

THE ROLE OF MANAGEMENT ACCOUNTING IN THE SUCCESSFUL IMPLEMENTATION OF STRATEGY AND ITS IMPACT ON LEVERAGE AND PERFORMANCE

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Abstract

This case study examines the use of a management accounting system (MAS) in the implementation of the company's business strategy to run its business. This particular pharmaceutical company was chosen for the case study because it won the award for "the application of the most effective management accounting system, tool or technique that has had a positive impact on daily practice. This application may have led to quality or process improvement, improved efficiency, lowered costs, or otherwise addressed a particular problem in the workplace." Many companies have problems executing their strategies leading to the realization of lower financial and non-financial performance. The study investigates how this company used management accounting as a tool to align itself with the overall corporate strategic objectives. It also investigates the strategies involving the use of different financial leverage which affects the performance of this company.

Keywords: Management accounting system, business strategy, financial performance, non-financial performance, leverage

Introduction

The threat of new diseases, coupled with an ever-aging population, continues to push medical research to new frontiers fueling the healthy growth of the

pharmaceutical industry. Today, that growth is evident in the need for improved research and increased global market presence. In order to compete effectively, the individual company has to strategise in order to optimize on its strength. The pharmaceutical industry places heavy emphasis on research and development of new drugs which may have an impact on the financial leverage of the industry. Consequently, for pharmaceutical companies with product differentiation strategy, the cost of debt is higher than cost leadership firms (Jermias, 2008). In the process of eliminating costs, this cost is passed down to the consumers in the form of higher prices. This is especially more evident in the case of original drugs than generic drugs. Optimum performance can be obtained through the utilization of management accounting system to align the organization with its strategic objectives. Companies on average realize lesser financial performance than what their strategies promise. Many companies have problems in executing their strategies. CEOs who realize this would prefer to have simple strategies they can execute rather than complicated strategies that are ineffective because they cannot be executed. The concept of Balanced Scorecard (Kaplan and Norton, 1996; 2001) introduces the notion of the importance of communicating an organisation's strategies through the management accounting system.

"I'd rather have a mediocre strategy that is well executed than a brilliant strategy executed poorly".

Jamie Dimon, CEO, J.P. Morgan Chase

Business strategy is about the overall direction of an organization and it indicates how managers are to add value to their organizations, addressing issues such as product diversity, geographical coverage. Organisations' strategies need to be clearly communicated to organizational members since strategies form the basis of all other decisions. The general expression of an organization is often reflected in the mission statement, while the vision statement represents the desired future direction of an organisation. The vision and mission statements together are crucial to the strategic planning process. Organisations can use the mission and vision statements as key sources of an emergent strategy to gain competitive advantage over their competitors. Embedded within each organization is a management control system of which management accounting forms a vital part. The management control system is an important tool which, when appropriately used either interactively or diagnostically (Simons, 1995) propels and accelerates the strategic decision-making process toward strategic alignment.

The main objective of this case study is to examine how a pharmaceutical company maximizes the use of management accounting to better align its organization with the corporate strategic objectives.

Literature Review

Management Accounting System (MAS)

Although there are various models of the traditional strategic planning process, most of them include similar basic elements. One of the most familiar of these is represented in Diagram 1. Many functional strategies are developed using processes based on this traditional strategic planning model.

Literature on organizational factors and mechanisms on the successful implementation of strategic policies is fragmented. The strategic management literature, for example, suggests that the composition of the organization's top management team (TMT), which is responsible for strategy development and deployment, affects the strategic choices of the organization, and the ability to execute them (Carpenter, Geletkanycz and Sanders, 2004). The accounting literature, in contrast, emphasizes the role of the management accounting system (MAS) as an organizational mechanism that supports strategic implementation

