterNet 3)

Trade liberalization, developments of export incentives by the Department of Trade and Industry, trade missions, tariff restructuring and trade agreements have all played a role in encouraging exports of SA products. Exports have played an increasingly important role in the SA economy since 1994. Over this period they

have grown in real terms by 41% and their share in the GDP has increased to 19% from 13.5%. Exports help to overcome the inherent size limitation of the relatively

small SA domestic market and are SA's most important source of foreign earnings.(InterNet 4)

South Africa has outperformed most of its competitors in terms of exports to the EU. Factors that are responsible for the increase in exports to Europe include the depreciation of the Rand , more competitive prices for manufactured products and the effect of the South Africa EU trade agreement. Towards the end of the 1980s, policy shifted to an export promoting and "outward looking" orientation. Since 1994, the government has refocused the country's policies from demand-side support measures (i.e. tariffs and quotas) to "supply-side" support measures. These measures generally aim at raising fixed investment in manufacturing, restructuring domestic manufacturing towards greater international competitiveness, facilitating a higher degree of labour absorption, and encouraging SME manufacturing.([http: / www.tisaglobal.com/export/trends](http://www.tisaglobal.com/export/trends))

While the last few years have shown significant increases in exports of manufactured goods from South Africa, the significant tariff reductions have also seen a marked increase in imports. At the beginning of 2002, President Mbeki outlined the Microeconomic Reform Strategy, which defines more precisely the structural changes needed within the economy to achieve higher levels of economic growth, increase employment, improve skills levels, improve access to basic services and infrastructure and broaden ownership of productive assets.

The manufacturing sector is seen to provide a platform for stimulating a wider range of economic activity and associated employment and value creation within the country.(InterNet 3)

Since 1994 there has been a decline of 20 percent in per capita income and even greater deterioration in the overall quality of life. Unemployment has grown and

much of the nation is experiencing crushing poverty. There has been an increasing polarization between rich and poor, and a pattern of inflation and high interest rates.

All of these factors give rise to an increasing growth in crime and a breakdown of traditional patterns of social and community organization. There has been a great decrease in economic and community efficiency.

Other important realities of South Africa's current socio-economic system structure are:

- ❑ Idle manpower, production capacity and skills existing side-by-side with great material needs.
- ❑ Limited markets and loss of niches for traditional, subsistence and craft skills.
- ❑ Patterns of livelihood based on traditional skills no longer valued and yet not replaced by production of tradable goods.
- ❑ Money almost entirely created through bank debt at high interest rates.
- ❑ Insufficient money in circulation to buy what industry and local labor is capable of producing.
- ❑ Effective local industrial capacity and associated employment destroyed because of cheaper imported goods and global competition.
- ❑ Economic capacity drained away from rural communities by cheaper production and retail markets in urban centers.

(InterNet 5)

A history of labour unrest in SA has discouraged the development of labour intensive production and led to capital intensive projects being undertaken by companies. Companies have imported capital goods along with technology and have chosen to neglect the perceived 'high risk' of employing lots of labour.

The South African government has committed to the building of more than 1,000 000 low cost houses annually for previously disadvantaged communities. Unfortunately, due to the low cost nature of these houses, cement blocks are used for construction, thereby replacing clay bricks.

The SA clay brick industry employs in excess of 25,000 unskilled or semi-skilled employees who all hail from previously disadvantaged communities and who support families which add up to an estimated 150,000 South Africans.(CBA newsletter, 2002) Loss of business to more cost effective, yet lower quality alternative products has led to the retrenchment of labour resulting in the loss of livelihoods by families who can ill-afford to not have an income.

In conclusion, the 1994 change in government has resulted in a number of external factor changes, which has impacted on the domestic clay brick business both positively and negatively. Despite efforts by the government to promote export growth, the local market has waned. The high inflation prevalent in the country despite efforts by the Reserve Bank to introduce measures to curb this, has resulted

In ongoing depreciation of the SA Rand against the currencies of our trade partners, notably, the US dollar and the Euro. In an effort to stem the flow of money, the Reserve Bank has continued to increase interest rates that has kered both government and industry spending on capital projects. Demand for quality clay face bricks has declined pushing many producers to scale down, retrench or even close down. The larger producers have adopted a pro-active approach and commenced investigating the potential of exports 5-7 years ago.

Governments introduction of minimum wage and reduced working hours to a 40 hour week has dramatically increased labour costs forcing manufactures to undertake the installation of expensive plant rather than employ labour. The cyclical nature of the construction industry in SA due to the above factors has led some

producers to recently investigate other geographic markets for their products beyond the borders of South Africa.

The industry recently undertook to encourage and support the socio-economic empowerment charter for the South African Mining Industry. The goal of the empowerment charter is to create an industry that reflects the promise of a non-racial South Africa. It is the stated intention of this charter to adopt a proactive strategy of change to foster and encourage black economic empowerment.

3.3 Industry Analysis

This analysis will attempt to build up an overview of the clay brick industry's dominant economic features or in simpler terms, a profile of the industry dominant economic factors.

Profile of the Clay Brick industry's dominant economic factors

Market Size: 3.5 billion bricks and pavers per annum. R2, 3 billion annual revenues.

Scope of competitive Rivalry: Primarily regional. Producers rarely sell outside of a 250km radius from their plants due to the commodity, low cost nature of the product. Corobrik, a well known SA company, and renowned as a world leader in clay masonry technology, has opened the door to exports of South African clay face bricks and pavers, which are now exported to the Middle East, the Far East, the USA, Indian Ocean Islands and elsewhere in Africa.
(<http://www.corobrik.co.za/content/services/exporting.htm>)

Market Growth Rate: Very variable, dependant on GDP growth and relative growth of the domestic construction industry. 2-3 percent in 2002.

Stage in industry lifecycle: Mature

Number of companies in industry: 220 companies located throughout South Africa with capacity to produce approx. 4 billion units annually. 72 companies are members of the Clay Brick Association. Corobrik holds largest market share with roughly 15%. Average operations have less than 0.1% share of the total market.

Customer Base: 60-70,000 buyers, mainly building contractors, building material agents and retailers countrywide.

Degree of vertical integration: Only 2-3 companies have forwarded integrated by establishing retail outlets in order to extend their value chains. All companies are backward integrated into the mining and crushing of clays and shales to produce the required raw materials.

Ease of entry: Moderate barriers to entry exist in the form of capital requirements to construct a new plant of minimum efficient size (3 million bricks per month) which costs approx. R2-3 million. High barriers to entry exist because of the necessity to own the clay bearing land and the mining rights to extract raw materials. The ability to build a sustainable customer base is not perceived as being a barrier to entry.

Technology: Production technology has not advanced greatly and changes in SA have been limited because of costs. The most advanced plant in Africa is based in Midrand and owned by Corobrik. This plant is fully automated and requires minimum labour to operate.

Product Characteristics: Standardized sizes for both bricks and pavers worldwide, however colors and textures vary greatly dependant on clays and types of firing. The industry standards are:

NFP - non - facing plaster brick

NFX - non-facing extra (engineering brick)

FBA - face brick aesthetic

FBS - face brick standard

FBX - face brick extra

Only 4-5 producers countrywide are capable of producing FBS and FBX standards, which is the minimum standard required for exports.

Scale economies: Manufacturing costs vary greatly from plant to plant and with level of technology being applied. Plants with very low technology employed have wastage costs of up to 20% on production, which pushes up unit costs. Mining costs vary depending on the depth and availability of raw materials. Some producers are forced to import clays for blending purposes due to the low grade of their available raw materials.

Learning and experience effects: Negligible in this industry. Brick making is an age-old industry.

Capacity utilization: Manufacturing efficiency is paramount. Below 70% utilization, unit costs are excessive.

Industry profitability: Profitability is below average. The overall commodity nature of the industries product results in price cutting when demand slackens, but prices are increased when demand increases. Profitability is affected by strength of demand and prevailing economic conditions and the overall health of the construction industry. It is believed by some that the development of sustainable export sales will bring about equilibrium to the supply / demand cycles of this industry.

3.4 Industry Competitive Forces

An effective tool for diagnosing the competitive environment is Porters Five-Force Model. As discussed earlier, there is a distinct lack of rivalry among domestic companies, there is limited potential for entry of new competitors in SA, however, substitute products have managed to steal market share over the past 10 years.

3.4.1 Rivalry among competitors

Despite the relative commodity nature of clay bricks, cross company rivalry in South Africa is not centered on price competition. Price cutting, expanded customer services promotions and new product developments are not functions utilized by competing sellers to compete. Despite demand for products slow growth, rivalry between competitors is not strong. There is limited excess capacity, as companies have cutback production to suit their markets. As mentioned, rivalry is weak as most companies are satisfied with their sales and market shares and have therefore not made any sustainable attempts to steal competitors customers, despite low industry growth and escalating costs.

3.4.2 Potential Entry of New Competitors

The potential of newcomers entering the industry is very limited due to the necessity of having clay-bearing land with a deposit of at least 650 000 cubic meters of raw materials and the mining rights to extract the material. Legislation also demands that the landowner be in a position to re-establish or rehabilitate the mined site after extraction. The Department of Mineral and Energy Affairs is responsible to ensure that the quarry owner has both the financial and logistical ability to carry out the rehabilitation after mining.

Scale economies also tend to discourage entry because competitors are forced to enter on a large scale and require total capital in excess of R6 million for purchase and initial startup costs for a small manufacturing company that would not yield a return on assets of greater than 20%. The majority of brick plants presently operating in SA were built and equipped many years ago at much lower costs than would be possible today, particularly considering the weakness of the SA Rand exchange rate to the US dollar.

Customer loyalty in SA is relatively strong and companies have a strong network of loyal customers, however, success is not unachievable, if the new entrant's products are less costly than what is presently available. However, this is slow and costly process. As mentioned earlier, the new competitor would be required to own land and the government would require a mining license. Present government legislature makes owning and operating a mine a very expensive affair and this tends to deter new startups. This having been said, the entry barriers for current industry participants are low and it is common for existing brick companies to purchase existing brickyards where they do not have a presence.

Overall, however, the industry's growth and profit prospects are simply not attractive enough to induce the entry of additional competitors.

3.4.3 Pressures from substitute products

The competitive pressures from substitute products are very great and increasing annually. The reasons for this are that there is a plethora of cheap, low quality, as well as cost effective, good quality cement bricks and blocks available to builders, developers and contractors to replace the role that clay facing bricks have traditionally filled. Secondly, both architects, engineers and buyers view these substitutes as satisfactory in terms of quality, cost and performance and are willing to replace clay products with these.

This has placed the clay brick manufacturers under ever increasing pressure to reduce prices, which has had a further impact on quality. The lack of overall profitability inherent in the industry because of the substitute products has discouraged producers from spending capital on plant upgrades and improving quality. While clay brick products sales are growing at a slow 2-3% annually, equal to the country growth, sales of cement bricks and blocks are increasing at a rate of 8-10% per annum.

3.4.4 Supplier Bargaining Power

The primary raw material in the production of clay bricks is the clay / shale which is mined by the producer, while secondary materials include coal, flyash, diesel and wooden pallets. The capital nature of the business includes the requirement for extruders, forklifts, mechanical scrapers and 30-ton flatbed delivery vehicles with cranes. The raw materials are all manufactured within South Africa and can be termed commodities and are readily available from a host of suppliers. Supplies of the majority of these materials are not often short and prices are relatively competitive countrywide.

Unfortunately, this cannot be said of the nature of the supply of the capital goods. There are no manufacturers of extruders or mechanical scrapers in South Africa and therefore all plant is imported and paid for in either US Dollars or Euro's. The local producers of forklifts and trucks sell their products at import price parity and there are only a handful of quality producers in South Africa, all owned by major corporates. Smaller brickyards have little or no bargaining power with major suppliers of plant and these large ticket items account for a sizeable fraction of the overall brickyards costs.

3.4.5 Buyer Bargaining Power

It is quite common for facing bricks, clay pavers and quarry tiles to be specified by an architect or engineer on a particular project. Because of this, virtually all brickyards employ sales representatives who visit architects in order to get their products specified and written up in the Bill of Quantities. These sales representatives also call on major developers who are some of the largest users of clay bricks on townhouse and cluster developments. It is not uncommon for larger developments to utilize more than 450 000 bricks, giving the developer leverage in negotiating favorable prices and delivery and payment terms.

The bargaining power imposed on brick makers by developers and specifiers, however, has still not imposed pressures on producers related to improved quality or customer service in order to differentiate their product offerings.

The fragmented nature of the industry, high pressure from substitutes, suppliers and buyers has tended to lower profitability of competing firms. However, despite these pressures, the rivalry among local producers is not particularly strong and there is a definite lack of new competitors into the industry. It is the writer's belief that the competitive forces are not collectively strong enough to encourage producers to search for more innovative ways to grow sales and market shares. The ownership structure of the industry has resulted in an overall fragmented industry, which is not an ideal environment for improving competitive positions and encouraging further competition and innovation.

As discussed earlier, local conditions within the clay brick industry result in very limited pressure on producers to improve quality and performance. Domestic consumers are not demanding of very high quality and very little demand is apparent for development of new products. The result of this is that the majority of local manufacturers are not competitive on the international market. The research

discussed in Chapter 4 of this dissertation attempts to identify some of the major demand factors that limit or encourage sustainable exports.

3.5 Related and supporting Industries

The clay brick industry in South Africa is supported by a host of related supplier industries including:

- The coal mining industry
- The mining industry
- The heavy plant and equipment industry
- The heavy transport industry

Out of these 4 industries, three of them are involved in exports themselves. South Africa is a major exporter of coal to Europe and the Far East, making coal a cost-effective raw material in South Africa and contributing towards competitive production. The mining industry in South Africa is one of the most technologically advanced in the world today and the clay brick industry is part of the mining industry by nature of the fact that it mines its clays and shales using open-cast technology which is also commonly used in mining coal and other deposits.

Bell Equipment and Denel manufacture some heavy plant and equipment in SA and these two companies are internationally competitive suppliers. These companies have all invested heavily in advanced factors of production. The heavy transport industry is one of the most competitive in the world. South Africa can also boast a relatively advanced roads network which assists in contributing towards potential competitive advantage.

3.6 SWOT analysis

The following analysis will attempt to overview the industry's position to ascertain its level of health. In order to draft an overall strategy for the claybrick industry to undertake exports, it is imperative that the resources, deficiencies, opportunities and external threats to the industry and its well being be identified and clearly understood.

