

Application of Marketing Management Techniques in Bio Coal Marketing

M. M. Manyuchi

Department of Operations and Quality Management, Faculty of Engineering and the Built Environment, University of Johannesburg, South Africa

*mercy.manyuchi@gmail.com)

N. Sukdeo

Department of Operations and Quality Management, Faculty of Engineering and the Built Environment, University of Johannesburg, South Africa

nsukdeo@uj.ac.za

Abstract

This paper focused on the application of marketing management concepts in product oriented engineering establishments where the introduction of a new product, bio coal was studied. The Porter's generic studies were assumed and applied during the market analysis to ensure positive product impact in the market. Superstar marketing was adopted as the market penetration strategy to capture many customers. The Marketing Management Information System (MMIS) was adopted as a tool for effective bio coal marketing.

Keywords: Bio coal, marketing management, MMIS, product marketing cycle

1. Introduction

Marketing Management permits for meeting the optimal customer satisfaction necessities as well as ensuring that the establishment through the process is getting a turnover. During the process of Marketing Management, the establishment identifies the customer needs to be satisfied, design a product to meet those needs and ensure that it is better than existing products. Subsequently, the establishment conveys the benefits to the users in order to promote higher purchase. The product must be at the right place and the right time and must also consider the available competition. The summary of the essential marketing concepts is shown in Figure 1.

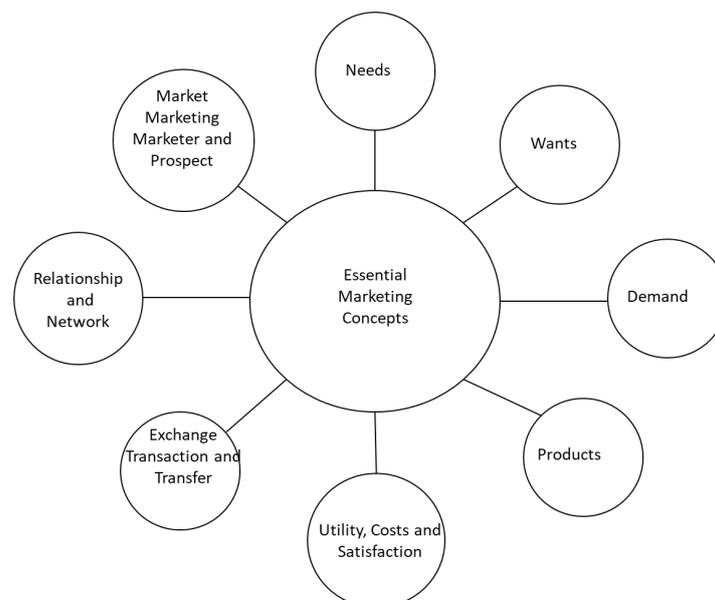


Figure 1. Essential marketing concepts

Proper Marketing Management will result in profitability of an establishment. This study focused on the valuation of the Marketing Management Initiatives of Company A, which is into bio coal production.

2. Bio Coal Market Generic Strategies

Company A is based in Harare, Zimbabwe whereby the country is experiencing a rising unemployment, shrinking economy, restructuring and job cuts. This has a negative bearing on Company A and must adopt the Porter's market generic strategies (Porter 1980) in order for them to stay in business. Operational effectiveness and good strategies, including the marketing strategies have been identified as the key for global success of companies (Porter and Takeuchi 1999). Furthermore, establishments must have a more outward looking approach to improve economic stagnation (Porter and Takeuchi 1999). In order for establishments in product development and manufacturing to be successful, the following considerations must be made:

- i. What types of actual strategies are Zimbabwean production companies currently using?
- ii. Do these strategies proper the Porter typology?
- iii. What is the relative occurrence of use of Zimbabwean business strategies?

While various types of establishments strategies have been identified over the years, Porter's generic strategies remain the most frequently buttressed and identified in key strategic management for improved establishments performance (Dess et al. 2004) and these include:

- i. The threat of new market entrants
- ii. Bargaining power of suppliers
- iii. Bargaining power of buyers
- iv. The threat of substitute products
- iv. Competition among existing competitors

The Porter's Five Forces are shown in Figure 2.