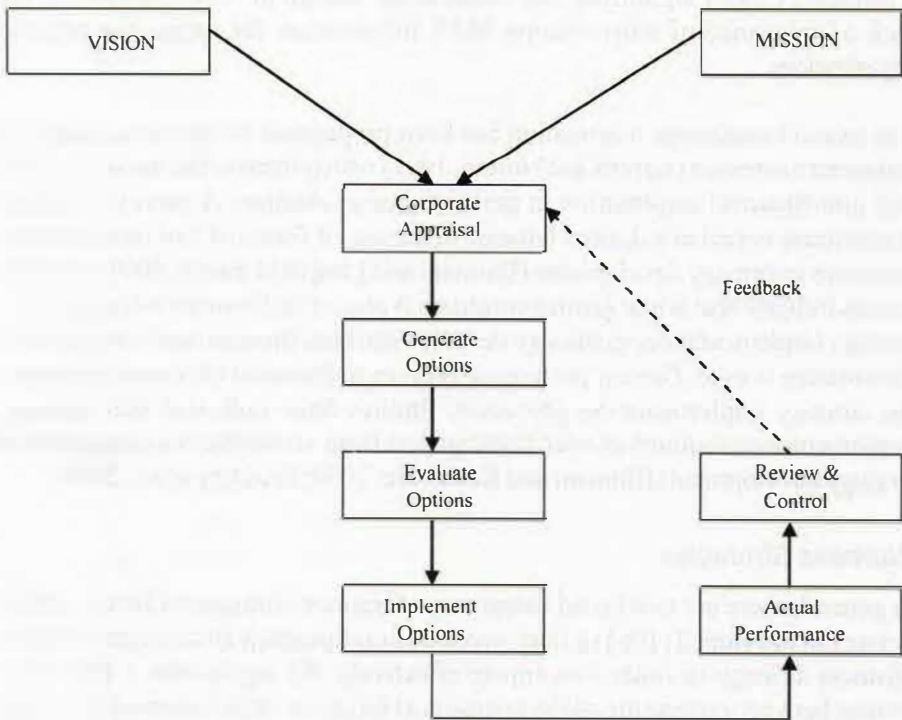


Diagram 1: Traditional Strategic Planning Model
[adapted from Payne (2008)]

(Dent, 1990; Simons, 1995), but very few empirical studies have addressed the way in which management uses the MAS in strategic implementation.

The majority of studies on the MAS-strategy relationship suggests that prospector and defender strategies require different designs and uses of MAS (Langfield-Smith, 1997; Simons, 1987). The prospectors typically require a more flexible and customer-oriented approach, aimed at improving product and service quality (Bouwens & Abernethy, 2000) while defenders emphasise maintaining efficiency by cost-control (Chenhall, 2005). Simons (1987) found that firms following prospector strategies relied more on interactive controls than firms following defender strategies. Abernethy and Guthrie (1994) found that the use of broad scope MAS information contributed more to performance in prospector-type firms than in defender-type firms. In combination, available evidence on the relationship between MAS and strategy thus suggests that MAS characteristics that support a certain strategic position may differ from the MAS characteristics that enable a move towards that strategic position (Henri, 2006). Naranjo-Gil and Hartmann (2007) found that broadscope MAS was positively related to strategic change for organizations moving towards prospector positions whose results agreed with Chenhall's (2003) arguments that broad-scope design of MAS overcomes the lack of relevance of narrowscope MAS information for managing organic organizations.

The use of broadscope information has been propagated by the introduction of Balanced Scorecard (Kaplan and Norton, 1992) which stresses the use of financial and non-financial information in performance evaluation. A survey of senior accountants revealed a desired balance in the use of financial and non-financial measures in strategy development (Bhimani and Langfield-Smith, 2007) and their results indicate that while greater emphasis is placed on financial information in strategy implementation, in strategy development both financial and non-financial information is used. Greater preference is given to financial information input in the strategy implementation processes. Studies have indicated that strategy implementation requires greater participation from accountants as compared to strategy development (Bhimani and Keshtvarz, 1999; Guilding et al., 2000).