3.6.1 Industry Resource Strengths and Competitive Capabilities

- ◆ Large industry resource base
- ◆ Widely recognized industry leader in Corobrik
- ◆ Ability to take advantage of very large scale economies
- ◆ Cost advantages due to costs being SA Rand - based and low cost of local labour.
- ◆ The nature of the SA industry makes it innovative
- ◆ Massive labour resources available
- ◆ Flexibility in production
- ◆ Massive reserves of raw materials , notably clays, shales and coal

3.6.2 Industry Resource Weaknesses and Competitive Deficiencies

- ◆ No defined strategic direction
- ◆ Fragmented local industry
- ◆ Old plant and equipment
- ◆ No global company or industry reputation
- ◆ Old manufacturing technology
- ◆ Limited or non-existent use of e-commerce
- ◆ Low quality
- ◆ Weak global distribution capability

- ◆ Limited access to geographic markets
- ◆ Lack of management depth
- ◆ Narrow product line relative to global competitors
- ◆ Domestic consumers are not sophisticated or demanding
- ◆ Lack of domestic rivalry resulting in no attempts to improve efficiency
- ◆ Limited proactive attempts to seek export opportunities

3.6.3 Potential Industry Opportunities

- ◆ Expansion into new geographic markets by exporting from SA
- ◆ Increasing product lines
- ◆ Better use of e-commerce and Internet to pursue export business
- ◆ Improved profitability by export foreign earnings in hard currencies
- ◆ Joint venture or strategic alliances with Australian export producers
- ◆ Centralized marketing organization which promotes SA products

3.6.4 Potential external threats to the industry's well being

- ◆ High road and sea freight costs (low value to weight ratio of product)
- ◆ Saturation of some geographic markets by other exporters
- ◆ Loss of sales to substitute products
- ◆ Late entry into the export market resulting in loss of first mover status
- ◆ Low growth in many global economies
- ◆ Ongoing quality improvements by rival exporters
- ◆ Adverse shifts in foreign exchange rates
- ◆ Changes in trade policies of foreign governments
- ◆ Costly regulatory requirements
- ◆ Strong bargaining power of export customers
- ◆ Vulnerability to industry driving forces

3.7 Industry Key Success Factors

The purpose of this research report is to identify and evaluate the Key Factors affecting the success of exports of SA clay products by producers. Every market demands certain attributes without which an industry can not hope to succeed. These attributes vary from market to market and due to the opportunity manifest in the export of clay products, it was decided to identify and evaluate these factors rather than undertake analysis of generic industry factors such as skills, market, production and technology.

For all industries, including the brick industry, demand and the nature of demand is a critical element. Domestic input factors such as people, finance, government restrictions and regulations play a role. Factors can also be divided into macro factors and micro factors. In South Africa, macro factors will include government regulations, AIDS, the exchange rate, the relative strength or weakness of the regional or national economy, labour and unions.

Micro factors are attributes that make for the successful operation of the Clay Brick Industry as a whole and can be further broken down into markets and specific sectors. Factors such as strategy, costs, management, labour, quality, logistics and finance are deemed micro factors.

3.8 Conclusion

Chapter 3 has analyzed the present state of the industry with respect to the pressures placed on it by the external environment, the state of the industry economically, its strengths/weaknesses/opportunities and threats, as well as the main driving forces within the industry. However, in order to identify the Industry Key Success Factors, it was decided to carry out a research program utilizing the

opinions of business owners and industry leaders and to formally evaluate the relative importance of these factors based on the feedback from these respondents.

The following chapter, Chapter 4 will discuss the data available from the research, describe the procedure used to gather the data, analyze the data and identify and evaluate the major factors affecting the sustainable export of clay products by South African producers.

CHAPTER 4

“ Identification and Evaluation of the Key Industry Success Factors affecting exports of products and evaluation of the present strategy”

4.1 Introduction

The necessity for industry survival and ongoing, sustainable growth and profitability puts pressure on industry players to investigate and locate new markets. A handful of quality producers have successfully developed export markets, many purely as an exhaust for excess production and inventory. With the weakness of the SA Rand relative to the US dollar during 2001 / 2002, a number of local producers have investigated export opportunities. Unfortunately, these producers have enjoyed varying success and many have terminated their export plans in favor of sales in the domestic market.

The SA Clay Brick Association presently comprises 72 members of a total of more than 220 producers countrywide and has expressed an interest in investigating the export of clay bricks as a potential sustainable outlet for its member's products. As an association, representing its members nationally, the Clay Brick Association (CBA) has shown interest in establishing a business model developed around the Key Success Factors that impact on the sustainable export of clay products. In order to undertake the design of such a business model, it is imperative to firstly:

- Undertake an environmental analysis to evaluate the effect that political, economic, social and technological factors have on the industry.
- Identify the strengths, weaknesses, opportunities and threats that are prevalent in the SA clay brick industry.

- ❑ Evaluation of industry and competitive conditions.
- ❑ Identification of Competitive Success Factors.
- ❑ Analysis of the feasibility of the export strategy.
- ❑ Finally, the drafting of a business model that local producers can utilize to simplify the export process and test the readiness of their business to export product on an ongoing and profitable basis.

So far, this research report has completed the environmental analysis, identified the strengths, weaknesses, opportunities and threats and profiled the conditions within the industry.

Chapter 4 will firstly discuss the background behind the development of exports and identify the industry driving forces that have resulted in the undertaking of exports, followed by the evaluation of the export strategy. We will then outline and discuss the research findings, which will identify the Key Success Factors affecting sustainable exports. These will then be evaluated to ascertain their relative level of importance.

Chapter 5, the conclusion and recommendations will attempt to draft a business model to prepare local brick producers for export based on the Key Success Factors.

4.2 Background

It is a generally accepted fact that SA-based companies have massive potential opportunities for growth in export markets and the same can be said of the claybrick industry in South Africa. Having said that, the major strength for SA exporters is that their production costs are generally based in SA Rands, while potential earnings from exports are in US dollars. A unique strength for clay brick producers is also the massive labour pool available to them at low cost.

Unfortunately, the industry in SA is very fragmented, market demand is extensive and diverse with more than 220 producers countrywide and very geographically widespread. There is a distinct lack of domestic rivalry among firms, which has resulted in low efficiency, limited or no new product development, generally making local firms uncompetitive in the global market.

The cost of importing resulting from the weakness of the SA Rand has often made it too costly to upgrade plant and equipment which has meant that new technology has not been implemented in SA affecting the quality of locally made products. The low quality of SA manufactured clay bricks means that they do not meet international standards and is therefore often not acceptable to the export market. Many local brickyards are family-owned and have been so for many generations. This has resulted in limited depth of management and a non-proactive mindset willing to undertake exports.

A major threat to sustainable export development is the generic low value to weight ratio of clay bricks and pavers. Bricks and pavers are sold per 1000 units and the weight varies between 3000 kg and 3500 kg per 1000 units. This means that only 7000 bricks can be packed into a 20ft container (maximum 24-ton incl. Tare.) making the seafreight costs very expensive relative to the gross selling price of the product. A second threat to exports is the massive shifts that occur in the value of the SA Rand, making the viability of sustainable exports very variable.

4.3 The Clay Brick Industry Driving Forces

There are a number of forces, which have a big influence both now and in the future on the industry's structure and competitive environment, which has tended to encouraged the development of export markets. They are:

1. Increasing globalization of the industry.

2. Changes in the industry growth rate.
3. Changes in manufacturing costs.
4. Government policy changes.
5. Changing societal concerns regarding safety.

(Crafting and Executing Strategy, Thompson & Strickland, 2002)

4.3.1 Increasing globalization of the industry

Two major South African clay brick producers commenced exporting their products in the last 10 years. The one producer exports from Cape Town and one from Durban harbour. Both enterprises undertook exports because of the slackening demand for their high quality clay products in the domestic market and the growing demand for their products from export countries. Both companies have launched aggressive export strategies to grow their export markets and provide sustainable profitability. The weakness of the SA Rand relative to other hard currencies has presented an opportunity for these SA firms to earn foreign currencies and hedge against rising local costs.

By growing exports to a large proportion of their overall sales, these companies have managed to enjoy significant cost economies, which has assisted in making their local sales more competitive. The growth enjoyed by these companies in export markets has stirred the interest of other local producers to investigate exports as an opportunity to grow sales. Unfortunately, a number of factors have tended to work against export growth for these companies and we investigate these in Chapter 4.

4.3.2 Changes in the industry growth rate

The relative instability of the industry as a whole and not necessarily the speed at which the industry is growing or declining has led manufacturers to investigate alternative measures to support sustainable supply from their plants. Producers are trying to overcome the inherent cyclical nature of the local market where increased demand triggers a race for growth from manufacturers only to be followed by a downturn resulting in a shrinking market and a dramatic increase in competitive pressure from within the industry. It is not uncommon for plants to be closed during these periods and production staff to be retrenched until economic conditions or industry conditions improve to warrant the re-opening of the plant again. It is anticipated that a number of firms will focus their attention on the potential of exporting in future years.

4.3.3 Changes in manufacturing costs

The relatively low cost of production factors such as labour, electricity and coal in South Africa has meant that South African producers are now becoming competitive in global terms. Countries such as China, the U.S.A and Australia, which have traditionally been viewed as low cost producers, are now potential competitors for South African exporters. As the SA Rand weakens relative to hard currencies, these cost of production differences become larger, making SA products more competitive on export markets.

4.3.4. Government policy changes

Since 1994, the government has refocused the countries policies from "demand-side" support measures (i.e. Tariffs and quotas) to "supply - side" support measures. These measures have been aimed at raising FDI in manufacturing and restructuring local manufacturing towards greater international competitiveness.

Significant tariff reductions export subsidies and deregulation have supported significant increases in exports of manufactured goods and overall accelerated globalization. In addition, the government has introduced a range of trade and industrial initiatives, such as:

- Technology Programs for industrial innovation in technology.
- Development Finance Programs
- Export Facilitation Programs to assist exporters.
- Matching grant programs and sectoral programs.

President Mbeki has outlined the Microeconomic Reform Strategy whose aim it is to achieve higher levels of economic growth, increase employment, improve skills levels and provide a platform for stimulating a wider range of economic activity within SA. (www.fnb.co.za)

4.3.5 Changing societal concerns regarding safety

The history of crime and violence in South Africa and the inability of the Government and police force to manage this situation has left the man in the street with no alternative but to take safety precautions into their own hands. Developers of housing estates have capitalized on this opportunity by building large-scale secure housing developments. In order to build low maintenance units, the first choice of construction material is a quality clay face bricks. This has presented limited opportunities for producers in and around major cities such as Johannesburg, Pretoria and Durban, where the rate of crime is high.

Overall, these industry-driving forces have had a positive influence on the changes and future changes in the industry's competitiveness and developments of potentially new markets.

Based on our analysis to date, why would South African Clay Brick manufacturers want to expand into foreign markets?

4.4 Reasons for undertaking an export strategy

Generally, companies opt to expand outside their domestic markets for any of the four major reasons:

- *To gain access to new customers* - expansion into export markets offers potential for increased revenues and long term growth, particularly when the local industry is a mature one.
- *To achieve lower costs and enhance the firm's competitiveness* - sales achieved in South Africa is not enough to fully enjoy economies of scale or to ensure that full capacity is being utilized.
- *Capitalize on core competencies* - utilize competitive abilities to secure a position of competitive advantage in export markets. Some companies have been successful in leveraging these competencies in the domestic market and want to capitalize on these capabilities in exports.
- *Spread business risk across a wider market base.* - by exporting to a number of different countries, rather than being solely dependant on a limited domestic market impacted on by its unique economic factors.

However, some South African producers also choose to expand into foreign markets for more specific reasons, such as:

- *Earnings in hard currency* - with the historic and ongoing depreciation of the South African Rand against hard currencies such as the U.S. dollar and the

Euro, firms want to earn income in a hard currency that will ensure a hedged value in times of currency depreciation.

- *Waning demand in the local market for high quality clay products* - producers of high quality clay products which conform to FBS and FBX quality standards have experienced reduced demand for their products over the past 10 years and have therefore been forced to find new outlets for their products beyond the borders of South Africa.
- *Availability of export incentives from the SA government* - the Department of Trade and Industry initially supported exports by the industry by providing financial incentives to encourage export growth. Unfortunately, this has changed somewhat and financial support is no longer easily available in the form that it previously was.

4.5 Evaluation of exports into foreign markets as a Grand Strategy.

As we discussed earlier, exports play a very important role in the SA economy and since 1994 have grown some 41% and now contribute towards 19% of the country's GDP. South African producers, like producers in other countries, are faced with an inherent size limitation of the domestic market and in South Africa, this is compounded in the Clay Brick industry due to the fragmented nature of the industry. South African clay brick producers make intensive use of raw materials and labour, while advanced factors of production such as communications, research and development technology and training and development of skilled labour are limited or non-existent.

Simple ignorance has been a huge barrier to exporting (Hill, 2002) and this has been the downfall for the majority of South African producers. Since 1994, the government has encouraged exports by incentivising exporters and encouraged

firms to be proactive in seeking export opportunities. All companies aim for revenue growth and creation of value as their objectives. A grand strategy of market development (selling existing products into new markets) or opening additional geographic markets is the least costly and least risky of the grand strategies. (Phillip Kotler, Marketing Management Analysis, 1999). Typically, a company will start to compete internationally by entering just one or maybe a select few foreign markets.

The strategies that companies use to compete in foreign markets need to be "situation-driven", as cultural, demographic and market conditions vary significantly among countries of the world. The potential for rapid market growth varies significantly from country to country. In emerging markets such as India, China, Brazil and Malaysia, potential is far higher than in mature economies, such as found in Europe. In some emerging economies, there are efficient and well-developed distribution channels, while in a country like China, distribution is primarily local and provincial and there is no national network for distribution. The marketplace in some countries is intensely competitive, while in others, this is not the case.

It is imperative that South African producers, who choose to export, exploit local advantages to the full. Basic production factors such as low wage rates, cost effective raw materials, low electricity costs and low shipping costs to the full in order to gain competitive advantage. The volatility of exchange rates needs to be utilized as a geographic cost advantage. A companies reputation, customer base and competitive position in one nation has little bearing on its ability to compete successfully in another and it is therefore imperative that the exporter has intimate market knowledge before entering that market.

There are a host of generic strategic options for a company that decides to expand outside its domestic market and compete internationally, however, the only realistic strategic option available to SA clay brick producers is to maintain their SA production base and export goods to foreign markets, utilizing either company-owned or foreign-controlled forward distribution channels.

Using a domestic plant as a production base for exporting goods is an excellent strategy that minimizes risk and capital requirements and is a conservative way to test international waters. With an export strategy, the manufacturer can limit its involvement in foreign markets by contracting with foreign distributors experienced in importing to handle the entire distribution and marketing function in their countries.

It may be more advantageous to maintain control over the distribution and marketing functions by establishing a sales / distribution organization in one or more of the target markets, however, this is viewed as risky, given the size of anticipated export business. The primary functions performed abroad relate to establishing a network of distributors and dealers and perhaps selected sales promotion and brand awareness activities.

In this regard, it is recommended that the exporter appoint an export co-ordinator to manage the establishment of these functions. The long-term success of the export strategy hinges on the relative cost competitiveness of the production facility. It is therefore imperative that manufacturing costs be contained and that shipping costs be competitive with rival companies and countries.

The following, Table 3 outlines the comparison between a Multi-country Strategy and the proposed export strategy for SA clay brick producers.

