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TITLE OF PROJECT PAPER

**THE BOSTON CONSULTING GROUP (BCG) MATRIX APPROACH IN
POSITIONING THE EXTRUSION DIVISION OF THE ALUMINIUM
COMPANY OF MALAYSIA BERHAD (ALCOM) IN THE LOCAL
ALUMINIUM INDUSTRY**

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BY

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(MATIC NO: G 9610012/MBA)

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IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE
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ABSTRACT

The Boston Consulting Group (BCG) was an innovator in the discipline of business strategy worldwide. It also provided one of the best known portfolio planning methods which could greatly assist Managers to evaluate the business making-up of the company and assess the attractiveness of each Strategic Business Unit (SBU) in the overall market. Using the BCG Matrix approach, SBUs having a life-cycle are classified according to the growth-share matrix where the market growth rate provided a measure of the market's attractiveness and the market share served as a measure of the company's strength in the market. The BCG Matrix approach undeniably revolutionised strategic planning but it had its limitations, especially for long-term future planning purposes.

Against this backdrop, the BCG approach was adopted to analyse the future of the Extrusion Division of the Aluminium Company of Malaysia Berhad (ALCOM) by positioning it against its major competitors and to study the marketing strategies adopted by each company. A market survey was conducted through interviews and structured questionnaires which were forwarded to local extruders and related suppliers, contractors and customers. The effectiveness of the questionnaires were then evaluated and tabulated for the plotting of the BCG Matrix. In this context, close reference was made to a Strategic Management case study namely the Anheuser-Bush Companies Inc. USA in the 1970s.

The research findings of the market survey using the BCG Matrix approach would firstly position ALCOM amongst its competitors in the local extrusion business and secondly determine ALCOM's market share contribution in the domestic market. Based on this phenomenon, recommendations would then be made for ALCOM to strategise the future of its extrusion business and to be apprehensive of the major competitors for obvious reasons.

To-date, there has been no market survey conducted using the BCG Matrix approach in the local aluminium industry and as such this study, with some limitations and assumptions, would provide a positive avenue for local extruders to have a general outlook of the industry in terms of the relative market growth and relative market share. Subsequently, this survey would further enhance the existing literature on the BCG Matrix approach by placing focus on a local example.

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CHAPTER ONE

INTRODUCTION

The global marketing environment, viewed as a single borderless market, is yet another challenge to the next millennium for multinationals, transnationals and organisations cum individuals. International marketing environment is unequivocally the platform for new opportunities and economic globalisation. As such, the much misconceived traditional idea that marketing is basically selling or advertising by the businessmen community is an out-dated notion now as marketing can no longer be appreciated in isolation for it has enhanced to be a philosophy that guides an entire organisation. The principles of marketing has brought to focus the integrated practical managerial approach to marketing which play a vital role in strategic planning in a wholistic manner in an entity or organisation. Competitive market strategies have been formulated or propounded by strategists, economists and intellectuals alike for obvious reasons whilst making concerted effort to understand marketing and the marketing process; analysing marketing opportunities; selecting target markets; developing and managing the marketing mix and globalising marketing overall.

Against this backdrop, it is interesting to study and analyse the corporate-level strategies that companies pursue with the view to become multibusiness enterprises. Various portfolio techniques are utilised in analysing the current business portfolio¹ that is the business-making cum set-up of a said company. A

¹ Philip Kotler & Gary Armstrong, "Principles of Marketing" (1996) Page 39

balanced portfolio of businesses² is often sought to achieve or enhance the growth and profits for a company, without exposing it to undue risks. There are indeed various advantages and limitations of adopting a particular portfolio technique or matrix, inter-alia, the Boston Consulting Group (BCG); the McKinsey & Company, Inc. for use at General Electric and by Charles Hofer, an industry evolution matrix.³ Undeniably, extensive research and references have been attested in this content of Corporate Strategy.

The Boston Consulting Group (BCG) and its founder, Bruce D. Henderson, may be best known internationally as the creators and architects of the discipline of business strategy⁴ worldwide. The project paper will study the advantages, disadvantages or limitations of this corporate portfolio technique or matrix in the general outlook of the market share and market growth of the local aluminium industry (Extrusion Division) and its attractiveness cum business strength in the current and future position of ALCOM (Aluminium Company of Malaysia Berhad) against the expanding local aluminium industry.