Business Strategies

In general, there are two broad categories of business strategies (Porter, 1985). Porter has developed (1985) a framework that outlines how firms might choose a business strategy in order to compete effectively. He argues that a firm must choose between competing as the lowest-cost producer in its industry (i.e., a cost leadership strategy) or competing by providing unique products in terms of quality, physical characteristics, or product-related services (i.e., a product differentiation strategy). Porter's (1985) classification of business strategies as either cost

leadership or product differentiation is considered by many to be conceptually valid and is academically well-accepted. Previous studies which used this classification include Chenhall and Langfield-Smith (1998).

Strategy and Leverage

Firms pursuing a strategy of cost leadership will benefit more from the use of leverage in terms of the increased managerial efficiency (Jordan et al., 1998). According to the agency theory (Jensen, 1986), monitoring by lenders curbs managers' opportunistic behavior by reducing the resources available for discretionary spending. This exerts a greater discipline on the management to set aside a portion of the profit toward the payment of interests. Accordingly, Porter (1985) suggests that cost leadership firms need to control costs tightly, and refrain from incurring too many other expenses in order to be able to cut prices when selling their products.

On the other hand, Miller (1987) argues that product differentiation firms tend to invest heavily in research and development activities in order to increase their innovative capability, thereby enhancing their ability to keep up with their competitors' innovations. The constraints of increased debt and requirements to pay debt interests will likely impede managers' creativity and innovation, qualities which are critical to maintaining competitive advantage for product differentiation firms (e.g., Simerly and Li, 2000). With a strong emphasis on innovation, product differentiation firms face high uncertainty, as their expenditure on research and development may take a long time to recoup or worse still, these expenses may not be recouped if the development of new products fail to enter the market. This might make it both difficult and undesirable for firms to use a greater amount of debt (O'Brien, 2003; Baginski and Wahlen, 2003).

Strategies, Leverage and Performance

The cost of debt has been found to be higher for product differentiation firms than cost leadership firms (Jermias, 2008). In addition, Jermias (2008) contends that the relationship between leverage and performance is negative and this relationship is more negative for product differentiators than cost leaders.

The successful implementation and execution of business strategies are expected to affect performance. Performance measures can be designed to assist managers in tracking the implementation and effectiveness of their business strategies (Simons, 2000). Basically there are two types of performance measures: accounting-based and market-based measures. Return on equity (ROE) and return on investment (ROI) are two examples of accounting-based performance measures which are more controllable by managers while market-based

performance measures such as the market value of equities tend to be beyond managers' control (Merchant and Van der Stede, 2007).

Research Design

The company selected for this case study is a company, PQR Ltd which has won the prestigious NAfMA award for using management accounting as a tool to align its organization with the corporate strategic objectives. One of the requirements for participating companies in the NAfMA Award is for the company to be consistently making profits for three consecutive years. The primary objective of this study was to investigate how this company used management accounting as a tool to achieve its strategic objectives, so this company was deemed appropriate for the case study. At the same time, the strategic choice affects performance through its financial leverage, and this was examined from data obtained from the annual reports.

Two site visits were made; each site visit was made by different groups of experienced assessors. Each site visit took up to one day when the company granted assessors accessibility to interview top management. When not occupied with interviews, the rest of the day would be spent on examining the financial and non-financial measures of their operation, and actual site visits. In the case of PQR Ltd, the Managing Director together with his team of managers met with the assessors and the group interviews were conducted over three hours in each session. After the site visits, each group of assessors met together to finalise their evaluation on the role and use of management accounting in the company.

The accounting documents of the company were viewed, scrutinized and evaluated based on different criteria such as the use of management accounting information (financial and non-financial), leadership (which encompass the vision and mission statements), and the practice of different management accounting techniques in creating value to the organization.

Quantitative analysis was also made through the use of financial information obtained from the annual reports of this company. Financial and non-financial data from the Annual Reports from 1999 to 2007 were collected to calculate the ratios and also for content analysis respectively. Content analysis was also conducted on the qualitative information available in the annual reports.

Company Background

Malaysia's rapidly growing private healthcare system, fueled over the past 10 years by the rise of employer-paid private insurance benefits and rising per capita income, is expected to double the country's health expenditure from 3 percent to

6 percent of GDP in the next 15 years (*Healthcare in Malaysia, Pharmabiz.com, February 12, 2004*). The Malaysian government considers the country's healthcare industry as one of its top priorities.