Strategy Description	Multi-country Strategy	SA export strategy
<i>Strategic Arena</i>	Selected target countries and trading areas	Selected target countries and trading areas
<i>Business Strategy</i>	Custom strategies to fit the circumstances of each host country situation	Same basic strategy but with minor country variations where essential
<i>Product Line Strategy</i>	Adapted to local culture and the particular needs and expectations of local buyers	Standardized products with very minor customization where and when required to meet local specifications
<i>Production Strategy</i>	Plants scattered across many host countries	One or more South African-based plants only
<i>Marketing and Distribution</i>	Adapted to practices and culture in each host country	Adapted to host country requirements
<i>Cross country strategy connections</i>	Transfer of ideas, technologies and capabilities that work successfully in one country to another country	Use much of the same technology and capabilities and promote use of relatively standard strategy
<i>Company organization</i>	Form subsidiary companies to handle operations in each host country. Each subsidiary operates autonomously to fit host country conditions	All major strategic decisions made in South Africa by the producer.

This strategy needs to be evaluated based on its suitability, acceptability and feasibility.

4.5.1 Suitability

Does an export strategy suit what is trying to be achieved?

What are the reasons for pursuing the export strategy?

Firstly, the very fragmented nature of the industry in South Africa and the anticipated future growth (only 2-3% annually) make sourcing alternative geographic markets very attractive and one of the few sustainable options available. Historically, the construction industry and thus the clay brick industry, as a major supplier to the former, has traditionally been dogged with massive swings in demand. The cyclical nature of the industry is the result of changes in bank interest rates, government spending and consumer demand. This situation has resulted in producers experiencing either "feast or famine" and for some the attraction of entering new, less cyclical markets is seen as the only sustainable growth opportunity available.

The opportunity to generate income in a hard currency that acts as a hedge against the depreciation of the local currency presents an opportunity for producers that are able to meet the strict quality standards of the export market. Other benefits of export that meet the suitability requirement are:

- ❑ The export market is utilized as an "exhaust " for over capacity and is used to reduce inventory.
- ❑ The export market is much larger and diverse than the local market, with higher growth rates.
- ❑ The "improved balance" experienced in production results in economies of scale, which drops unit production costs and improves overall efficiencies.

- ❑ Offering a standardized product or product range to the global market speeds up the "ride down the experience curve", resulting in improved quality and production performance.
- ❑ The demands of exporting often result in focus by management on successfully implementing generic strategies, such as low cost leadership or differentiation.

4.5.2 Acceptability

The commitment to exports requires additional working capital, as generally export payment terms are 90 days or over and are covered by a letter of credit or similar. Local customers pay in 45-60 days, which means that exporting results in a stretch on working capital. It is a generally accepted fact that export sales net operating margins need to exceed the cost of capital, as export sales are often funded using an overdraft or other interest - bearing debt. With the present bank prime rate (*February, 2003*) fixed at 14.5% and assuming that the required working capital is borrowed from a commercial bank , it is imperative that a Net Operating Profit after Tax (NOPAT) at least exceed this figure, in order to cover the cost of capital.

The financial risks involved in exporting far exceed the risks of operating in the domestic market. Market development needs to be funded using resources from the local market and often this requires input for 12 months or more before an export order is granted. Often, successful exporting requires investment in adapting the product and packaging to meet the requirements of the country that is being exported to. It is imperative that the exporter utilizes the payment facilities and hedging derivatives available to the exporter, as well as familiarizes him/herself with the Standard Incoterms.

In order to ensure timeous payment and to reduce financial risk, all payments need to be covered by a confirmed letter of credit issued by the bank prior to dispatching the goods. Due to foreign exchange exposure and particularly transaction exposure,

it is imperative that the exporter buys forward cover or forward exchange to cover the risk of further depreciation of the SA Rand.

Some producers may adopt a more long term approach to exporting and be willing to initially export product at breakeven in order to grow market share and reduce excess inventory, with the future strategy of reducing costs and becoming more competitive, thereby producing a profit. The reduced inventory results in a reduced working capital requirement and a drop in interest paid, which makes the firm more competitive.

4.5.3 Feasibility

Prior to the undertaking of an export program, it is imperative that the producer analyses whether its existing resources and competencies are capable of meeting the demands that will be placed upon it. (Johnson & Scholes, Strategy evaluation and selection, 2002). Exporting requires time, particularly in the early stages of market development and often a small brickyard has a limited staff complement. A total commitment to the export program is required by both management and staff alike. Often, exporting requires that a business rearrange the way it operates, in order to become internationally competitive. It is imperative that management be committed to exports and that an attempt be made to develop management skills in international business. Prior to exporting, it is important for the producer to analyze its domestic performance and assess the firm's capacity. It is important to consider the demographics, social, political and economic factors of its target markets and wise to confer with international trade experts prior to selecting its target markets.

Trade and Investment South Africa, an initiative set up by the Department of Trade and Industry to promote and support South African exports by Small, Medium and Micro Enterprises (SMME's) manage a website at [http:// www.tisaglobal.com](http://www.tisaglobal.com) where an aspiring company that believes it is ready to export can analyze the suitability and

feasibility of pursuing this option. They have an online self - administered questionnaire that can be answered, comprising a total of 18 questions to evaluate the export readiness of one's business.

The main factors discussed and questioned are:

- Management's commitment to exports.
- Management's skills in international business.
- Financial Resources
- Technical know-how
- Capacity to supply
- International marketing intelligence

Answers to these questions are in a YES / NO format and each factor is weighted according to its level of importance. The trade initiative has weighted the various factors as follows:

Management's Commitment	25%
Management's skills	5%
Financial Resources	25%
Technical know-how	20%
Capacity to supply	20%
Marketing Intelligence	5%
Total :	100%

It is clearly apparent that the Department of Trade and Industry place major emphasis on the acceptability and feasibility factors, namely, management's commitment to exports and available financial resources followed by capacity to supply. Although their online model is generic, it assists would - be exporters to

identify and evaluate factors that can impact on successful exports and provides a "rough and ready " indication of the company's export readiness. In order to evaluate the suitability, acceptability and feasibility of the export strategy further, it is important that we carry out the following:

1. Identify and evaluate the key success factors that are unique to the industry and that the industry itself perceives as having a major impact on the sustainable export of Clay Products.
2. Identify the present performance gap between where the industry is now and Where it needs to be in order to address successful and sustainable exports.

Other than the generic evaluation of export readiness provided on the Trade and Investment website, there is little or no "industry – specific " guidance available to industry players to identify success factors and evaluate export readiness for their industries. This is also true of the Clay Brick Industry in South Africa, where successful exporters are generally not supportive or in anyway forthcoming in assisting the industry to improve its export readiness.

Because of the export opportunity available to local producers and the general lack of industry specific information available to would-be exporters, it has become necessary to carry out research into the primary success factors that influence the sustainable success of exports of clay products by local producers.

The objective of this research was to establish what the most important factors are (as perceived by the industry itself) that have an influence on the exporting of clay bricks and pavers. In 1999, the Department of Trade and Industry appointed the ceramics development division of the CSIR in Pretoria to undertake research to

establish the requirements for the SA Ceramics industry to grow into becoming a major exporter of value-added ceramic products.

For the layman reading this report, "ceramics" incorporates all clay, semi-clay, lime and fireclay-based products. Unfortunately, the research was never formally completed, as the DTI withdrew its financial support prematurely. It can therefore be stated that there is no significant body of literature available in SA on the subject of exports of clay products. The research results indicate a reasonable level of consensus within the industry with regard to the major factors affecting sustainable exports.

The objective of this research project was essentially to assess and consider two primary issues. Firstly, to identify the Key Success Factors (KSF's) affecting the sustainable export of clay products by South African producers, and secondly, to evaluate these KSF's to ascertain the most important factors that need to be addressed by industry players in developing their export programs.

The process of identifying generic Key Success Factors is not a difficult one and a fairly significant body of literature exists in textbooks and on the Internet. However, the intention of this research was to identify success factors that are industry and / or product export specific. In order to identify these specific factors, it was imperative that a project be undertaken where the industry itself was questioned and these specific KSF's be identified.

Identification of these KSF's, however, is not enough. In order for the research to create value for the industry and to contribute further to the existing body of knowledge, it is important that the Key Factors be evaluated in respect of the positive or alternatively, negative role that these factors play in affecting sustainable exports.

The final outcome of this research is to develop a business model, which takes account of the key success factors and guides the exporter through the export process.

4.6 Research Procedure

The problem statement is defined as follows:

“ What are the major factors that impact on the sustainable export of clay products by RSA producers and evaluate these factors according to their level of importance”.

4.6.1 Sample Design

There are more than 220 clay brick producers countrywide of which 72 companies are members of the Clay Brick Association. These 72 producers comprise more than 85% of SA production capacity and can thus be viewed as truly representative of the industry in this country.

As the primary objective of the research project is export – related, producers of NFP (non-facing plaster bricks) have been excluded from the population, as their products are of such low value, that they cannot be exported. Thus, the research project was directed at producers of clay facing bricks, clay pavers and quarry tiles, who are Members of the South African Clay Brick Association.

Restricting the target population to the above, ensured that focus was placed on the finite subject at hand and not too broad based. As the clay brick association has a total membership of 72, of which only 44 are producers of the required products, it was decided that a sample size of 12 companies would be sufficiently representative to complete the research. Therefore, 44 companies were each given

a number ranging from 1 to 44 and 12 numbers were randomly selected from this population.

4.6.2 Collection of Data

Questionnaires were posted or faxed to owners and general managers of the various selected companies and respondents were asked to complete the questionnaires. Personal interviews were conducted with 3 respondents, as it was the intention of the writer to explore the subject further and obtain more detailed information.

4.6.3 Questionnaire Design

The questionnaire utilized is included in Appendix 1A. The questionnaire was carefully designed to encourage full participation. The introductory letter stated that the questionnaire required less than 20 minutes to complete and that completion was voluntary. The covering letter is attached as Appendix 1B.

The questionnaire was designed to be simple to complete and the primary consideration was that the questionnaire should facilitate data collection and analysis. The questionnaire comprised 19 questions, the first 8 questions were targeted at gaining fundamental information regarding the respondents involvement in exports. Questions No.9 to 16, all Lickert Scale type questions, collected the respondents rating of various factors listed, that impact on sustainable exports. The final 3 questions were viewpoint questions, which allowed the respondent to comment on related issues.

The last page of the questionnaire thanked the respondent for taking the time to complete the questionnaire honestly. The questionnaire was pre-tested on a small

sample of two MBA graduates and their recommended amendments were included accordingly.

4.6.4 Data Analysis

The data from the 12 returned questionnaires was entered onto Microsoft Excel 97 spreadsheet database and responses were meaned in order to determine the factors with the highest average scores. The indices were arrived at by aggregation of the scale values for the responses in the relevant sections. The advantage of this system is that it is elementary, but easily comprehensible and meets the requirements of this level of analysis.

Of the 12 questionnaires sent to respondents, all 12 were returned, representing a 100% response rate. Appendix 2A indicates the responses to each of the 12 questionnaires in tabulated form.

4.7 Research Findings

The following pages cover the findings of the research project.

4.7.1 Export involvement and fundamentals relating to export activity.

Of the 12 respondents, only 3 companies presently export their goods. Although one could draw the conclusion that this indicates a 25% of the industry, this would be incorrect, as an interview with the Chairman of the SA Clay Brick Association revealed that these are the only enterprises in the industry that presently exports at all.

Five out of the twelve companies interviewed namely 40%, have exported or attempted to export in the past 3 years. Six of the companies interviewed, or 50%,

plan to export in the foreseeable future. The 3 companies that presently export export two products on average, namely, FBS and FBX facing bricks and 50mm thick clay paving bricks. A shocking 80% (10 respondents out of 12) commented that they did not believe that the Clay Brick Association had an active or meaningful role to play in the promotion of exports of products.

In summary, less than 4% of the CBA members presently export and only 11% of clay facing brick manufacturers have exported in the past 3 years, while 14% of the CBA producers will consider attempting to export in the future. An analysis of the products presently exported reveals that demand is mainly for high quality FBS or FBX facing bricks and 50mm geometric pavers.

4.7.2 Analysis of the Key Factors affecting sustainable exports

Essentially, these are actions required by the industry or government to promote exports of clay products.

Table 4.0 (Question 6) sets out the research results with regard to the industry's perception of the required actions needed to actively promote exports

		Resp. 1	Resp 2	Resp 3	Resp 4	Resp 5	Resp 6	Resp 7	Resp 8	Resp 9	Resp 10	Resp 11	Resp 12	avg sco
1	The Clay Brick Industry needs the support of the Dept. of Trade & Industry.	3	2	4	5	2	5	3	3	5	5	2	3	3.5
2	The brick yards need to appoint their own agents and reps overseas to sell and should export Individually.	5	4	4	5	5	5	4	3	5	3	5	5	4.4
3	The CBA needs to appoint an export manager that reps SA exports	1	2	2	5	1	3	1		5	5	4	5	2.8
4	A formal export council needs to be formed to manage exports of SA Products	5	2	2	2	2	1	1	1	5	1	3	3	2.3

Table 4.0

The results clearly indicate that the industry believes that producers should appoint their own agents or representatives in the overseas markets and that an individual, rather than a united approach is supported. The result of this analysis is clearly manifest in the fragmented nature of the industry in South Africa and the overall lack of co-operation between the companies in the industry.

Fifty percent of the respondents (6 in total) agreed that the South African Clay Brick Industry needs the support of the Department of Trade and Industry to develop exports, however only 25% feel that the CBA needed to be involved in representing SA exports.

Table 4.1 sets out the results regarding the industry's perception of the value potential that exports hold and whether they represent an opportunity to SA producers to grow. A **LICKERT SCALE SUMMATED RATING** was utilized where the number 5 represented "Strongly Agree" and Number 1 represents " Strongly Disagree".

Strongly Agree	5												
Agree	4	Resp	Resp	Resp	Resp	Resp	Resp	Resp	Resp	Resp	Resp	Resp	avg
Unsure	3	1	2	3	4	5	6	7	8	9	10	11	12
Disagree	2	4	2	4	4	4	2	4	3	4	3	3	4
Strongly Disagree	1												3.42

Table 4.1

The average score posted was 3.42 indicating that on average, respondents are unsure of the potential value that exports hold. This result is consistent with the answers received from the Chairman of the Clay Brick Association who stated that "most clay brick producers are production – driven and are preoccupied with their own environment and are not outward looking in their approach to business growth".

He also commented that, in general, the majority of producers have no exposure and little interest in exploring export opportunities. His conclusion was that the majority of producers are uninformed and that ignorance hinders them from investigating export potential.

Question 8 endeavored to evaluate which countries or geographic regions were presently the most successful in importing South African –produced products.

Table 4.2 sets out the findings with respect to the most serviced region.

	Resp 1	Resp 2	Resp 3	Resp 4	Resp 5	Resp 6	Resp 7	Resp 8	Res p 9	Resp 10	Resp 11	Resp 12	No.
African Countries													5
Japan													1
Malaysia													0
UK													6
USA													2
Brazil													0
Argentina													0
Singapore													1
Middle East													2
Mauritius													1
India													0
Philippines													0
Korea													1
Taiwan													1
Europe													0
Australia													0

Table 4.2

It comes as no surprise that African countries such as Botswana, Mozambique, Namibia and Zimbabwe claim popularity. The reason for this is obvious and clearly understood. All of these countries are members of SADEC (Southern African Development Council) and as such have a zero – rated import tariff on South African –produced products. Secondly, all of these countries can be reached by

road, resulting in lower transport / freight costs. Thirdly, South Africa has a strong reputation as the major producer of quality clay facing bricks in Africa. Finally, it is commonly known that South African-based architects and engineers design large capital projects in these countries and therefore specify locally manufactured components to be used in these projects.