1.1 SCOPE OF STUDY

The Scope of the study includes a literature review on the BCG Matrix and its viability in the domestic aluminium industry in the general context. In perspective, the BCG Matrix, if applied, would be able to evaluate ALCOM's

² Charles W.L. Hill & Gareth R. Jones, "Strategic Management, An Integrated Approach" (1989) page 185

³ Ibid, Page 185

⁴ Carl W. Stern & George Stalk Jr., "Perspective on Strategy from the Boston Consulting Group" (1998) Preface.

Strategic Business Units (Extrusion) in terms of their relative market growth rate and relative market share and henceforth chart its position and also amongst its competitors in the expanding local aluminium industry. The modus operandi is confined to methodological research where questionnaires were distributed to twenty-two local aluminium companies (Extruders) with the selection of the five major competitors of ALCOM; open interviews with marketing officers and suppliers cum contractors from relevant companies in this study; scrutinising records from the Registrar of Companies (ROC) for the companies' background and financial status and making a close reference to a well-known case study for the tabulation of the results obtained. Upon completion of the data collection, an analysis of the market survey using the BCG Matrix was conducted and the results were tabulated in the context of analysing the current and future business corporate portfolios in the local aluminium industry (Extrusion Division) with ALCOM as the major competitor.

1.2 OBJECTIVE OF STUDY

The objective of this research was to critically examine and review, both the contemporary literature and practical skills and experiences relevant in Strategic Planning and the marketing process via the Boston Consulting Group (BCG) Matrix approach. As an Engineering Manager with ALCOM, which is synonymous with top quality Aluminium, this study proposed to focus on the strengths and weaknesses, if any, in the Extrusion Division of the aluminium industry by making a comparative study of ALCOM with the other local

competing entities and organisations in the local extrusion business. Retrospectively speaking, although ALCOM was the only local Extruder in Malaysia, it now faces competition from approximately 22 other local extruders (in 1997) which are typically family-owned concerns but gradually gaining foothold in the local aluminium industry, as some are also listed in the Kuala Lumpur Stock Exchange (KLSE).

1.3 SIGNIFICANCE OF STUDY

This market survey using the BCG Matrix, would hopefully throw light on some of the Corporate strategies used by the local aluminium industries, especially ALCOM in the context of market share and market growth in the overall local aluminium industry. The findings will greatly benefit the local extruders, especially ALCOM, the pioneer in this industry and more so since there is no study or market survey using the BCG Matrix done to throw light into the market share-growth Matrix per se. This market survey, although with some limitations will indeed be a positive indication cum literature review for potential marketers and extruders in the local extrusion industry. It would hopefully serve as an advancement of the usage of the BCG matrix with a localised example as its practical usage has been witnessed in various case studies and operating multi-businesses in the USA over years.

CHAPTER TWO

LITERATURE REVIEW

2.1 THE BOSTON CONSULTING GROUP (BCG) MATRIX

The Boston Consulting Group is an innovator in the Business Strategy worldwide since 1963. Its founder, Bruce D. Henderson (born on 30th April, 1915 on a Tennessee farm and passed away on 20th July 1992), aspired to nothing less than changing the way the business world thought about competition. The vehicle was strategy.⁵

The main objective of the BCG technique is to assist Managers to strategically identify the cash flow requirements of the different businesses in their portfolios. The concept is thus useful in strategic portfolio analysis and choice.⁶ For example, a Company may wish to put forward its strong resources into its more profitable businesses and down-size or phase down its weaker ones in adopting a proactive stance in the making up of the company and to maximise a company's future growth and profitability.

⁵ Carl W. Stern & George Stalk Jr., "Perspectives on Strategy from the Boston Consulting Group" (1998) Preface.