Against this backdrop, PQR Ltd strategises to further expand its market share in the private sector market whilst strengthening its position in the government market. Established in 1994, PQR Ltd currently has a 35 percent market share of Malaysia's pharmaceutical industry. In 2006, it registered 16 new products, launched two new products, one new bio-equivalent product approved and registered 15 products in international markets.

PQR Ltd was listed on the Kuala Lumpur Stock Exchange Second Board in 1999 and in 2003, PQR Ltd migrated to the main board. Its vision is to be Malaysia's foremost integrated healthcare solutions provider, contributing significantly to improving wellness of people by providing high quality products and services.

PQR Ltd has since become one of the largest integrated local healthcare companies. PQR Ltd supplies more than 2,000 products, of which 330 are made by the company itself. Invoices and business transactions are done via the Internet, using its own information technology platform.

There are currently 74 (or more than 250, if inclusive of manufacturers in the Over-The-Counter supplements and traditional medicine categories) registered pharmaceutical manufacturers in Malaysia which cater mainly to the generic drug market. PQR Ltd's vision is to be Malaysia's foremost integrated healthcare solutions provider, contributing significantly to improving wellness of people by providing high quality products and services.

As a leading Malaysian healthcare company, PQR Ltd is driven by its core businesses namely, generic pharmaceuticals manufacturing, hospital equipping, warehousing and distribution of pharmaceutical and medical products as well as sales and marketing. These core businesses are supported by its research and development activities and a niche healthcare IT solutions which form the backbone of its operations. The essence of PQR Ltd is the seamless amalgamation of these key disciplines, represented by an entirely integrated group of companies, processes and people that uphold their commitment to deliver quality products and services at all times. This is driven by their goal to enrich the lives of all those they come into contact with, i.e. their employees, customers and business partners, or the patients who benefit from their products and services.

It is guided by their philosophy of doing business with a conscience; a philosophy they intend to nurture as they journey towards becoming a global total integrated healthcare solutions provider. This philosophy has led PQR Ltd to be named as

Asia's Best Managed Pharmaceutical Company in the pharmaceutical sector in Euromoney's 10th Asian Company ranking that is based on a survey of market analysts at leading banks and research institutes in Asia.

Its rapid growth is driven by the vision "to be the *preferred brand* in healthcare, *in the markets* we choose to serve", and its mission is "to deliver *maximum value* to our customers through *superior quality products and services* by *committed, professional and caring employees*".

In 2006, PQR Ltd announced its Key Performance Indicators (KPIs) targeting a revenue growth and return on equity of 35 percent and 14 percent, respectively. The KPIs announcement was in line with the Government's call to improve the performance of Government-linked Companies (GLCs) as prescribed in the GLC Transformation Manual. The two factors above – revenue and return on equity (ROE) were selected as they represented PQR Ltd's five-point focus in value creation strategies, namely, productivity of resources, expansion and growth of business, people and organisational development, system and processes improvements and image and perception management.

Value Creation Through Strategic Objectives

Although corporate strategy is all about the direction of an organization, it also indicates how managers can add value, addressing topics such as product diversity, geographical coverage and other expectations. Therefore, it is vital that top management are clear about their strategy, since it forms the basis for all other decisions. A company's vision is the desired future state of the organisation. The vision is crucial to the strategic planning process. Strategists try to focus the energies of the workforce on the corporate vision. The need for clarity has made mission statements increasingly popular. These general expressions of the organisation's purpose, embodied in the mission statement, are intended to communicate the organisation's *raison d'être*. The mission of PQR Ltd is "to deliver maximum value to our customers through superior quality products and services by committed, professional and caring employees". The five maxims provide an excellent example of how PQR Ltd communicates the mission and vision throughout an organization.

Through the effective use of resources and technologies, which examines the drivers of customer value, shareholder value and organizational innovation, value creation can be achieved (International Management Accounting Practice Statement – IMAPS 1).