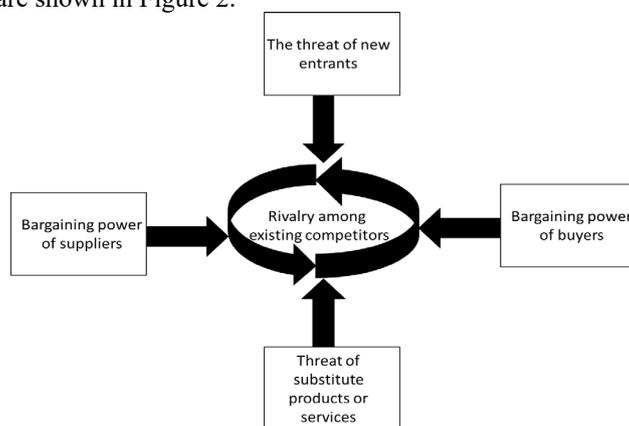


Figure 2. Potter's Five Forces Adopted in Bio Coal Marketing (Porter 1980)

Porter (1980) proposed three generic strategies yielding competitive advantage, specifically cost leadership, product differentiation and focus and for Company A to be highly profitable these strategies must be adhered to. Porter (1980) Suggested that for long-term profitability, an establishment must make a choice between one of the three generic strategies rather than end up being stuck in the middle and these strategies include: cost leadership, product differentiation and focus.

2.1 Cost Leadership.

Cost leadership focuses on utilizing lower costs for the bio coal and cost advantages result from process innovations, learning curve benefits, economies of scale, reductions, product designs that reduce manufacturing time and costs and reengineering activities. A cost leadership strategy is effectively executed when the business designs, produces and markets a similar product more efficiently than its competitors. As in this case, the competition for bio coal is the conventional fossil coal however it has disadvantages that it results in emission of greenhouse gases resulting in its less competitiveness. In addition, Company A may have access to raw materials which is normally waste biomass or superior proprietary technology to lower costs such as the recovery of heating gases during the process and the utilization of the bio coal as an energy source during the process.

2.2 Product Differentiation

Product differentiation achieves a characteristic customer need by tailoring the product allowing establishments to charge a superior price to arrest market share. For example, in the bio coal sector, the product differentiation lies in the fact that the bio coal burns at the same intensity as coal but is from renewable bio mass waste sources and does not result in the emission of greenhouse gases such as methane and carbon dioxide. The differentiation strategy is effectively effected when the business provides a superior significance to the customer through product

quality, features or after-sale support. The quality may be real or perceived based on brand name or appearance. Establishments following a differentiation strategy can charge a higher price for their products based on the product characteristics, the delivery system, the quality of service or the distribution channels. The differentiation strategy appeals to a sophisticated or knowledgeable consumer who wants a unique, quality product and is willing to pay the higher price.

2.3 Focus

Focus is the third generic strategy, is based on adopting a narrow competitive scope within the industry. Focus strategies grow market share through operating in a niche market or markets not striking to, or disregarded by, larger competitors. For example, the bio coal can be a product for people who are promoters for clean and renewable energy. These niches arise from a number of factors including geography, product specifications buyer characteristics or requirements. An effective focus strategy depends upon an industry segment large enough to have good growth potential but not of key importance to major competitors (Porter 1980). Market infiltration or market development can be an important focus strategy. (Porter 1980) also affirms focus strategy can be based on:

Differentiation targeting a specific segment of the market with exceptional needs not met by others in the industry or

Cost focused where the company has access to specialized production and operations equipment to save costs from smaller production lots or runs.

Midsized and large establishments use focus-based strategies only in conjunction with differentiation or cost leadership strategies. Focus strategies are best effective when consumers have distinct preferences or competitors overlook the niche (David 2003).

3. The Role of Market Analysis in Product Marketing Management

Marketing analysis in product evaluation refers to the method by which strategic marketing principles are applied for the purpose of assessing the capability of an investment project to survive the competitive forces in its market. It provides the rules by which the marketing variables in a projected cash flow such as price, sales volume, distribution and promotion expenses are derived (Kerzner 2009). Marketing analysis also scrutinizes the reliability and steadiness of the marketing assumptions and where possible, supports in reformulating the project thereby increasing its possibility of viability and sustained market performance. This study addresses the need of the product analyst to understand and assess the effect of market forces in appraising renewable energy projects, like bio coal production. It attempts to show how financial projections can be made more meaningful and less risky when marketing concepts and tools are used in product appraisal. Figure 3 shows the process flow diagram of market analysis in bio coal product management.