⁶ Gerry Johnson & Kevan Scholes, "Exploring Corporate Strategy" (1988) Page 103

2.2 Strategic Business Units (SBUs)

By using the BCG approach, a company classifies all its Strategic Business Units (SBU) according to the growth-share matrix ⁷ as below:-

BCG Matrix

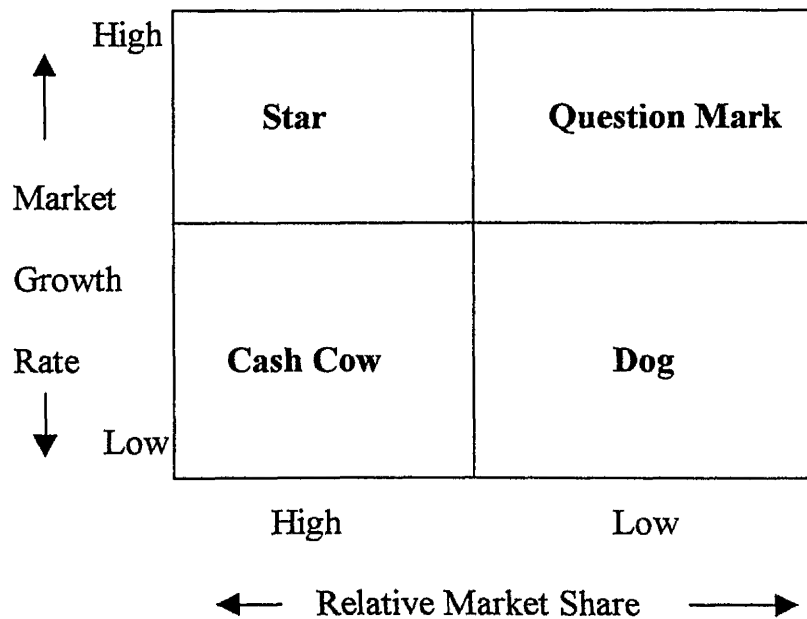


Diagram A

The market growth rate, on the vertical axis, provides a measure of the market's attractiveness. The relative market share, on the horizontal axis, serves as a measure of the Company's strength in the market. With the division of the growth-share matrix, four types of SBUs can be categorically highlighted namely:-

⁷ Philip Kotler & Gary Armstrong, 'Principles of Marketing' (1996) Page 39

Stars

High growth, high-share businesses or products. They often need heavy investment to finance their rapid growth. Eventually their growth will slow down and they will turn into cash cows. They are products or SBUs which are growing rapidly.

Cash Cows

Low-growth, high-share businesses or products; established and successful Units that generate cash the company uses to pay its bills and support other business units that need investment. They also provide funds for overhead and dividends.

Question Marks

Low-share business units in high-growth markets that required lot of cash in order to hold their share or become stars. If left in the cell, they become cash traps.

Dogs

Low-growth, low-share business and products that may generate enough cash to maintain themselves but do not promise to be large sources of cash.⁸ They should be minimised by means of divestment or liquidation.⁹

Using the BCG Matrix, the Group has recommended that firstly a company should use the cash surplus from any cash cows to support the development of selected question marks and to nurture the emerging stars. In its long-term aim, it is to consolidate the position of stars whereby favoured question marks are converted to stars, hence making the company's portfolio more attractive. Secondly, the question marks with the weakest prospects are divested so that demands on the company's cash resources are reduced. Thirdly, where the SBU is a dog, the company should exit from such industry that is via divestment, harvesting market share or liquidation. Fourthly, if the company lacks sufficient cash cows, stars or question marks, it should re-consider to build a more balanced portfolio via acquisitions or divestments. Overall, such a portfolio has to sustain enough stars and question marks to enhance a healthy growth and profitable returns for the said company and likewise enough cash cows to support the investment requirements of the stars and question marks.¹⁰ Overall, the BCG Growth-Share Matrix compares units on market growth rate and market share in relation to the largest competitor. As such investment recommendations are

⁸ Ibid, Pages 39 – 40

⁹ William F. Glueck & Lawrence R. Jauch, "Business Policy and Strategic Management" (1984) Pages 271-275

¹⁰ Charles W.L. Hill & Gareth R. Jones, "Strategic Management, An Integrated Approach" (1989) Pages 189-190

based on the placement of individual units on the grids created by these two dimensions.¹¹

Based on the above, managers using the BCG Matrix plotted each of the company's business in accordance to the market growth rate and relative competitive position. Market growth rate is the projected rate of sales growth for the market being served by a particular business. Usually measured as the percentage increase in a market's sales or unit volume over the two most recent years, this rate serves as an indicator of the relative attractiveness of the markets served by each business in the firm's portfolio of businesses. Relative competitive positions usually is expressed as the share of a business divided by the share of its largest competitor.¹² Hence, this provides a basis of comparison of the strength of the firm's portfolio in terms of its position in the respective markets.