The United Kingdom (U.K.) is an equally popular export destination, although freight costs to Europe are known to be higher than freight costs to the Far East. The successful export to the UK lies in the fact that the United Kingdom has a history of assisting in the development of the SA clay brick industry dating back to the early 1950's and because of this, excellent contacts were made in the UK and the acceptance of SA products still prevails.

Only one major producer in South Africa exports clay products to South East Asian countries such as Japan, Singapore, Korea and Taiwan. An interview with the export director of this enterprise revealed that these countries are very competitive markets and that SA companies wanting to compete in these markets would need to be competitive against suppliers from the USA, Australia and China.

In the following six questions, a **MULTIPLE RATING LIST SCALE** was used and respondents were requested to rate the factors based on their level of importance or unimportance as having the greatest impact on the sustainable export of clay products. The scales are all 7-point scales and the respondent is asked to circle the number that he or she feels fits the measure. This type of scale produces interval data and allowed the researcher to utilize the arithmetic mean and also measure the standard deviation as a measure of dispersion of results, despite not intending to run statistical tests.

The answers to the following six questions all evaluate the major factors that affect exports.

4.7.3 Manufacturing and production-related key factors

The importance of this question was to identify the three most important factors in production or manufacturing that impact upon sustainable exports.

Table 4.3, below sets out the research findings with regard to these factors as respondents were requested to evaluate according to their level of importance.

	Resp 1	Resp 2	Resp 3	Resp 4	Resp 5	Resp 6	Resp 7	Resp 8	Resp 9	Resp 10	Resp 11	Resp 12	avg	St
Quality	7	6	6	7	6	7	7	5	7	7	7	7	6.5	0.7
Limited infrastructure	6	6	1		2	4		2		1	3	3	3.1	2.2
Low cost production efficiency	7		5	6	4	5	7	4		5	6	4	5.3	1.2
Technical know-how	7		4		4	1		4		4	1		3.5	1.9
Superior workforce talent	6		4	4	4	3		3		2	3	3	3.5	1.5
Outsource production	2		1	1	1	1		1		1	1		1.1	0.4
Production capacity limitations	7		6	4	7	7	6	7		7	7	6	6.1	1.7
Strong quality control know-how	7	7	4	7	3	2	4	4		5	3	4	4.5	1.9
Other:														

Table 4.3

The table clearly indicates that according to the 12 respondents, **quality** is the most important factor, followed by **production capacity limitations** and then, **low cost production efficiency**. All respondents rated product quality as being a major factor from a manufacturing perspective. At present, only 2 or 3 producers are able to meet international standards. The majority of SA producers manufacture FBA (face brick aesthetic) quality bricks, while the minimum standard demanded by export markets is FBS standard and sometimes even FBX quality, which are both of a much higher quality standard than FBA.

Production capacity limitations are highly rated as playing a major role in the export of product for obvious reasons. If the plant cannot produce sufficient product to

service its existing local market, there is scant chance that the producer will attempt or even consider undertaking export. Effectively, the company is not ready for growth, let alone export or geographic growth. This is the case with a number of the privately owned "one man" operations that have scaled down to only service their immediate geographic markets. There is little chance that they will consider exports or any growth with their current production facilities and require vast capital investments in plant and equipment to increase production capacity.

Low cost production efficiency plays an essential role in the commercial aspect of export potential as the exporter needs to at least enjoy a competitive advantage in some factors of production such as labour, raw material costs or plant efficiency in order to be competitive in the market. This is also a factor of relative price parity and the exchange rate. Therefore, in conclusion, for the manufacturer, factors that play a profound role in export and need consideration are:

- I. Product Quality
- II. Production capacity or the limitations of production capacity
- III. Low cost production efficiency – the ability to produce at a low cost relative to other exporters.

4.7.4 Marketing and sales – related key factors

Once again, the purpose of this question was to identify and rate the three most important factors that impact on exports, related to the sales and marketing functions. Here, the selection of factors could have been made very wide, however, the purpose of the exercise was rather to identify the industry generic factors, rather than identify factors that would be specific to each companies marketing strategy and might change drastically dependant on their strategy.

Table 4.4 clearly sets out the research findings.

	Resp 1	Resp 2	Resp 3	Resp 4	Resp 5	Resp 6	Resp 7	Resp 8	Resp 9	Resp 10	Resp 11	Resp 12	avg	std
Selling Prices	7	5	7	7	6	7	7	7	7	7	6	7	6.7	0.7
Cyclical nature of local market	4	5	5	2	3			5		4	3	2	3.7	1.2
Market size	6	5	5	5	3			3		7	5	5	4.9	1.3
Market Potential	6	5	5	5	3	7		5	7	7			5.6	1.3
Lack of representation in export	7	5	6	5	7	7	7	7	7	5			6.3	0.9
High marketing costs	7	5	7	6	3	7	6	5		4			5.6	1.4
Compliance with int. standards	7	7	7		7		6	7			7	6	6.8	0.5
Lack of promotional literature						6							6.0	

Table 4.4

The results in the table above indicate that some respondents were not able to rate some of the factors. This affect can be attributed to the fact that many of the respondents have no export marketing experience or insight and are therefore not in a position of being able to make an informed judgement of the importance of a factor. The remaining results are clear in their evaluation.

Compliance with international standards is identified as the important key factor in marketing and sales. This evaluation is confirmed by the fact that product quality was identified as the major factor in production. It goes without saying that if the exporter cannot produce what the market demands, there is scant chance of them exporting on a sustainable basis. International standards encompass the geometric size of the brick or paver , the finish quality, number of chips and cracks on the surface as well as the quality of the packaging.

Selling prices are an obvious choice, and rated almost as important as compliance with international standards. This factor should theoretically rate as an even more important factor than the former, as it goes without saying that if the market does

not accept the selling price, the quality or compliance of the product is irrelevant, as the product will not be exported. However, in penetrating any new market, it is accepted as a given, that the product needs to be priced at a level that is acceptable to the market and that allows it to compete with competitors products. The commodity nature of clay products excludes them from enjoying a skimming price strategy and it is essential that the exporter have clear insight into the market-related prices in order for them to compete successfully.

Lack of representation rated as the third most important sales and marketing factor. This conforms to expectation, as once the company is in a position to export, has suitable quality product that meets the required standards and has a market related selling price, the next most important issue is to find someone to sell the product on your behalf. Despite this rating as the 3rd most important factor, it must not be dismissed as not being critical. The negotiation and establishment of a representative to act as an agent to sell imported products often takes months and many contacts to establish.

In many countries, more than just a suitable product and price is needed to establish representation. It often takes many visits and months to develop a trusting relationship with an agent and a formal agreement is recommended to ensure that performance expectations are met. Suitable country representation is viewed as paramount in the establishing of an export business.

Other important factors noted were the market potential and the high costs of marketing which also play an important role in deciding which market to enter and what to spend on the marketing strategy. The majority of respondents stated that if the export market was unable to provide the margins and demand that the domestic market provided for them, that they would be hesitant to pursue an export strategy, as this would require major investment in time and money.



4.7.5 Distribution – related Key Factors

It is common knowledge that distribution and freight costs play a massive role in the profitability of sustainable exports as well as the ability of the exporter to deliver the goods on time and conforming to the receiving countries regulatory requirements. Table 4.5 sets out the factors that are viewed by the industry as playing the most important role in sustainable exports.

	Resp 1	Resp 2	Resp 3	Resp 4	Resp 5	Resp 6	Resp 7	Resp 8	Resp 9	Resp 10	Resp 11	Resp 12	avg	std
High seafreight / shipping costs	7	7	7	7	7	7	6	7	7	7	6	7	6.8	0.4
Location of brickyard within SA	5	7	7	6	4	4	7	6		6		7	5.9	1.2
Clearing & forwarding expertise	6	4	3	5	5	6	4	6		7	3	4	4.8	1.3
Geographic location of market	7	7	6	6	5	5	7	4		7	5	5	5.8	0.7
High int. transport/warehouse cost	6	6	4	6	6	7	6	6	7	7	5	6	6.0	0.9
Short delivery times	7	5	4	4	7	1	7	7		2	4	4	4.7	2.1

Table 4.5

Containerization has revolutionized the transportation business, lowering the overall cost of distribution (Hill, Int. Business, 2002). Transportation costs play a major role in low value to weight exports, often making them uncompetitive to export. A primary activity in the export value chain is the on-time delivery of the product. Freight rates are a key component to a company’s relative competitive advantage and hence market access, particularly in the East and Far East.

Kidger (2002) states that in many Eastern and Far Eastern markets, Australian producers enjoy similar freight rates to South Africa producers and therefore SA producers can compete effectively in such circumstances. He further states that where freight rates exceed US\$600 per 20ft container, the freight costs become excessive and ultimately limit the export opportunities. Kidger’s experience is that there is a strong correlation between the cost of freight and volume potential in

export markets. Based on the importance that distribution inputs play in sustainable exports, an analysis of Table 4.6 indicates:

- I. **Sea-freight costs** are the most important distribution – based key success factor. Because freight makes up such a large proportion of the overall cost of exports, it is a factor that needs to be addressed at the early stages of the export strategy. The cost of sea freight is directly affected by the destination of the export and not necessarily by the proximity of the export country to SA. Often, shipping lines will effectively discount shipping rates to certain destinations in order to ensure that they have sufficient traffic in that direction. Shipping lines also offer trans-shipments to nearby destinations in order to make up a critical volume of export containers. This is a subject that needs to be researched by the exporter, prior to attempting to export.
- II. Table 4.6 indicates that the 2nd key factor identified by the industry is the high **internal transport and warehousing costs** associated with exports. This factor is directly impacted on by the proximity of the brickyard to the port. The high weight to volume ratio of clay products means that a maximum of 10,000 bricks can be transported by truck at a time, resulting in a high unit cost per 1,000 bricks. The unit of measure for clay bricks and pavers is thousands, however, both transport companies and warehousing service providers charge by ton weight, resulting in a relatively high input cost for both services.

Warehousing includes the unloading, storage and stuffing of containers for export. These services are all charged out per ton weight and can result in a dramatic increase in costs due to the high weight to volume ratio of clay bricks.

III. The **location of the brickyard within South Africa** plays a major role in the cost make-up of the export. It goes without saying that a brick yard that is within close proximity to the export port will have a cost advantage over a brickyard that is situated inland from the port. In evaluating the export readiness of a company, management needs to access the cost implication of the transport required to have the product delivered to the port of export and investigate the most cost-effective options available, whether it is road or rail transport.

4.7.6 Finance-related Key Success Factors

Table 4.6 outlines the research results for finance.

	Resp 1	Resp 2	Resp 3	Resp 4	Resp 5	Resp 6	Resp 7	Resp 8	Resp 9	Resp 10	Resp 11	Resp 12	avg	std
Cost structure	6			7		4		6		7	4	3	5.3	1.6
Access to financial capital	3			6						4		2	3.8	1.7
Foreign currency earnings	6	6	7	6		5		7	7	7	5	6	6.2	0.8
Use of financial derivatives	4			5							2		3.7	1.5
Weakness/Strength of SA Rand	7	7	7	7		7		7	7	7	6	7	6.9	0.3
Financial Resources	2			5						7		6	5.0	2.2

Table 4.6

The purpose of including finance-related factors was essentially to ascertain whether the factors related to costs and inputs played a greater role than did the lure of increased earnings or earnings in a hard currency. Table 4.7 sets out the results as follows:

From a financial perspective, a key factor in undertaking exports is the **weakness of the SA Rand** versus hard currencies such as the Euro and US dollar. This factor is crucial to any exporter and essentially decides whether a company can export or not. Based on the fact that local costs are incurred in Rand terms and exports are

sold in a hard currency, which when converted to Rands, results in increased earnings, this external environmental factor, plays the single most important role as a driving force for exports.

A strengthening of the SA Rand against another currency can result in a companies cost advantage being totally destroyed and profitability diminished or destroyed.

Foreign currency earnings are perceived by the industry as being a very important factor in undertaking exports for obvious reasons. Earnings in dollars or Euro's act as a hedge against rising costs and can also result in increased earnings without an increase in working capital. The SA Reserve Bank allows exporters to hold a foreign exchange account and to hold foreign currency for a period of 180 days before having to convert it to SA Rands. This allows the exporter the opportunity to speculate on the currency changes and optimize on profitability.

Another obvious benefit of exporting is the reduced cash outflow because of reduced VAT output tax, due to the trading currency being either dollar or Euro denominated.

The 3rd success factor quoted by respondents is the exporters **cost structure**. This relates to the manner in which the company views its costs in the make-up of its product and the real costs that a company faces. A company that has plant and machinery paid off and has little interest bearing debt might structure its cost make-up in a different way to a company that has new plant and machinery.

A company that has excess capacity might choose to "contribution cost" some of its supply in order to reduce inventory and liquidate its working capital earlier. The cost structure of the enterprise has a direct bearing on its profitability and flexibility. A company that is highly profitable can afford to contribution cost some of its new business in an effort to penetrate a new market, while a company that is barely breaking even cannot afford to reduce its contribution margin, without losing money.

In conclusion, the respondents cited the weakness of the South African currency as being the major key success factor relating to finance, when considering sustainable export of clay products. Their claim is that ongoing exports rely on the weakness of the local currency in order to be sustainable. They all identified this single factor as playing a pivotal role in sustaining existing exports and developing new business.

A major motivation behind exporting is the lure of foreign currency earnings for South African producers. With the continuing depreciation of the local currency against hard currencies, exports act as a Rand hedge for local producer income streams.

Finally, the cost make-up of an export business plays a vital role in affording the business both flexibility and the opportunity to earn increased margins.

4.7.7 Product – related Key Success Factors

Despite the “product” constituting part of the marketing strategy, it is deemed of great enough importance to identify factors pertaining to it on its own that have an impact on sustainable exports. The fact that a product is readily accepted in the domestic market in no way assures it readiness for the international market. The number of competitor products available on the world market far exceeds the level of competitiveness experienced in the domestic market and as such warrants consideration as a key factor.

Issues such as packaging and product advertising, which are often overlooked in the South African market now, need to be considered as playing a meaningful role in successful exporting. Table 4.7 not only identifies some of these factors but also sets out the research results as received from the 12 respondents:

	Resp	Resp	Resp	Resp	Resp	Resp	Resp	Resp	Resp	Resp	Resp	Resp		
	1	2	3	4	5	6	7	8	9	10	11	12	avg	std
Breadth of product line	7		5	5	4	7	5			2	2	3	4.4	1.9
Attractive & Quality packaging	5		4	5	4	4	5			4	6	5	4.7	0.7
Readiness of product for export	5		7	7	7	7	7		7	7	7	7	6.8	0.6
Competitor products	6		6	7	6	7	5		7	7	7		6.4	0.7
Clever product advertising	5		3	6	4	4	5			2	4		4.1	1.2
Product adaptability to suit export	6		7	7	7	7	7		7	7	6	7	6.8	0.4
New product development	7		6	7			6			7		7	6.7	0.5

Table 4.7

The importance of “getting the product right” is clearly identified in the results indicated in Table 4.8, where both *‘readiness of product for export’* and *‘product adaptability to suit exports’* had the same aggregated scores of 6.8.