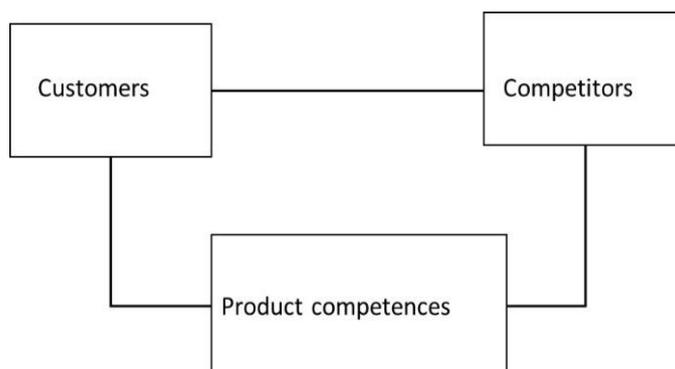


Figure 3. Marketing Analysis in Bio Coal Product Management

The most critical question that a marketing analysis has to answer in a product evaluation study is whether the product can compete successfully in the market place over its expected lifetime (Maritato 2011). In this case, can the bio coal perform in the same manner as coal as a source of thermal fuel. Is the market enormously adequate? Will plenty proceeds be produced to counterpoise the costs? To what level can the earnings of the project be foreseeable to enlarge the existing market or accelerate its growth? What is the organization's ability to respond to such pressures or to take advantage of opportunities along the way? What is the risk of competition now and during the life of the product? What marketing costs have to be acquired to enhance long term income and expenses?

Providing responses to these critical questions is not an easy duty and a detailed market analysis must be done. Assumptions are both unavoidable and essential as there are usually too many uncertainties involved. In the case of bio coal production, an assumption that must be made is the continual supply of the bio waste for bio coal production. Nevertheless, the interrogations have to be asked before thoughtful answers can begin to be found (Larson 2011). Many of the business projections will still be based on subjective opinion and incomplete databases. There are no actually correct and incorrect projections. The latter will, in all possibility, lack more than just numeric accuracy. Except by chance, they will not be a true reflection of the market forces that shape competitive position and determine the outcome of the bio coal sales on the market.

Appropriate marketing analysis would make the assessor and in consequence the potential investors, wiser and more well-informed about the key success factors of the proposed project (Shockley-Zalabak. 2006). It is very unusual to find a product that cannot be improved as a result of the insights gained from a truly in-depth assessment. Resolutions to reduce risk and increase expected return are therefore closer at hand if the hardworking analyst, pushed by a positive research attitude, is assisted in the task from a sound methodology by which to seek, process and interpret marketing associated info.

The establishment should appreciate that every project has its difficulties and therefore the way by which the answers to the marketing enquiries are required may vary from product to product (Creamer 2011). The depth of analysis achieved may also depend on data availability, cost and time constraints, the difficulty of undertaking primary product development research and many other factors.

4. Sustainability of Superstar Marketing Strategy in The Bio Coal Sector

The powerful practice of superstar commendation as a means of advertising strategy has increased drastically in the past few years; superstars have been used to promote various kinds of products. The radical rise of superstar supporters is not restricted to a detailed sector of the economy, companies using superstar commendation cut across entirely all the industry categories including packaged goods and financial services (Khatri. 2006).

Using well-known and admired people to promote products is a widespread phenomenon with a long marketing history. For example, the bio coal can be promoted local known superstars who have a huge following. Accordingly, in choosing a superstar endorser, it is important for the superstar to be well enough known that the responsiveness, image and responses for the brand may be enhanced (Goldsmith et al. 2006). In particular, a superstar endorser should have a high level of visibility and a rich set of potentially useful associations, judgments and feelings. Ideally, a superstar endorser would be seen as credible in terms of skill, dependability and friendliness as well as having detailed relations that carry potential product significance (Goldsmith et al. 2006).

Nowadays superstar commendation is being seen more and more as an integral part in a combined marketing communication strategy. Three macro factors present in the market today that in principal justifies the validity of superstar commendation as a promotional strategy. The first factor is the increasing opportunity for interactivity between brands and their consumers. Second is the age of agreement situation present today where consumers have more control over the messages they receive. Finally, is the increasing media fragmentation and commercial communication clutter (Farrell et al. 2000).