The company has expanded on its mission statements with five maxims that every employee can use to guide the decisions they make. PQR Ltd has

concentrated on value creation by aligning its key strategic objectives with the outcome measures based on a five-point focus, as follows:

- Productivity of resources (P)
- Expansion and growth (E)
- People and organizational development (P)
- System and processes improvement (S)
- Image and perception improvement (I)

PQR Ltd interprets its strategic objectives using the five key focus points which are in line with the ten key results areas that the Government has identified under its Government-linked Company Transformation initiative. The introduction of this is to set clear accountabilities over achievement of target measures and effectiveness of initiatives. The strategic objectives are developed using the PEPSI at the corporate level which are then cascaded down to various business units and monitored on a monthly basis. The strategic corporate plan is then interpreted into day-to-day management of all departments, sections and units in several ways which include monthly group management meeting, monthly divisional management meeting, fortnightly operational meeting, mid year budget review meeting, yearly strategic review meeting, quarterly employee briefing and bi-annually risk management meeting. On an informal basis, the management team practise “management by walking around” (MBWA) to meet and discuss operational matters with employees at all levels.

The areas on productivity of resources, expansion and growth and system and process improvement are developed by the respective business units and are aligned with the corporate targets of the company. The Corporate Office is tasked with developing human capital through the Organisational Development Division while Corporate Communication Division is responsible for image and perception areas. They are done in tandem with the business units’ strategies.

The strategic objectives underlying the five maxims have increased the group’s performance by increasing the group’s revenue through appropriate business expansion strategies, improving profitability by making assets and other resources more productive and enhancing value to shareholders by streamlining processes for improved efficiency. Overall, the PEPSI framework is a structured approach to attaining the vision, mission, strategy, objectives and action plans of the company.

Management Accounting Practices to Create Value Using the ‘PEPSI’ Framework

Value creation focuses on the steps taken by top management as well as other personnel in promoting activities that will enhance the overall value of the company. The role of management accounting is to concentrate on processes and techniques

that would ensure the effective use of organizational resources, and the development of the organization in financial and non-financial areas. This has become the key focus for all contemporary managers. PQR Ltd has managed to create value for its organization by focusing on the “PEPSI” framework. Some of these areas where values have been created are discussed below.

Productivity in its Use of Machinery

The maintenance and engineering department supports the company’s operations by ensuring that the facilities, utilities and equipment are properly maintained. Trained personnel provide twenty four hour troubleshooting / repair service to the warehouse Automated Storage and Retrieval System (ASRS) to ensure minimal downtime and disruption to the movement of pharmaceutical goods to the external customers.

At the plants, the manufacturing downtime is minimized and throughput is always optimised through the maximum utilization of the machines. The maximization of quality throughput is measured in terms of overall equipment efficiency (OEE). The OEE is a measure of quality, throughput as well as equipment performance. In addition, Key Performance Indicators (KPIs) are set in all departments to ensure everyone understands and works towards the common goals. Furthermore, the KPIs are set as moving targets, in an attempt for continuous improvement. In addition, PQR Ltd also increased their energy conservation efforts in 2005, by adopting new energy efficient equipment in their plants. Equipment includes inverter controls for chiller condenser pumps and sequential controllers for air compressors. Furthermore, PQR Ltd implemented a Value Improvement Plan programme to improve productivity and cost efficiency in electricity consumption.

Expansion and Growth

Initially, PQR Ltd started off its core business as a logistic company procuring for Government hospitals. Within this narrow ambit, PQR Ltd achieved a high growth rate within the first 10 years. Realising that dependence on organic growth alone is insufficient, PQR Ltd embarked on moving up and down the pharmaceutical value chain to expand and grow. The company looks into the value chain comprising research and development, manufacturing, distribution, marketing and sales.

They embarked on research and development to gain competitive advantage while the research centre continued to improve its capabilities and processes to ensure maximization of resources during the product development cycle. This is reflected in the rising trend in the number of new products under various phases of development. Consequently, the research centre has successfully registered 16 new products for the Malaysian market. PQR Ltd has also increased the

number of products for the export market with the approval of 16 new products, of which 7 products were for Sri Lanka, 4 products were for Kenya, and 2 products each were for Hong Kong and Myanmar. Their future outlook is to continue concentrating on developing and registering new products categorised as Small Volume Injectables (SVI) and new off-patent generics. They also believe in placing emphasis on biotechnology and the high potential herbal medicines in sync with the Government's focus on these areas.