Croukamp (2002) stated that product quality and standard which is readily accepted in the local SA market does not mean that it will be acceptable on the export market. Although there is a proliferation of products available and accepted by SA users, the majority of these products are not suitable for exports. Why?

Croukamp continued to state that overall the requirements from export markets are that both bricks and pavers not only conform with international standards, but that they must be part of an extended product range that includes matching face bricks, pavers, bullnoses, cants and other “specials”. The same conclusion was alluded to by Kidger (2002) who stated that it was necessary for an exporter to be able to supply a full product range which included a range of surface finishes such as satin, rockface and travertine. He continued to state that a producer that could guarantee supply of an extended product range had a “much greater chance of success in the competitive export market” than a manufacturer who had a limited product range.

The ability of a producer to introduce **new products** was also highlighted as being important. Unfortunately, new product development is viewed as a “luxury” by

many local producers who feel that there is no demand for new products and that attempting to add new products is only successful in adding more costs to a tight operating budget. However, the international market expects the supplier to offer new products to the market on a regular basis.

Awareness of **competitor products** also posted a high average score despite the respondents overall lack of export experience. Despite the fragmented nature of the domestic industry in SA, respondents have excellent knowledge of both their competitors and their opposition’s products.

An interesting result was the relatively low score given to **“attractive and quality packaging”**. High scores were posted on this option by the 3 enterprises who currently export, but overall the respondents did not evaluate this option as being key to the success of exporting product. The reasons for the low scores can only be attributed to ignorance on the part of “non-exporters”, who due to their lack of exposure to export intricacies, do not realize the important role that robust and durable packaging plays in ensuring that quality is upheld.

Considering the fact that the products need to be able to endure multiple loading and unloading, packing into a container and thousands of kilometers of sea travel, quality & robust packaging is a must. A visit to a Durban – based warehouse revealed that standard export packaging for clay products includes palletizing, stretch-wrapping and plastic strapping to limit the amount of movement of the units on the wooden pallet.

4.7.8 Management – related key success factors

It goes without saying that without total commitment from top management, any strategy will not be successful and the same can be said for exporting. It is imperative that the organization has the full support of all management to meet its objectives. In the case of exporting, much time and resources are required to set up the export initiative. Capital is committed to the project and staff requires training and support. Often, the skills of management are tested during this period and resources are pushed to the limit.

We also noted in Chapter 3 that Trade and Investment South Africa assist 'would-be' exporters to evaluate their export readiness. Within their evaluation, they rate management's commitment and management skills in international business as being two of the primary factors that affect the success of the export program. With this in mind, management – related key factors were included in our research. The research results are set out in Table 4.8 below:

	Resp	Resp	Resp	Resp	Resp	Resp	Resp	Resp	Resp	Resp	Resp	Resp		
	1	2	3	4	5	6	7	8	9	10	11	12	avg	std
Management's commitment	7	7	7	7	7	7	7	7	7	7	6	7	6.9	0.3
Management's skills in business	7	6	7	5	5	4	7	6	7	4	5	6	5.8	1.1
Int. market intelligence	6	7	7	5	7	7	7	5	3	4	4	4	5.5	1.5
Technical know-how	6	3		5		2				1			3.4	2.1

Table 4.8

It is interesting to note that all twelve respondents rated the need for management to be totally committed to the export initiative in order for it to succeed. Kidger (2002) commented that most CBA members are too preoccupied with their own local markets and do not have an outward looking market driven culture. This serves as a deterrent for manager's to commit their time and efforts to develop their export programs.

Respondents also indicated that management business skills were important as a factor when considering exports. It is an all too common phenomena that management have been in the clay brick industry all their working careers and only have skills limited to their particular businesses. As such, they not only display ignorance when faced with challenges outside their scope of experience but is also reluctant to undertake anything that might hold a level of risk.

International market intelligence was rated as important, but was viewed by respondents as something that could be "picked up" with exposure to export markets. Some respondents also commented that the Clay Brick Association should be attempting to forge relationships with CBA's in other countries with the expressed intent of gathering market intelligence, which could be used to assist the SA exporters.

In conclusion, it is clear that an export program can only be successfully undertaken when it has the full support and commitment of top management, particularly the General Manager or higher. Top management need to be perceived as "champions" of the export initiative and need to be perceived as given impetus to the undertaking.

4.7.9 Other Factors

In question 15, respondents were requested to make recommendations regarding other factors that they either had experienced or thought also played a crucial role in the sustainable export of clay products. Once again a multiple rating list scale was used and respondents were requested to not only identify the factor, but also evaluate it according to the scale requirements, where 7 = Important, 3 = Average importance, 1= Unimportant.

The respondent entered the factor in on the questionnaire and then circled the number on the multiple rating scale accordingly. Despite a number of the factors being duplicates of the factors already evaluated, a total of nineteen factors were mentioned that provides further insight into what the industry views as being important factors.

Table 4.9 outlines the factors that were listed by respondents.

	Resp 1	Resp 2	Resp 3	Resp 4	Resp 5	Resp 6	Resp 7	Resp 8	Resp 9	Resp 10	Resp 11	Resp 12	AVG
Performance of Port Authorities	7			5									6
Production planning	6												6
Transport logistics in SA	7			5									6
Credibility / Reputation	7	6		6									6.3
Staff-co. needs to have people		5				7			5				5.7
Time & travel to appoint agents						4							4
Payment terms and payment type	5	6				7				7			6.3
Knowing who competitors are						7							7
Who are potential customers						7							7
Product that is attractive to customer	7					7							7
Ability to keep skilled black labour										5			5
Internet advertising & e-mail	5			5						4			4.7
Keep all costs to a minimum										7			7
Having stock available		7								7			7
The local market absorbs all product									6				6
Need to FBS and FBX quality only	7								3				5
The lack of unity in this industry									3				3
Fear of the unknown									5				5
Easier to export across border into			7					6	7				6.7
Africa than export overseas													0

Table 4.9

The factors that respondents commented on as being of major importance and that which are not repeats of the already identified factors or generic business factors are:

- Performance of Port Authorities
- Credibility & Reputation
- Payment terms & Payment type
- Internet advertising and e-mail
- Easier to export into Africa than overseas

4.7.9.1 Performance of Port Authorities

Two of the enterprises that presently export raised the performance of the Port Authorities as being a major factor that is having an increasingly negative impact upon their export programs. Kidger (2002) stated that the Durban port regularly experienced severe congestion resulting in late departures of vessels. He further commented that a number of shipping lines have introduced a demurrage charge per container because of delays in the port. This has tended to increase overall shipping costs per container.

Archer (2003) commented that a further complication has been the fact that Portnet are now purely landlords at all SA ports and the operation of the port is managed by the SA Port Authority. This change has led to a massive increase in wharfage charges, as this charge is no longer introduced on an ad valorem basis, but is now a fixed charge per container. This has impacted on the overall cost of shipping and increased the wharfage component by more than 40% in some cases.

Despite Portnet committing more than R5 billion to the upgrading of Durban and Cape Town ports, it will be more than three years before the impact of these changes will be felt by industry.

4.7.9.2 Credibility and Reputation

Kidger (2002) claims that the development of a sound reputation in the export market is a Key Success Factor, without which the exporter will not be capable of sustaining exports to a number of countries. He commented that particularly in South East Asian countries, credibility and reputation plays a key role in ongoing success. It should be expected to take up to 6 months to develop relationships with agents and distributors in countries such as Japan, Korea and Singapore.

Often, the overseas agents will want to visit the South African exporter's premises and see projects that have been built using their products. This is valued as a trust building exercise and allows the company to be correctly marketed.

4.7.9.3 Payment terms and payment type

De La Hunt (2002) stated that this is a key factor that needs to be understood prior to undertaking any export shipments. The most common payment type presently used by SA exporters is the Irrevocable Confirmed Letter of Credit (I.C.L.C) This is issued by a bank at the request of an importer, stating that the bank will pay a specified sum of money to the exporter, on presentation of the required documents. The L/C being irrevocable means that it cannot be withdrawn by the bank or importer once issued and the fact that it is confirmed, means that the bank confirms that the funds are available and the bank commits to effect payment.

The payment term decision can have a meaningful impact on the cashflow of the exporter. It is common for payment terms to range from 90 – 180 days, which means that the exporter needs to fund the transaction for this period. Brick companies trading in SA in the domestic market enjoy debtors days that range between 40-60 days (De La Hunt, 2002) and need to be aware of the working capital implications of exporting.

4.7.9.4 Internet advertising and e-mail

Matlou (2002) identified the importance of having a well – presented Internet website as a Key Success Factor in exporting. Linked to the website should be contact details as well as an e-mail address that is managed by the Export Manager or General Manager of the firm. He outlined the important features of the website for exporting as the following:

- A defined exports information page.
- Clearly laid out export product options.
- Available product types
- Packaging options in 20ft containers
- Product specifications and standard conformances
- Average delivery times to various destinations.
- Incoterms and delivery or collection requirements.
- Payment terms

Matlou (2002) claims that although the required detail for such a webpage might appear to be excessive, experience shows that importers want quantifiable details on the webpage before making a buying decision.

4.7.9.5 Easier to export into Africa than export overseas

The claim by Koekemoer (2003) is that aspiring exporters should evaluate their export readiness by firstly exporting to nearby African countries such as Namibia and Botswana prior to exporting overseas. His comment is based on his experience with regular exports across SA's northern borders and limited exports to the UK. Koekemoer claims that the simplicity of exporting into Africa allows the exporter exposure to the fundamentals of exporting such as concluding delivery dates, payment terms and L/C's and provides the exposure to the risks of exporting.

He also claims that African countries are not as remote as overseas export destinations and generally South Africa has trade relations with these countries, which reduces the risks associated with the sale. Road transport costs to these countries is also lower than average sea freight rates, making SA exporting more competitive.

In conclusion, the additional factors provided by the respondents give us even further insight into the finer aspects of exporting products from South Africa.

Although the factors described are all generic to exporting in general, awareness of these factors and the affects that they have on successful and sustainable exports is invaluable to the "would be" clay product exporter.

4.8 Critical Factors identified and evaluated

Question 16 of the questionnaire asked the respondents to evaluate the role that each factor (that had been analyzed) played and then to identify which single factor plays the most positive role and which factor has the most negative impact on the sustainable export of clay products. Table 5.0 sets out the findings of this question.

	Res 1	Res 2	Res 3	Res 4	Res 5	Res 6	Res 7	Res 8	Res 9	Res 10	Res 11	Res 12	Total	%
Positive Factors														
Ability to earn hard currency													7	50%
Weakness of SA Rand													4	29%
Potential export incentives available													1	7%
Very large international markets													2	14%
													Total:	14 100%
Negative Factors														
The heavy mass of clay products / unit													1	7%
High cost of freight as % of landed cost													9	60%
Limited information on export customers													2	13%
Most SA products do not meet int. specs													3	20%
													Total:	15 100%

Table 5.0

As indicated in Table 5.1, the answers from each respondent were tabulated and the totals for each factor calculated as a percentage of the total. Although rather elementary, the results are easily comprehensible. The critical factors are clear. The most positive incentive to export is the lure of earning hard currency.

The most important positive key success factor is the weakness of the SA Rand against the currency of denomination. Essentially, if the SA currency strengthens against the currency of income, both the competitive advantage and profitability of the export initiative can be destroyed. Therefore, the weakness of the SA Rand is imperative as a Key Success Factor in order for exports to be sustainable. This KSF is generic to all SA companies who currently export or plan to export in the future. An interview with Kidger (2002) highlighted the fact that "in order for the majority of clay brick producers to enjoy profitable exports, the SA Rand: US dollar exchange rate needs to exceed 8".

The most negative key factor, which presently discourages export growth, is the high cost of sea freight as a percentage of the landed selling price.

Although high sea freight costs are a generic negative factor affecting all exporters, this situation is exasperated by the very high weight – to - volume ratio of clay products. As an example, a six-meter shipping container is capable of holding an estimated 34-35 cubic meters OR a total of 24 tons of cargo. Because of the heavy weight of burnt clay products only 7740 bricks can be packed into a six-meter container, as the total weight of the cargo alone is then 23,22 tons. However, 7740 bricks only occupy 14,24 cubic meters, a measly 42% of the available space in the container.

This factor was addressed in an interview with Kidger (2002) where he claimed that "if freight rates exceed US\$600 per six- meter container, sales opportunities become limited " because of the increased cost of shipping. Assuming that US\$600 is the "upper limit" and that 7740 bricks is the maximum number of units that can be

stacked into a six-meter container, then the maximum allowable freight cost cannot exceed US\$77,50 per 1000 bricks. It should also be borne in mind that all sea freight rates are quoted and paid for in US dollars and therefore a weakening of the SA Rand against the dollar makes sea freight more expensive, despite the fact that Rand earnings increase.

Essentially, identification and basic evaluation of these two factors can be utilized as an introductory yardstick for aspiring exporters of clay products. As an initial approach to exports, brickmakers can use the exchange rate and the destinations shipping rate as a "go" or "no-go" stage gate. This approach will be discussed in greater detail in Chapter Five.

Finally, all respondents were questioned regarding the importance of the CBA lobbying the Department of Trade and Industry for trade and financial support in developing exports. Although some respondents viewed this as a progressive approach, virtually all respondents answered that the CBA and the majority of its members are too preoccupied with developing the local market and would not be motivated to commit time or resources to this initiative.

The overall response to the expected contribution that this research dissertation would make in assisting the industry with future exports was one of "unsure".

4.9 Conclusion

Due to necessity for survival, the cyclicity of the domestic market, the requirement of sustainable growth and profitability, the clay brick industry sees the need to investigate and locate new markets. Despite the distinct lack of domestic rivalry, other driving forces within the clay brick industry, such as low industry growth and changes in overall manufacturing costs, as well as slackening demand in the local

market has driven producers to consider export as an option for market development.

Factors of production such as relative changes in manufacturing costs, cheap labour and electricity and an abundance of coal have assisted producers in achieving a competitive advantage compared to overseas producers. The South African government has assisted aspirant exporters with a range of trade and industrial initiatives to encourage export development by S.M.M.E's.

The reasons for local producers considering exporting, are numerous and very valid. Firstly, exporting is an excellent way to expand their customer base without encouraging domestic rivalry. Increased sales and increased production result in scale economies and thus lower costs. Exporting allows a spread of business risk across a wider base and allows earnings in hard currency.

Market development is the least costly and least risky form of sales development. An export strategy is suitable to SA producers because they are able to use existing production facilities, while exploiting factors of production such as low wages, cheap raw materials and low electricity costs. The only requirement is to produce products that conform to international standards and appoint reliable agents in the import country.