2.3 ADVANTAGES OF THE BCG MATRIX

Corporate strategists propounded that the BCG Matrix via the growth-share matrix's singular axes limited their ability to reflect the complexity of a business situation. As such, some Companies adopted a matrix with a broader focus that is the matrix developed by Mc Kinsey & Company at General Electric

¹¹ Leslie W. Rue & Phyllis G. Holland, "Strategic Management, Concepts and Experiences" (1986) Page 504

¹² John A. Pearce II & Richard B. Robinson, JR, "Strategic Management-Formulation, Implementation and Control" (1997) Pages 283-284

called the Attractiveness-Business Strength Matrix.¹³

On one hand, the major advantage of the BCG Matrix is that it focuses a Company's direction on the cash flow requirements of different types of businesses and points out ways of using cash flows to optimize the value of the Corporate portfolio. Furthermore, it also indicates when a company needs to add another SBU to its portfolio and when it requires to remove an SBU.

2.4 DISADVANTAGES OF THE BCG MATRIX

The weaknesses of the BCG Matrix are as follows:-

- The model is simplistic where the attractiveness of an SBU is assessed in just two dimensions that is market share and industry growth. This is quite misleading as a host of other factors ought to be taken into consideration;
- The connections between the relative market share and cost saving is not that straight-forward where for example the BCG Matrix classified minimill operations as dogs of the American steel industry whereas in fact their performance over the last decade has characterised them as stars business.¹⁴ At times, a high market share does not always give a company a cost advantage.

¹³ Ibid, Page 285

¹⁴ Charles W.L. Hill & Gareth R. Jones, "Strategic Management, An Intergrated Approach" (1989) Page 190

Likewise, a high market share in a low-growth industry does not necessarily result in large positive cash flow the characteristic of cash cow as the BCG Matrix classified the General Motors auto operation as a cash cow ;

- The said matrix carries the risk of misclassifying businesses, hence the Mc Kinsey Matrix was founded assessed on more factors;
- The portrayal of businesses as they exist at one point in time rather than as they evolve over time is another criticism of the BCG Matrix with its static quality, hence the third portfolio approach was introduced using the Multiple factor approach to assess the competitive strength as one dimension and the stage of the market life cycle as the other dimension ;¹⁵
- The BCG Matrix, although revolutionised strategic planning, had its limitation as it was difficult, time-consuming and costly to implement. As an example, it was difficult to measure the market share and growth. Furthermore, it focused on classifying current businesses but lesser on future planning. The Management still had to rely on its own judgement to set the business objectives for each SBU, to determine what resources each will be given and to figure out which new businesses should be added.¹⁶

¹⁵ John A. Pearce II & Richard B. Robinson, JR, "Strategic Management-Formulation, Implementation and Control" (1997) Page 285

¹⁶ Philip Kotler & Gary Armstrong, "Principles of Marketing" (1996) Page 41

2.5 EXPERIENCE CURVE

Foregoing the above, another aspect of the work of the BCG is the idea of the experience curve or the learning curve which showed the company's performance vis-à-vis a direct and consistent relationship between the aggregate growth in volume of production and declining cost of production. The premise of their findings is that in any market segment of an industry, price levels tend to be very similar for products and this aspect is particularly relevant for organisations competing on the basis of cost leadership. It is the key determinant of low levels of cost that the BCG attempted to unearth via the experience curve that is the relationship between unit costs and total units produced over time as resembled below:-

The Experience Curve

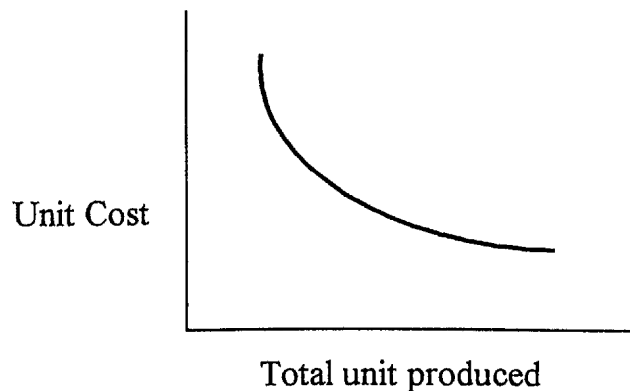


Diagram B

The BCG matrix approach contended that since Cost is a function of experience, then cost is also a function of the market share. Hence the importance of gaining and holding market share becomes very important that is