The number of manufacturing plants has also increased. The company rationalized the manufacturing activities between a manufacturing facility which focused on the production of tablets, capsules, creams and suspension for general pharmaceutical, as well as Cephalosporin range of products and another plant which is used for the production of all penicillin products and creams, as well as major liquid products.

Apart from the manufacturing facilities, the distribution division has also embarked on adding two new principals.

The warehouse at PQR Ltd has expanded tremendously with facilities sufficient to support the planned business expansion for at least over the next five years. Subsequently, warehouse facilities have also been expanded.

Within a decade, its business has extended beyond the national borders. Among PQR Ltd's export markets are Brunei, Indonesia, Singapore, Papua New Guinea, Fiji, Myanmar, Cambodia, Vietnam, Hong Kong, the Philippines, Zimbabwe, the Sudan, Sri Lanka, Kenya, Iraq and Macau. In 2004, PQR Ltd secured and completed non-recurring contracts amounting to RM20.4 million. In 2005, its sales to overseas markets reached RM7.7 million, a figure which is significantly lower than the RM28.2 million sales recorded in the previous year.

People and Organisational Development

PQR Ltd believes that their employees are their greatest assets and without their full involvement and cooperation, the company will not be able to achieve any of the things that are planned by top management. Therefore, various initiatives are made to ensure that employees' development is in line with the company's direction. The career plan chartered for the staff at every job level at PQR Ltd follows through a succession plan as well as a staff development plan.

In addition, effective training is conducted for the staff through the following phases:

1. Training need analysis conducted at the beginning of the year
2. Staff development needs identified during the staff annual performance review

3. Annual training calendar prepared based on 1 and 2
4. Individual training file for each staff to track training attended
5. Effectiveness of staff training evaluated with a test or quiz and also by on-the-job evaluations by the immediate supervisor.

PQR Ltd also provides the means for employees to contribute effectively to the company's corporate and quality objectives. This is facilitated through a number of diverse and interrelated mechanisms. Teamwork culture is considered as the primary driver for employee involvement. Employees are given the empowerment to improve quality and solve problems through participative involvement. Teams are formed to spearhead their quality initiatives and employees are encouraged to join various quality-related teams to work together with their co-workers to manage projects jointly such as the Value Improvement Programme (VIP), Quality Improvement Program (QIP) and Lean Six Sigma. Employee involvement is also achieved through internal competitions amongst the employees.

PQR Ltd promotes employee activities by providing various types of non-monetary incentives and recognition to its staff who have contributed to the organisation/corporate performance.

System and Processes Improvement

During the past few years, PQR Ltd has been making improvements in its systems and processes in different areas, particularly in manufacturing, IT and management accounting systems. Some of the initiatives implemented to improve systems and processes include various improvement initiatives for the manufacturing processes under the Six Sigma program, the migration to the PQR Ltd Integrated Enterprise Resource System (PIERS) as an enterprise resource planning system that better integrates PQR Ltd's operations with its suppliers and customers, as well as the Clinic Procurement System (CPS) to allow for electronic ordering of stocks by all government clinics from PQR Ltd's warehouse.

Management Accounting Systems & Value Engineering (VE)

The use of management accounting techniques such as value engineering resulted in huge cost savings. The value management techniques used during the front end design of the project identified a 22% reduction in the total installed cost for one facility. The concept design amounted to RM108 million, so the savings were substantial.

When PQR Ltd identified its need to build new world-class production facilities to manufacture sterile products, the project team chose to apply Value Management techniques right from the beginning. The Value Management

approach, through its systematic and organized way of developing and comparing alternatives, seeks to maximize the overall performance of the business.