The conclusion is that an export strategy is the correct strategy for the clay brick producers in SA to follow and this strategy meets the suitability, acceptability and feasibility criterion. However, it is imperative to identify and evaluate factors that will impact on the sustainability of exports and that can be utilized to gauge the export readiness of the industry, as a whole, and individual enterprises planning to export.

In an effort to identify and evaluate these KSF's, members of the Clay Brick Association who presently produce facing bricks, pavers and clay quarry tiles were

deemed to be a representative population from which to extract a random sample. Of the 44 producers, a sample of 12 respondents was chosen. Questionnaires were utilized for all 12 respondents and face to face interviews were conducted with 3 companies.

The research results are as follows:

- 1) Only three SA companies presently export, however, of the 12 questioned, six intend exporting in the foreseeable future.
- 2) There was general consensus regarding the appointment of agents. Producers agreed that they should appoint their own agents or representatives and not rely on the CBA for support or representation.
- 3) African countries and the United Kingdom are the most exported to countries by SA producers, however, South East Asian countries such as Japan, Singapore, Korea and Taiwan hold out increasing opportunities due to the very competitive freight rates.

The Key Success Factors identified by the respondents are as follows:

Table 5.1

DESCRIPTION OF DISCIPLINE	KEY SUCCESS FACTOR
Manufacturing / Production	-Product Quality
	-Production capacity limitation
	-Low cost production efficiency
Marketing & Sales	-Compliance with international standards
	-Selling Prices
	-Lack of representation in export country
Distribution	-Sea Freight costs
	-internal transport & warehousing costs
	- location of brick yard within SA
Finance	-weakness of the SA Rand

	- Foreign exchange earnings
	- cost structure of the producer
Product	- readiness of product for export
	- product adaptability to suit export
	- new product development
Management	- management's commitment to exports
	- management's business skills
	- export market intelligence
Other factors	- performance of the Port Authorities
	- reputation of the producer
	- payment type and payment terms
	Internet advertising and e-mail
	-Easier to export into Africa than overseas

Finally, the respondents evaluated the various key factors and were requested to choose two critical factors, one positive and one negative, that are crucial to sustainable exports. The two critical factors chosen are:

- **POSITIVE FACTOR** – Weakness of the South African Rand vs. dollar / Euro.
- **NEGATIVE FACTOR** – the high cost of sea freight relative to the product cost.

In conclusion, the questionnaire and interviews were successful in not only identifying, but also evaluating the key factors that impact upon the sustainable export of clay products by SA producers. Having this information readily available, not only allows aspiring exporters the opportunity to evaluate their export readiness, but also forms the foundation for the preparation of a business model that can be used by clay product exporters to successfully formulate their export strategy. The awareness of these KSF's acts as a catalyst for the drafting of recommendations for the industry as a whole.

CHAPTER 5

“ Conclusions and Recommendations”

5.1 Introduction

The objective of this chapter is to summarize the main results and conclusions of this research project, provide recommendations based on the conclusions drawn and draft a suitable business model that can be used by prospective or existing South African exporters of burnt clay products.

The dissertation thus far has overviewed business strategy theory and business science and successfully concluded that an export strategy can successfully be adopted by the SA clay brick industry to promote growth and ensure sustainable profitability. The research clearly identified the key factors affecting exports and evaluated these by business discipline. Finally, critical success factors were identified which play a pivotal role in the success of the export strategy.

With the investigation of these issues completed, conclusions can be drawn with a suitable level of confidence and valuable recommendations made to assist 'would be' exporters as well as the industry as a whole, to undertake exports with greater confidence. Prospective exporters can use these recommendations to evaluate their export readiness and follow the fundamental business model as a guide.

5.2 Key Results and Conclusions

The result of the external environmental analysis, industry analysis and SWOT analysis led to the identification of an export strategy as a suitable choice of grand

strategy. The results of the research relating to specific industry issues are dealt with including an overview of export incentives available to the clay brick industry.

We draw conclusions based on the critical factors that have been identified and include these as "GO" or "NO GO" gate points for the exporter. Essentially, these critical factors assist the exporter to decide whether to export or not.

Recommendations are then discussed regarding specific success factors that need to be reviewed by the aspiring exporter. A clay product export success model is proposed indicating the driving factors, push factors and key success factors. This chapter culminates in an export business model, which guides the aspiring exporter through the export process.

5.3 South African Clay Brick Industry challenges

The research identified a number of areas that will require consideration by the industry leaders in order to be successful in future market growth endeavors. These issues presently pose a number of challenges for the industry as a whole and are expected to act as a major hindrance in the future, if the industry players pursue exports as a growth opportunity.

Although ongoing exports are a relatively new undertaking and only presently pursued by a handful of major players, a major obstacle is the lack of initiative shown by producers in proactively pursuing growth opportunities. This lack of initiative coupled to ignorance has been identified as major reasons for producers not being more proactive in growing export sales.

A further hindrance is the overall low quality of the products produced by the majority of local manufacturers, which does not comply with international quality standards. Exports need to at least meet the FBS and FBX standards, which are the

minimum requirements of, export markets. This issue is discussed in greater detail later in Chapter Five, however, suffice to say, that this is one of the most important factors to be considered by prospective exporters.

A further challenge is the overall fragmented nature of the industry, which tends not to be supportive of any market development initiatives. The Clay Brick Association needs to play a far greater role in promoting these initiatives. Unfortunately, lack of financial support and limited infrastructure tend to downplay the positive role that the association should be playing. The association is presently understaffed and would require a "champion" to head up such an initiative as well as the financial resources to drive a plan of this nature.

The limited input by the CBA to date has also tended to downplay its role within the industry as a whole and support is waning. For a united export initiative to be successful, it is important that an industry association be intrinsically involved. An association of this nature is important due to the role that it plays in lobbying the Department of Trade and Industry for support and plays a pivotal role in the establishment of an export council. The association also assists its members in obtaining assistance from export schemes and in government funded export incentives.

5.4 Export incentives available to exporters

Export incentives are intended to encourage exports by providing financial assistance to exporting companies to enable them to compete effectively in international markets. Export incentives currently in operation in South Africa include:

- Export Marketing and Investment Assistance Scheme (EMIA)
- Sector Assistance Scheme (SSAS)
- Export credit insurance
- Export finance

Export incentives relate only to the export of goods destined for recognized exports markets, which in general means to countries outside the Southern African Customs Union (SACU).

5.4.1 The Export Marketing and Investment Assistance Scheme (EMIA)

The purpose of assistance under this scheme is to partially compensate exporters for certain costs incurred in respect of activities aimed at developing export markets for SA products. The offering provides exporters with financial assistance to showcase their products internationally and also assists in offsetting the exporters marketing costs. The offering is targeted at manufacturers, service businesses, trading houses and export councils.

In assessing who qualifies, the DTI takes into account the production performance of the applicant, the competence of the company and its representatives in marketing their products overseas, export capacity, planning, type of product for export, location and technological requirements and the strategic importance of the industry in which the company operates.

The benefits work on a reimbursable basis, in that the applicant must bare the initial costs or outlay of all expenses incurred in participating in events such as trade missions, exhibitions and market research. The applicant is reimbursed once a claim has been submitted and the claim is paid upon verification as to whether the claim complies with all the requirements.

In order to be considered for assistance, an application form needs to be submitted to the DTI. The application form is submitted no less than one month before the trip is undertaken. Late applications are not accepted. The turnaround time to process the application is 10 days and once the approval is received, the applicant can embark upon their trip. All invoices and documentary proof of travel need to be collected for submission upon return. This is required because these documents are requested when submitting a claim. A claim must be submitted within three months after returning and payment of the claim is made within 20 working days.

The Department of Trade and Industry has set up a call center in Pretoria to handle inquiries and claim details. They also have an export incentive booklet, which is freely available, and details are also available on their WebPages.

5.4.2 Sector Assistance Scheme (SSAS)

Financial assistance is available to industry sectors with the objectives of developing new export markets. Organizations eligible to apply for assistance from the scheme are export councils and recognized industry associations. Export councils are Section 21 (non-profit) companies that serve to represent the developmental and promotional objectives of the particular industry on a national level. A recognized industry association is a group of three or more companies which associate for the primary objective of embarking on projects that benefit the industry. The Clay Brick Association conforms to this requirement.

Project funding is available to all qualifying applicants for specific projects, which will contribute to the development and promotion of the industry. The DTI will partially refund between 50% and 80% of the cost of the approved projects. Additional assistance is also available to all qualifying applicants, which includes annual maximums of R250 000 for generic advertising and publicity. R100 000 assistance

is also available for specific marketing materials such as export directories, videos and CD's and R100 000 is available for local trade exhibition assistance.

Applications for project funding should be submitted to Trade and Investment South Africa (TISA) at the beginning of each financial year. Claimants may claim against milestones achieved on the project or on completion of the entire project. A monthly report on achievements and proof of the outcomes of the project needs to be submitted.

5.4.3 Other export incentives

The Department of Trade and Industry has other forms of assistance available with the objective of encouraging or improving international competitiveness of the SA industry. These include:

- ❖ An allowance for the appointment of agents in the export market.
- ❖ Exemption from value added tax on export sales.
- ❖ Customs and excise duty rebates, drawbacks and refunds.
 - Under the customs and excise Act of 1964, provision is made for the refund, drawback or rebate of duties on goods exported from South Africa.
 - Refunds are paid in respect of duty paid for goods, which are exported in the same condition as that in which they are imported.
 - Drawbacks are paid in respect of duty paid on specified materials used in the manufacture, processing and packing of goods which have been exported.
 - Rebates are granted in respect of goods used for specific purposes such as the production of export goods.

5.4.4 The Sector Partnership Fund

The objective of this fund is to promote collaborative projects that will enhance productivity and competitiveness of the manufacturing firms or industry. The fund is available to groups of five or more firms in preparation and execution of marketing and production related projects with the aim of improving competitiveness and productivity. The fund covers 65% of projects up to a maximum of R 1,5 million. This fund is administered by the DTI.

5.4.5 Export organizations

The Department of Trade and Industry promotes the formation of industry-based export councils. Officials from the DTI: Export sector promotion encourages industry, especially those with cluster formation, to include and export strategy in future growth plans. A financial assistance scheme makes provision for financial contributions to industry associations in order to form export councils. The DTI has 53 representatives in 44 offices situated in 40 countries and they actively assist in the process of helping exporters.

The Export Council approach has also been tailored to allow Small Businesses to join the SMME export council that can act as an entry point for first time exporters. This allows small businesses in any sector to access the DTI support structures and to grow to become successful exporters. The export council structure has also been given a forum to address all obstacles that may affect their ability to export successfully. This takes the form of the National Export Advisory Council, which is chaired by Minister Alec Erwin.

This section has attempted to address the host of incentives available to exporters and export organizations and indicate the massive financial and operational benefits, which can be gained by pursuing these opportunities. The

recommendation is that the Clay Brick Association investigates these opportunities and advises their members that have shown interest in export opportunities. Alternatively, it is recommended that the companies that are interested in undertaking an export strategy form an export council and approach the DTI as such in order to investigate and benefit from these export incentive schemes.

5.5 Critical Success Factors

The research results clearly identified two major factors that have such a large impact on exports that they can be deemed *critical success factors*. These factors play such a vital role in exports that they directly affect two decisions, namely:

1. Whether to export or not to export due to the revenue that would be generated from the export.
2. Which destination or country to export to.

These two critical factors were identified and evaluated in Chapter 4 after having been researched. The two factors are:

- The relative weakness of the SA Rand vs. the currency of export. E.g. the US dollar.
- The cost of seafreight

Essentially, these are the two primary factors that act as catalysts to the decision whether to proceed with export sales and as the drivers to decide which country to export to. The relative weakness of the SA Rand is an obvious one. If the SA currency is relatively strong against the US dollar / Euro, the Rand earnings of the export sale will be lower than if the SA Rand is weak against the converting currency. Given the fact that the exporter has higher costs in exporting, due to

increased freight and administration costs, it is imperative that the selling price of the product at least meets all the existing and additional costs.

Kidger (2002) commented that the recommended exchange rate at which exports of clay bricks becomes attractive is an exchange rate of 8,0. It is recommended that this exchange rate be introduced as a "GO / No GO " entry or exit point for companies wanting to export. This exchange rate is to the US dollar. Based on this recommendation, the assumption is that exports are not profitable at an exchange rate below 8,0 to the US dollar and therefore exporting at below this exchange rate could not be sustainable. Conversely, exporting at an exchange rate in excess of 8,0 , will result in profitability and thus the exporter would find the transactions attractive enough to export on a continuing basis.

Rationally, one could argue that all companies have differing cost structures and that the assumption that a single exchange rate factor as an indicator of sustainable exports is an over simplification of the input parameter and therefore not a true indicator. However, the argument is that prospective exporters need a benchmark exchange rate from which to work and that this "benchmark exchange rate" provides a starting point from which to commence work.

The aspiring exporter will need to estimate an exchange rate that will make exports attractive to them based on their cost structure and desired profit margin. Here the 2nd critical success factor comes into play. The seafreight rate plays a pivotal role in where to export. Kidger (2002) stated that where freight rates go above US\$ 600 per container, sales opportunities are limited, as the C.I.F price of the product becomes uncompetitive. Kidger stated that there is a strong correlation between the cost of freight and volume potential in export markets.

Once again, the second critical success factor acts as a "GO / NO GO" entry or exit point. We recommend from the research, that if the sea freight costs for a 20-ft

container exceed US\$ 600 to the destination, that this destination should not be pursued as an export market.

The writer took the liberty of contacting two of the major shipping lines that ship containers from Durban port, in order to gain a level of insight into potentially viable destinations for South African clay brick producers, based on purely on freight rates per container.

The two shipping lines contacted are:

- 1.) Evergreen Shipping Line
- 2.) P & O Nedlloyd

These two shipping lines indicated that they would be in a position to ship a 6-meter container from the Durban Container Terminal to the following destinations for less than US\$600 per box:

- 1.) Dubai, U.A.E
- 2.) Karachi, Pakistan
- 3.) Mumbai, India
- 4.) Singapore
- 5.) Kuala Lumpur, Malaysia
- 6.) Manila, Philippines
- 7.) Hong Kong, China
- 8.) Busan, South Korea
- 9.) Keelung, Taiwan
- 10.) Nagoya, Japan.

Of interest is the fact that the majority of the destinations indicated above are in South East Asia. The shipping lines indicated that freight rates to the East are presently very competitive due to increased trade with Asian countries. The information shows that there are a number of potential destinations in Asia that can be pursued by aspiring clay brick exporters. The important fact that needs to be noted by exporters is that freight rates are a key component to one's relative competitiveness and hence market access and that freight rates can constitute up to 50% of the total landed price of the product. As such, it is imperative that the aspiring exporter research destinations that have acceptable freight rates, prior to undertaking an export program.

In conclusion, it is critical that the exporter evaluate both of the critical success factors discussed in order to ascertain whether the export program is feasible and acceptable based on the present and expected future exchange rate and the proposed destinations sea freight costs.

5.6 Specific Success Factors

The research clearly identified a host of specific success factors, the majority of which are generic to export of all products. In reality, quality, product compliance with international standards, readiness of the product for export and product adaptability to suit exports are all referring to the same thing.