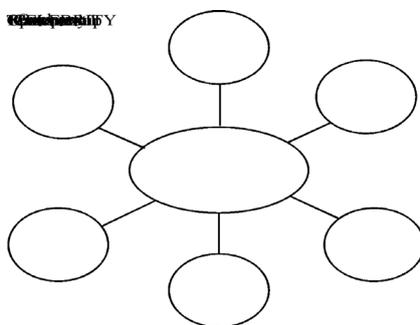


Figure 4. Ways in which a superstar can promote a brand (Pringle. 2004)

For brand commendations, it is very significant to elect Right Brand endorser at the Right time and for right product. The essence of a commendation strategy consists in creating an emotional tie between the consumer and the endorsers. The positive associations that, in people's perception, are attached to the product e.g. achievement, indestructability have to be shifted to the product (Belch and Belch. 2001). Superstars guarantee consideration of

the target group by breaking the clutter of advertisements and making the advertisement and the brand more noticeable. A superstar's favorite for a brand provides out a convincing message and hence, because the superstar is benefiting from the brand, the consumer will also benefit (Faircloth et al. 2001). There is a psychographic and demographic link between the superstars and their fans. Demographic connection establishes that different fans appeal differently to various demographic segments i.e. age, gender, class and geography while psychographic connection establishes that superstars are loved and adored by their fans. Some superstars have a worldwide appeal and therefore prove to be a good bet to create interest among the masses e.g. Ronaldo. Another invaluable benefit from superstar commendations is the public relation opportunities.

5. Key Components of a Product Marketing Management Information System

The Marketing Information System (MIS) gathers, investigates and provides a lot of relevant information to the product marketing managers. The MIS is an appreciated device for preparation, executing and directing the product marketing accomplishments.

The part of MIS is to recognize what kind of data is requisite by the marketing managers. The MIS then gathers and examines the information and supplies this information to the marketing manager at the right time. MIS collects the information through its subsystems. These subsystems are called constituents. The four main components of Marketing Information System (MIS) are:

- i. Internal Records
- ii. Marketing Intelligence
- iii. Marketing Research
- iv. Marketing Decision Support System

The basic components of MIS are depicted and explained in Figure 5.

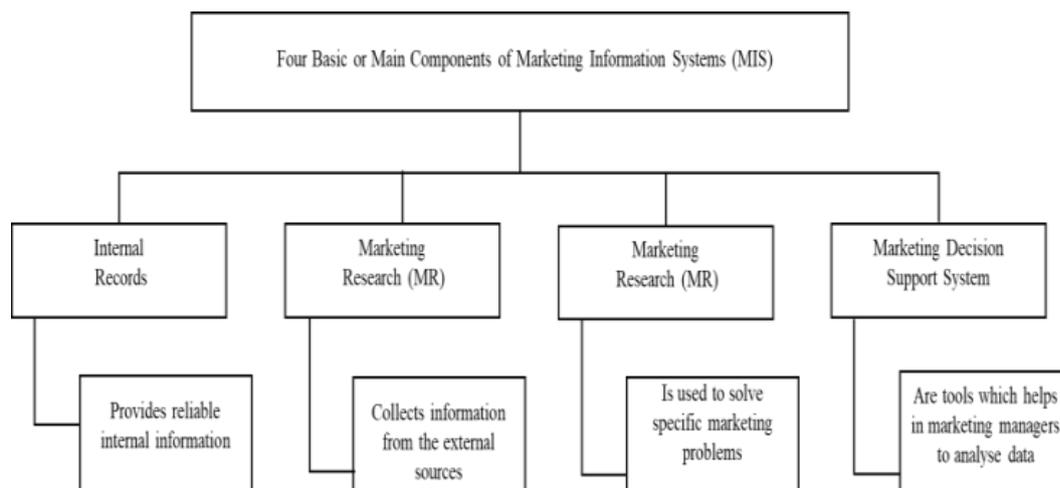


Figure. 5. Basic components of MIS

5.1 Internal Reco

The first component of MIS is the Internal Record. Marketing Managers get lots of information from the internal records of the company. These records provide current information about the bio coal sales, expenses, records, cash flows and account receivables and payables (Hansen. 2000). Numerous companies maintain their computerized internal records and inside records help marketing managers to gain faster access to reliable information.

5.2 Marketing Intelligence

The second component of MIS is the Marketing Intelligence which collects information from external sources such as customer feedback on the bio coal price, the quality and the heat generated. Marketing Intelligence provides information about current marketing-environment and changing conditions in the market for example climate change issues (Kachur 2000). This information can be easily collected from exterior sources like customer feedback forms, magazines, trade journals and commercial media. This information cannot be collected from the Annual Reports of the Trade Association and Chambers of Commerce and the Annual Report of Companies. The salesmen's report also contains information about market trends and these can be used to improve the bio coal sales.

The data which is composed from the external sources cannot be used straight but must be first assessed and organized in a proper order. It can be then used by the Marketing Manager for taking decisions and making policies about marketing.

So, marketing intelligence is an important component of MIS.