Value management workshops were conducted to ensure the involvement of stakeholders and multi-disciplined users in order to make the project a success. Key business needs, success criteria and value objectives were clearly explained to involved personnel.

PQR Ltd implemented VE at various stages identified as orientation, information, creative, judgment, development, challenges and presentation. VE is a cost-reduction and process-improvement technique that utilizes information collected about a product's design and production process and then examines various attributes of the design and process to identify candidates for improvement efforts. The attributes examined include such characteristics as part diversity and process complexity.

Orientation

The owner's representative briefed the value engineering (VE) team and reviewed all materials related to the project (pre-design reports, cost estimates, etc.)

Information

The design team briefed the VE team on previous construction projects at the site. This allowed the VE team to learn more about the background, and the mission of the project and the functions that had been performed.

Creative

At this stage, the VE team identified possible cost saving methods and improvements to the end product.

Judgment

Next came the evaluation stage, when the VE team evaluated the ideas generated in the creative phase and determined the ideas with the most merits for further development. The criteria were based on inherent value, benefits, technical appropriateness, potential of acceptance by the owner and expected magnitude of potential cost savings or value added by the idea.

Development

Each idea was then expanded into a workable solution for implementation. The development phase consisted of a description of the recommended design, life-

cycle cost comparisons and an evaluation of the advantages and disadvantages of the proposed recommendations.

Challenges

PQR Ltd anticipated challenges in implementing the above development of ideas. Four areas of challenges had been identified by the company: coordination and input of information from various consultants and project team members, who came from diverse backgrounds and expertise; sifting through various alternative options or in some cases creative options to arrive at the same end result/effect at lower costs; getting the consensus of every team member on the final “value” and first exposure for team members to the concept of value engineering

Presentation

Finally, the VE team presented their findings and recommendations, and also submitted a written document to the owner and project design team members/representatives.

PQR Ltd does not sit on its laurels but seems bent to make it a force to be reckoned not only nationally but also internationally and takes great pain to groom its image accordingly.

Image and Perception Management

A company which cares is a company which takes pride in building a reputable image and PQR Ltd adds that extra mileage in incorporating image and perception management into its strategic objectives. Organisational development initiatives are undertaken to create high impact on customers, and hence its image as perceived by customers.

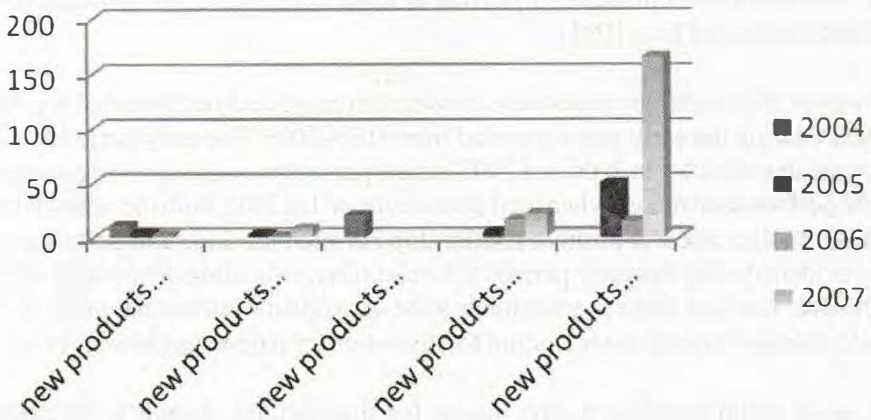
Corporate Branding

In tandem with its image building, PQR Ltd seeks to carve a name for itself in the local and international market through the creation of a Brand Identity – “PQR”. PQR Ltd embarked on their new corporate branding in 2002 and since then this branding has helped them to become more noticeable and more recognizable especially within the local domestic scene and also the international arena especially within the ASEAN region.

Business Strategy

PQR Ltd can be characterized as employing “cost leadership” strategy through its aggressive introduction of new products at competitive prices every year. “We

continue to expand and anchor our presence in the healthcare market by introducing new products. The strategy of introducing new quality products at competitive prices has given us the edge of being leaders in the local pharmaceutical industry”. In 2007, PQR Ltd took a big leap by registering 165 new products overseas as compared to 15 new products registered in the international market the previous year.