What is important is that the exporter is thoroughly conversant with what the end user wants from the product. The exporter needs to be able to deliver a product that meets the quality standards demanded, which also encompasses the particular international standard. This means that the exporter needs to research what that particular standard is, possibly obtaining samples of products that the importer has previously been satisfied with. It means that the aspiring exporter needs to ensure that the necessary changes are made to his product to match the sample or competing product and that if necessary, the product is adapted to suit.

Before commencing an export program, management needs to commit to the strategy and needs to commit the required production capacity of the plant to the export program. This might require a build up of inventory to support the program or a cost review to reduce costs and become more efficient. It is recommended that market research be carried out to establish competitor prices, products, capacity and quality. This will often require a visit to the country that is to be exported to and evaluation of the possible agents and distributors. Often, such a visit uncovers challenges that were not considered at first.

Consideration needs to be given to the logistics of the venture. Given the location of the brickyard, which is the closest port to export from? What transport mode will be utilized to get the product to the port? Should the bricks be containerized at the brickyard or should they be warehoused and packed at the port of discharge?

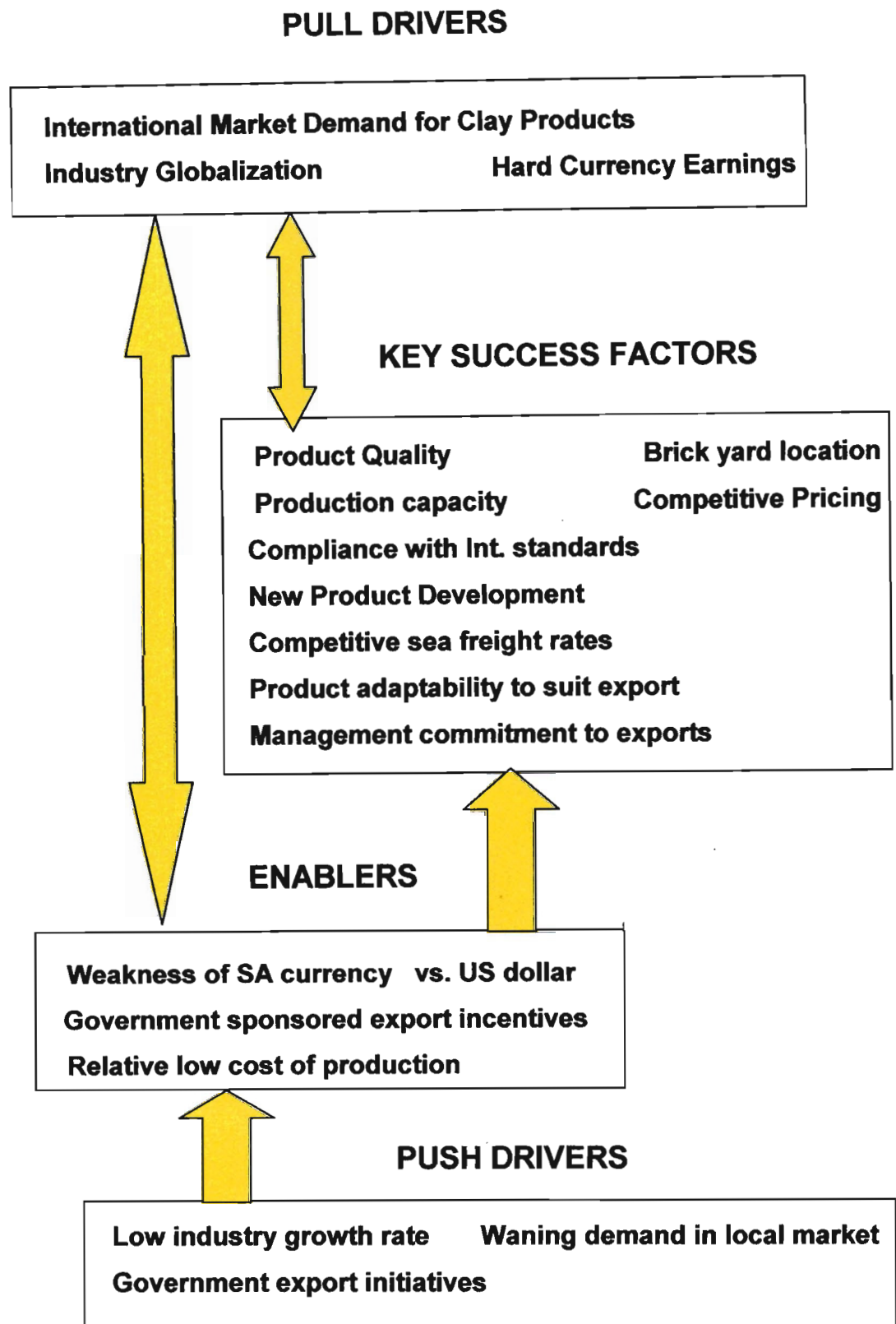
These factors need to be considered by the exporter and evaluated according to their acceptability and feasibility. There is great value to be gained in breaking down the chain of events required to produce, transport, and pack and sea freight the product and then evaluate these events by placing them in a value chain. An elementary analysis of the value chain will identify where the value lies in the export process and assist the exporter to price the export sale correctly, while at the same time identifying the relative costs of the various functions in the export process.

In conclusion, it is important that the exporter pay particular attention to each and every one of the success factors identified and put sufficient time and effort into evaluating the impact that each one of these factors has on their export sale. An analysis of each of these factors by an enterprise will also serve as a foundation for establishing good business discipline prior to exporting. The export business model discussed later can be used as an excellent guideline or checklist for the exporter.

5.7 Export Success Model

A summary of the industry driving forces indicated as creating pull and push drivers coupled to the export enablers and key success factors can be represented in a dimensional model. This analysis outlines the industry dynamics as they pertain to the sustainable exports of the products produced by the industry. The Export Success Model (ESM) indicates the pull-type drivers at the top of the model and the push – type drivers at the bottom. The enablers or parameters that enable exports to be successful are indicated in the center, while the key success factors that make the exports sustainable are indicated as leading on from the enablers.

Figure 6 : 'The Export Success Model'.



The model is a visual presentation of the interaction of the various dynamics involved in the development of clay brick exports. The demand drivers are the market dynamics and the ongoing globalization of the industry coupled to the lure of earnings in hard currency. The push drivers are all local driving forces and include the relatively low growth being experienced in the industry in SA and the waning demand for high quality products in the South African construction industry. The positive driver is the role played by government in their support of exports and the host of initiatives that they have made available.

There are limited key enablers or factors that assist or support export development. These are the weakness of the SA Rand against the US Dollar, which makes exporting attractive and allows for increased revenues and foreign exchange earnings. The support of the government agencies such as the Department of Trade and Industry in incentivising exports initiative acts as a support for aspiring exporters. Finally, the low cost of production, relative to the international economy makes SA producers competitive and affords them a level of competitive advantage due to the low cost of coal, electricity and labour in the country.

Finally, we have the Key Success Factors that are crucial to the undertaking of sustainable exports. This research project successfully identified and evaluated these factors determining their overall importance in the export value chain. The export success model clearly identifies the crucial role that these key factors play in sustainable exports and indicates the link that is imperative between the drivers, enablers and key success factors.

The exporter can now visualize the macro dynamics of the export process from a strategic perspective, however, the actual dynamics of exporting from SA might still be too challenging. This next section attempts to simplify the process by the creation of a business model.

5.8 Export business model

International or export marketing presents unique challenges. A well thought out export strategy is essential in focussing the company or industry effort and reducing both the risks and uncertainty of trading in an international environment.

5.8.1 The international market

Export strategy development begins with the identification of the best possible market for the available product. This is a key step and can ultimately determine the success or failure of the initiative. Evaluation of the company and product resources will eliminate a number of unsuitable markets. An evaluation of the relative sea freight costs will also tend to negate a number of potential destinations. The remaining markets are then evaluated until the exporter has just two or three outlets that have potential for the available product.

5.8.2 The Product

When entering an export market, it is essential to first investigate whether the present available product is acceptable to the foreign country and whether it meets the international standards. The results of this investigation will determine which product strategy is suitable, namely:

- Standardization – sell the same product or product line worldwide.
- Modify the product to meet the needs of the export market.
- New Product Development – develop a new product for the export market.

Entry into multiple markets might require that all three-product strategies be implemented, in different markets and countries.

5.8.3 Pricing

Competitive pricing is one of the major competitive advantages available to a company. The long-term objective of the export pricing policy is to achieve and sustain sufficient volumes to ensure maximum profits. In determining a pricing policy, there are multiple factors to be considered:

- Competitor products and pricing.
- Nature of the market.
- Profile of the buyer and the market.
- Competitive advantages of the product.

5.8.5 Investing in a foreign market

Under certain circumstances, a company may need to invest locally if it is going to succeed in that market. The level of investment required can range from appointment of a representative or a branch office through to full distribution and packaging facilities. The benefit – cost –risk trade off is likely to be most favorable in politically stable, developed and developing nations that have free market systems and where there is not a great upsurge in inflation or private sector debt. The complexities of business practices, language, culture, legal systems and currencies all need to be accounted for prior to embarking on the export process.

5.8.6 Recommended export principles

The following can be termed the “ five commandments” for the aspiring exporter.

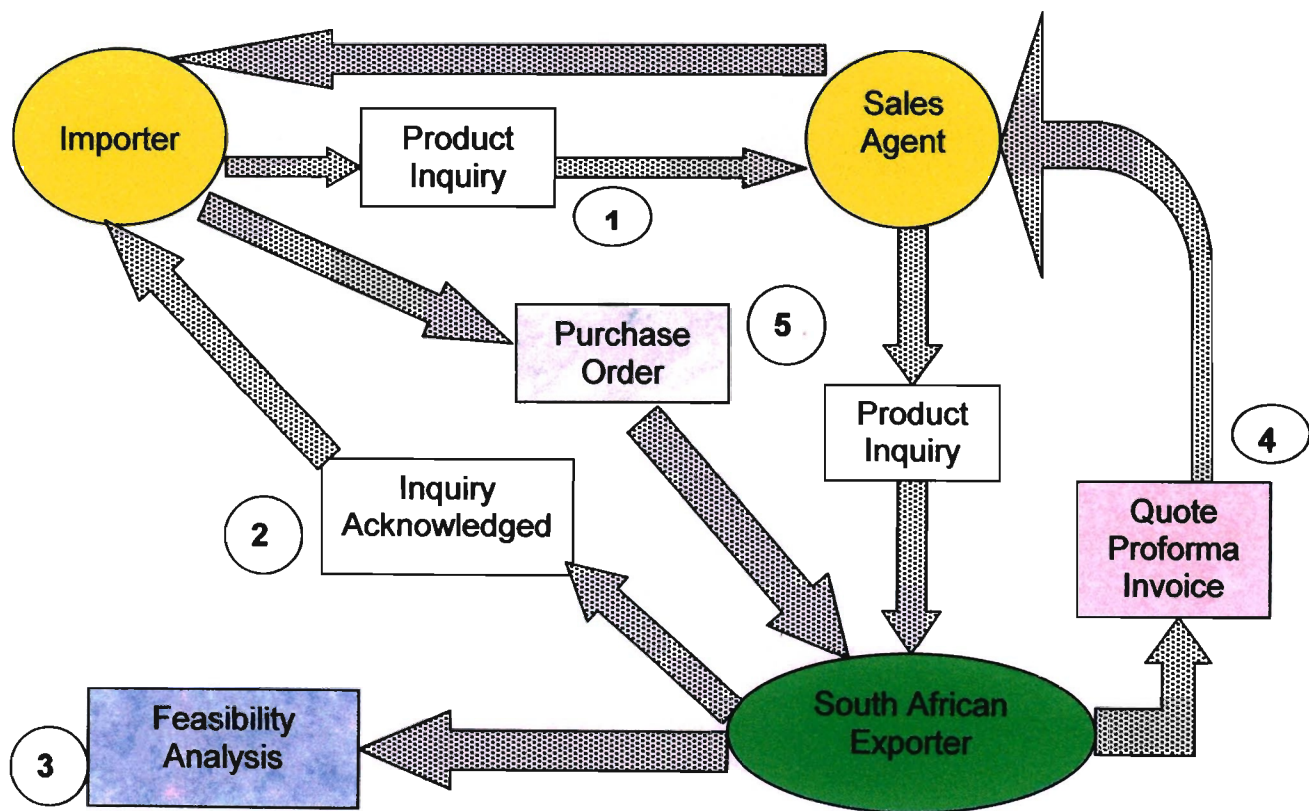
1. Initially, enter the export market on a small scale to reduce risks.
2. Only add additional products once success has been achieved with one product.
3. Hire locals in the foreign country as agents / distributors to promote products.

- 4. Initially, only focus on one market, but never more than three at a time.
- 5. Hire or appoint an export manager / co-ordinator to manage the export function.

5.8.7 The export flow chart

Once the organization has commenced its export marketing program and assuming that the issues discussed in the Chapters leading up to this point have all been covered, the company is ready to secure or accept its first international purchase order. The export flow chart attempts to plot the sequence of events that follow from the point of the product inquiry.

Figure 7 : The Export Flow Chart: Securing the Export Purchase Order



5.8.7.1 The initial inquiry

The importer sends an inquiry to the exporter's agent or representative and this inquiry is forwarded to the aspiring exporter in South Africa.

5.8.7.2 Enquiry acknowledgement

The exporter acknowledges receipt of the enquiry and advises the importer accordingly. Alternatively, the exporter might advise the agent / representative that he acknowledges receipt of the inquiry and that he will forward a quote to him shortly. Another alternative is that the exporter may advise the agent that he will not be interested in quoting.

5.8.7.3 Feasibility Study

In order for the exporter to submit his quotation, it is important that he evaluate the feasibility of the enquiry. The feasibility study serves to evaluate all aspects linked to the export order in order to ascertain whether the enquiry should be actively pursued. The feasibility study is probably the most important process in the export order and is especially important in the beginning stages of the export strategy, but also serves as a checklist for future export orders.

The feasibility analysis includes the following checks and balances:

- The financial standing of the importer. Information is available from banks, credit insurers and obviously, your foreign sales agent or country representative.
- Any export restrictions that may apply from South Africa.
- Any import restrictions that might apply in the country of destination.
- Does the importer require any product modifications to be made?

- Does the exporter have the available inventory or production capacity to deliver the goods within the required time frame?
- What are the Incoterms required by the importer and are these terms suitable to the exporter?
- The proposed payment method and the payment terms demanded.
- Does the packaging need to be modified and what special labeling is required by law and by the importer?
- The most cost-effective freight rate for each shipment.
- What are the internal transport and warehousing expenses?
- What export documents are required for the country in question?
- Is credit insurance available for the importer?
- Marine insurance requirements.
- Have all the costs linked to the supply chain been accounted for?