5.3 Marketing Research

The third significant constituent of MIS is the Marketing Research (MR). MR is done to solve specific marketing problems of the company for example in this case to investigate on the potential to increase the heating value of the bio coal. MR gathers information about the problem, this data is tabularized, examined and deductions are drawn (Kotler 1997). Then the recommendations are given for solving the problem. MR also delivers material to the marketing managers. However, this information is exact information and can be used only for a precise purpose.

5.4 Marketing Decision Support System

The fourth component of MIS is the Marketing Decision Support System. These are the tools which help the marketing managers to evaluate data and to take improved marketing decisions. They include hardware i.e. computer and software programs such as STATISTICA for data analysis (Mougayar. 1998). Computers help the Marketing Manager to examine the marketing info and also help them to take better decisions. In actual fact, today marketing managers cannot work without computers. There are many software programs, which help the marketing manager to do market segmentation, price fixing and advertising budgets.

6. Conclusion

Marketing Management is critical in meeting the marketing targets for product oriented engineering establishments. The effective marketing of bio coal can be highly achieved through application of the marketing generic studies and conducting a detailed analysis. Having a detailed MMIS for the bio coal value chain to the market will enhance decision making in sales support.

References

- Belch, G. and Belch, M., Advertising and Promotion: An Intergraded Marketing Communication. New York, USA: McGraw Hill, 2001.
- Creamer, M., "Your Followers are no Measure of Your Influence", Advertising Age, vol. 82, no. 1, pp. 1-22, 2011.
- Dess, G. G., Lumpkin, G. T., and Taylor, M., Strategic Management: Text and Cases. New York: McGraw-Hill Higher Education, 2004.
- David, F., Strategic Management: Concepts. (9th Ed). New Jersey: Prentice-Hall, 2003.
- Goldsmith, Lafferty and Newell., The Impact of Corporate Credibility and Superstar Credibility on Consumer Reaction to Advertisements and Brands., Journal of Advertising, vol. 3, pp. 43-54, 2006.
- Farrell, K. A., Karels, G. V., Monfort, K. W. and McClatchey, C. A., Superstar Performance and Commendation Value: The Case of Tiger Woods., Managerial Finance, vol. 26, no. 7, pp. 1-15, 2000.
- Faircloth, J. B., Capella, L. M., and Alford, B. L., The Effect of Brand Attitude and Brand Image on Brand Equity., Journal of Marketing Theory and Practice, vol. 9, no. 3, pp. 61-74, 2001.
- Hansen, W., Internet Marketing, Cincinnati, Ohio: South-Western Publishing, 2000.
- Kachur, R., Data Warehouse Management Handbook. Paramus, N.J. Prentice Hall, 2000.
- Kerzner, H., The Future of Project Management, 2009.
- Khatri, A., "Superstar Commendation: A Strategic Promotion Perspective". India Media Studies, vol. 1, no. 1, 2006.
- Kotler, P., Marketing Management: Analysis, Planning, Implementation, and Control, 9th Edition. Upper Saddle River, N. J.: Prentice Hall, 1997.
- Larson, E., Partnering for Success: An IIBA/PMI Joint Collaboration, 2011.
- Maritato, M., (PMI®-NIC Congress, 2011). Project Management E Business Analysis: il duo dinamico.
- Pringle, H., Superstar Sells. Chichester, UK: John Wiley and Sons, 2004.
- Mougayar, W., Opening Digital Markets. New York: McGraw-Hill, 1998.
- Porter, M. E., Competitive Strategy. New York: Free Press, 1980.
- Porter, M. E., and Takeuchi, H., Fixing What Really Ails Japan. Foreign Affairs, pp. 66-81, 1999.
- Shockley-Zalabak, P. S., Fundamentals of Establishment Communication: Knowledge, Sensitivity, Skills, and Values. 6e. Boston: Pearson, Allyn and Bacon, P., pp. 379-400, 2006.

Biographies

Prof. Mercy Manyuchi is a Professor in Chemical and Metallurgical Engineering at the University of Johannesburg in South Africa. She holds a Doctorate Degree from Cape Peninsula University of South Africa, a Master of Science Degree from Stellenbosch University and a Bachelor of Engineering Honors Degree from Zimbabwe. Her research interests are in waste to energy technology, mining waste management, engineering management, value addition of waste biomass and renewable energy technologies.

Prof. Nita Sukdeo is an Associate Professor in Engineering Management and the Head of Department for the Department of Operations and Quality Management, in the Faculty of Engineering and the Built Environment at the University of Johannesburg. Her research interests are in engineering management.