5.8.7.4 The Quotation

The exporter's quotation is submitted via fax or e-mail to the exporter's agent. The agent, who acts on behalf of the exporter, will submit this quotation to the proposed importer and discuss the expected Incoterms, payment methods and payment terms with the importer. Often this takes some negotiation and changes are negotiated between the two parties until some agreement is settled upon. It is imperative that all quotations bear the following clearly stated:

1. A clear description of the goods to be exported and the packaging.
2. The price quoted in the desired export currency.
3. The number of units that are to be exported.
4. The expected delivery times dependant on the destination.
5. The proposed Incoterm.
6. Desired payment terms.
7. Desired payment method.

5.8.7.5 The importers purchase order

The rule here is that the importers purchase order needs to have a valid order number and carry all the details indicated in the quotation. It is also expected that the order will have an ETA (estimated time of arrival) or delivery date. Often, the purchase order is received along with a letter of credit (LC) which guarantees payment by the importer's bank. The purchase order is a legal document and is binding once accepted by the exporter. It is therefore imperative that the exporter acknowledges receipt of the order and confirms acceptance of its contents. If the contents of the purchase order is not acceptable to the exporter than the exporter needs to advise the importer to change the order accordingly. Contentious issues cannot be amended after the order has been accepted and the merchandise has been shipped. The order confirmation is deemed a contract of sale and is deemed a legal and binding document in a court of law.

In closing, the business model provides a framework of the fundamental elements that are involved in exporting. The process is subject to changes and might be slightly different for each and every order. However, the framework is indicative of the process that is followed and provides the aspiring exporter with crude guidelines.

5.9 Conclusions and recommendations for further research

The South African Clay Brick Industry, like many other local industries, faces a host of challenges to survive in today's competitive economic climate. Changes that have occurred in South Africa in the political and economic arena have exerted pressure on the industry, which has resulted in dramatically lower industry growth and reduced profitability. The industry's direct link to the cyclical nature of the SA

economy and its reliance on the local construction industry has resulted in a situation of "feast or famine".

This dissertation has reviewed modern business science strategic techniques and the resulting grand strategic choice is one of market development in the form of an export strategy. The document also evaluates an export strategy in order to determine its ability to achieve organizational objectives for companies within the industry.

The reality is that industry driving forces such as increased globalization, low industry growth, changes in manufacturing costs and government policy changes relating to exports have acted as catalysts in making exports attractive to the industry. These forces coupled to the opportunity to earn hard currency have acted as enablers. With this in mind, the research project was able to identify a host of Key Success Factors that have a direct bearing on sustainable exports. The evaluation of these KSF's resulted in the selection of two critical success factors, which act as a direct linkage between the ability to export and its converse.

The Key Success Factors were further developed to be able to propose an export success model for the Clay Brick Industry which feeds into a practical export business model. The research project is deemed as being successful in a number of facets. Firstly, this research project is the first of its kind for the SA clay brick industry and as such was able to strategically evaluate the current health of the industry. Secondly, the project has served as a 'sounding board' for local companies who presently export and who promote exports as an opportunity for industry growth.

Thirdly, the project has successfully identified factors that do impact on exports and evaluated them according to their level of importance and the overall role that they play in affecting exports. Finally, these factors have been adopted into a model,

which guides the aspiring exporter and makes the industry aware of the importance issues impacting on exports of their products. Despite the success of this project, it would be presumptuous to consider the findings of this study sufficiently far reaching and definitive to prescribe rigorous prescriptive recommendations to companies or the industry as a whole.

However, the results are sufficiently clear to provide reasonable guidelines or suggestions for action and to add to the body of existing knowledge gathered by industry players. It is believed that adoption of these guidelines will improve the export performance of organizations that presently export and assist aspiring exporters to avoid pitfalls.

These recommendations include:

- The Clay Brick Association of South Africa should appoint an export co-ordinator to “champion” the export drive for its members. This co-ordinator would need to assist members in training and development and the introduction of an export statistics program that can guide members in their export strategies. The co-ordinator will need to assist members in obtaining export incentives from the DTI and lobby government for industry subsidies to develop the export program.
- Organizations wanting to export need to amalgamate their resources and establish an industry export council, which will be recognized by the Department of Trade and Industry. The value attached to the establishment of such a council is enormous and will assist the growth of the industry as a whole.
- It is also recommended that further research be carried out to define the parameters of the effects of increases and decreases in exchange rates have on sustainable exports and set more refined guidelines for the industry.

- Finally, further research needs to be carried out on evaluation of the industry value chain, particularly pertaining to the issue of supply chain and identification of potential cost savings and logistical improvements. The implications for increased value addition and improved profitability are most significant.

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QUESTIONNAIRE

Question 1:

Does your company presently export clay bricks , pavers or quarry tiles to other countries ?

☒

Yes

☐

No

Question 2:

If your answer to Question 1 is No , has your company ever exported product in the past 3 years ?

☐

Yes

☐

No

Question 3:

If your answer to Question 1 is No , do you plan to export in the foreseeable future ?

☐

Yes

☐

No

Question 4:

If your answer to Question 1 is Yes , what types of products do you export ?

☒ Clay bricks

☒ Clay Pavers

☐ Quarry tiles

☐ Other(specify).....

Question 5:

Based on your experience in this industry , do you see value in the Clay Brick Association becoming more actively involved in promoting or supporting the export of clay products from South Africa ? Please add your comments.

☐

Yes

☒

No

Comments . No in terms of going overseas to represent our company at the sales interface. Yes in terms of .
.....authoritative product design and application guides that can be used to support the sale
..... of specification in export countries

Question 6:

In order for exports of South African clay products to grow , I believe that one or more of the following actions needs to be taken:

	Strongly Agree			Strongly Disagree		
The Clay Brick Industry needs the support of the Dept. of Trade & Industry to grow exports	5	4	X	2	1	
The brickyards need to appoint their own agents and representatives overseas to sell and should export individually	X	4	3	2	1	
The Clay Brick Association needs to appoint an export manager that represents SA exports and gets products exposed & specified.	5	4	3	2	X	
A formal export council needs to be formed to manage exports of SA products	5	X	3	2	1	
Other (specify).....	5	4	3	2	1	

Question 7:

I see the exporting of clay products such as clay bricks , pavers and quarry tiles as holding sustainable value potential and as an opportunity for South African producers to grow. If you agree or disagree , please indicate your reasons why.

Strongly Agree	X	Unsure	Disagree	Strongly Disagree
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Reasons..... Agree on the assumption that over the longer term the SAR/US\$ and SAR/ Euro exchange rates will steadily weaken in relation to the inflation rate differences between ourselves and our export partners and that shipping routes and freight rates will facilitate relative competitiveness given that bricks are a low value high weight cargo which results in the freight costs forming a high percentage of the landed cost

Question 8:

If you presently export or are looking to export in the foreseeable future, please indicate which countries you are / intend exporting to.

<input checked="" type="checkbox"/> African Countries	<input checked="" type="checkbox"/> USA	<input checked="" type="checkbox"/> Middle East	<input checked="" type="checkbox"/> Korea
<input checked="" type="checkbox"/> Japan	<input type="checkbox"/> Brazil	<input checked="" type="checkbox"/> Mauritius	<input checked="" type="checkbox"/> Taiwan
<input type="checkbox"/> Malaysia	<input type="checkbox"/> Argentina	<input type="checkbox"/> India	<input type="checkbox"/> Europe(specify).....
<input type="checkbox"/> UK	<input checked="" type="checkbox"/> Singapore	<input type="checkbox"/> Phillippines	<input type="checkbox"/> Other(specify).....

Question 9:

From a **manufacturing & production** perspective, kindly rate the factors in the list below based on their level of importance or unimportance as having the greatest impact upon the sustainable export of clay products by South African producers.

	Important					Unimportant	
Quality	X 6	5	4	3	2	1	
Limited infrastructure	7 X	5	4	3	2	1	
Low cost production efficiency	X 6	5	4	3	2	1	
Technical know-how	X 6	5	4	3	2	1	
Superior workforce talent	7 X	5	4	3	2	1	
Outsourced production	7 6	5	4	3	X	1	
Production capacity limitations	X 6	5	4	3	2	1	
Strong quality control know how	X 6	5	4	3	2	1	
Other (specify).....	7 6	5	4	3	2	1	
Compliance with appropriate International Standards							

Question 10 :

From a marketing and sales perspective, kindly rate the factors in the list below based on their level of importance or unimportance as having the greatest impact upon the sustainable export of clay products South African producers.

	Important					Unimportant	
Selling Prices	X	6	5	4	3	2	1
Cyclical nature of the local market	7	6	5	X	3	2	1
Market Size	7	X	5	4	3	2	1
Market potential	7	X	5	4	3	2	1
Lack of representation in export countries	X	6	5	4	3	2	1
High marketing costs	X	6	5	4	3	2	1
Other (specify)	X	6	5	4	3	2	1

Comparative analysis of compliance with standards as required or specified

Question 11:

From a distribution perspective , kindly rate the factors in the list below based on their level of importance or unimportance as having the greatest impact upon the sustainable export of clay products South African producers.

	Important					Unimportant	
High seafreight / shipping costs	X	6	5	4	3	2	1
Location of brickyard within RSA	7	6	X	4	3	2	1
Clearing & Forwarding expertise	7	X	5	4	3	2	1
Geographic location of target market	X	6	5	4	3	2	1
High internal transport / warehousing costs	7	X	5	4	3	2	1
Short delivery times	X	6	5	4	3	2	1
Other (specify).....	7	6	5	4	3	2	1

Question 12:

From a financial perspective , kindly rate the factors in the list below based on their level of importance or unimportance as having the greatest impact upon the sustainable export of clay products South African producers.

	Important					Unimportant	
Cost structure	7	6	5	4	3	2	1
Access to financial capital	7	6	5	4	3	2	1
Foreign currency earnings	7	6	5	4	3	2	1
Use of financial derivatives	7	6	5	4	3	2	1
Weakness / Strength of SA Rand	7	6	5	4	3	2	1
Financial Resources	7	6	5	4	3	2	1
Other (specify).....	7	6	5	4	3	2	1

Question 13:

From a product perspective , kindly rate the factors in the list below based on their level of importance or unimportance as having the greatest impact upon the sustainable export of clay products South African producers.

	Important					Unimportant	
Breadth of product line	X	6	5	4	3	2	1
Attractive & Quality Packaging	7	6	X	4	3	2	1
Readiness of product for export	7	6	X	4	3	2	1
Competitor products	7	X	5	4	3	2	1
Clever product advertising	7	6	X	4	3	2	1
Product adaptability to suit exports	7	X	5	4	3	2	1
New product development	X	6	5	4	3	2	1
Other (specify).....	7	6	5	4	3	2	1

Question 14:

From a management perspective , kindly rate the factors in the list below based on their level of importance or unimportance as having the greatest impact upon the sustainable export of clay products South African producers.

	Important					Unimportant	
Managements commitment to exports	X	6	5	4	3	2	1
Management's skills in international business	X	6	5	4	3	2	1
International Market Intelligence & know-how	7	X	5	4	3	2	1
Technical know-how	7	X	5	4	3	2	1
Other (specify).....	7	6	5	4	3	2	1

Question 15:

Other than the key factors in Questions 8 - 13 , kindly recommend which other factors you personally think play a crucial role in the sustainable export of clay products from South Africa and rate these based on their level of Importance or unimportance.

	Important					Unimportant	
1.). Performance of Port Authorities	X	6	5	4	3	2	1
2.). Production planning	7	X	5	4	3	2	1
3.). Transport Logistics in RSA	X	6	5	4	3	2	1
4.). Credability/ Reputation	X	6	5	4	3	2	1
5.).	7	6	5	4	3	2	1
6.).	7	6	5	4	3	2	1

Question 16:

In evaluating the role that each factor plays in the sustainable export of clay products from South Africa , which single factor do you believe plays the most **positive** role and which factor has the most **negative** effect. Please fill in the space indicated using capital letters.

Positive Factor	Product compliance with relevant international specs +effective agents in export country
Negative Factor	High cost of freight as a percentage of the landed cost/realisable selling price at destination

Question 17:

I think that it is imperative that the Claybrick Association establish an export council to lobby the support and assistance of the Dept. of Trade and Industry to further develop the ongoing export of clay bricks and other clay products produced by South African manufacturers.

Strongly Agree	Agree	X	Disagree	Strongly Disagree
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Question 18:

With regard to the sustainable growth and development of exports of clay products from SA , are there any other issues which you feel play an important role , which you believe requires further investigation ? Please comment clearly using your own words.

Government initiated trade missions

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Question 19:

I believe that the results of this survey will play an important role in the future approach to development of clay product exports from South Africa

Strongly Agree	Agree	X	Disagree	Strongly Disagree
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The End

Thank you for taking the time to complete this questionnaire. The replies received from respondents will undergo both quantitative and qualitative analysis to evaluate the Key Success Factors (KSF's) that have an impact on the future exports of clay bricks and other clay products.

Please feel free to contact me on 072 102 2353 if you have any questions.

May I kindly request that you fax your completed questionnaire to the following fax number:

(011) 768 43 94 OR alternatively , post it to:

Mark A Mitchley
P O Box 22279
Heldekruin
1733

Please mark the envelope : " MBA dissertation"

Thanking You

Mark Mitchley
Master of Business Administration
Graduate School of Business
University of Natal

Date: 15 January 2003

For Attention:
Company Name:
Fax number:

From: Mark Mitchley University of Natal
 Graduate School of Business
 Master of Business Administration Degree

Dear Sir,

Ref: Identification and Evaluation of the Key Factors affecting the sustainable export of Clay Products by South African Clay Brick Manufacturers.

I would like to take this opportunity to introduce myself. My name is Mark Mitchley and I am a final year graduate on the University of Natal, Graduate School of Business, Master of Business Administration Program.

In order to complete this program, it is necessary to complete a research dissertation on a business - related problem which will "contribute towards "improving and increasing the body of knowledge" in that particular industry or subject.

Of personal interest to the writer and of importance to the Clay Brick industry in South Africa, is the potential for the future growth and sustainable export of clay products such as bricks, paver's and quarry tiles by South African manufacturers. With this in mind, the writer chose the above subject in order to firstly identify and then to evaluate what factors play a role in the export of clay products from S.A.

In order for exporting to be successful, it needs to be sustainable and create value for the industry. This research dissertation is aimed at identifying the key factors that impact on the success of exporting products and an attempt at evaluating the affects of these factors to determine what actions are required by the industry, its association or the Department of Trade and Industry to make conditions more favorable, thereby encouraging exports.

Based on the outcome of the research, recommendations will be made for further investigations or actions. All information obtained will be treated confidentially and the rights of both the individual respondent and the company will be protected as no individuals or company names will be revealed in the report.

Completion of the questionnaire should take no longer than 15-20 minutes and participation is voluntary.

If you as an individual or company would like to obtain a copy of the test results, these will be forwarded to you upon completion of the research dissertation in July 2003.

The questions are easy to read and answering requires a simple tick, ring or cross. Some questions ask for further comments and your positive input will contribute towards the overall quality of the research.

In conclusion, I would like to thank you in advance for taking the time and effort to complete the questionnaire. Your inputs are greatly valued.

Kind regards

Mark Mitchley
Graduate School of Business
University of Natal (Durban)
Student Number 201 509 470