Graph 1: New Product Introductions

Leverage and Performance

When total debts increased in 2005 as shown in Table 1, ROCE and ROA also took a dive, confirming Jermias’ (2008) findings that there is a negative relationship between leverage and performance. As total debt to equity continued to spike upwards in 2006, the performance ratios in terms of ROA and ROCE continued to plunge. The pattern of this negatively-correlated relationship can be clearly traced in Graph 1. Interestingly, when the total debt ratios took a dip in 2007, the ROA and ROCE ratios took an upward direction.

Since its listing in 1999, PQR Ltd saw a gradual increase in its total debts and at the same time enjoyed a simultaneous increase in its ROA and ROCE ratios until its migration to the main board in 2003, when its total debt ratios decreased and its ROA and ROCE also decreased. This positively-correlated behavior during this period contradicts Jermias’ (2008) findings.

Both types of leverage-performance relationship can be observed within PQR Ltd. The more recent period of 2004-2007 witnessed a negative relationship between total debts and performance. Table 1 shows how when total debts decreased in 2004, the performance ratio, ROCE showed an increase by 2%;

when total debts increased subsequently in 2005 and 2006, both the performance ratios, ROA and ROCE, decreased. In 2007, when total debts decreased, the performance ratios, ROA and ROCE showed a significant increase. Various reasons have been offered for this kind of behavior. Since a fraction of the earnings will go toward servicing debt payments, this will limit the opportunity for investments, leading to sub-optimal performance (Jensen and Meckling, 1986). Increasing debt financing also leads to a risk aversion behavior among managers and impedes their willingness to invest in riskier and more profitable projects (Balakrishnan and Fox, 1993).

However, this negative relationship between leverage and performance was not evident during the early infancy period from 1999-2003. The early period saw an increase in total debts in 2000 and 2002, accompanied by a corresponding increase in the performance ratios. When total debts decreased in 2003, both the performance ratios also decreased. A positive relationship between leverage and performance was evident during this early period of the company, indicating debts are good for PQR Ltd. The high debts require funds to be set aside for interest payments to be made, thereby leaving lesser amount for discretionary payments (Jensen, 1989).

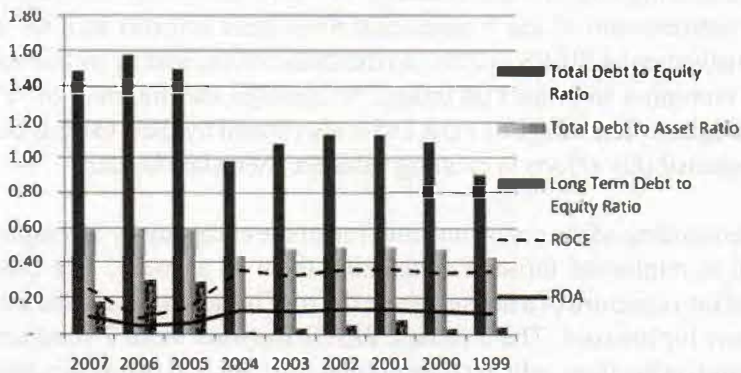
So, what could possibly be the reason for this distinct change in leverage-performance relationship? The results of Jermias' (2008) study indicate that financial leverage does affect firms' performance, although the relationship between the two variables is also affected by other variables such as the firm's business strategy and that the relationship between leverage and performance is more negative for product differentiators than for cost leaders. The apparent positive relationship between leverage and performance during the first period of PQR Ltd contradicts Jermias' (2008) findings on the negative relationship between leverage and performance. The literature has remained unclear whether debt is good or bad. Some empirical studies report a negative relationship between leverage and performance (e.g., Gleason et al., 2000) while others argue that financial leverage has a positive effect on performance (e.g., Jensen, 1989).

PQR Ltd, during its infancy period from 1999-2003, could be adopting more of the cost leadership strategy in its attempt to penetrate the industry. The adoption of the cost leadership strategy resulted in more benefit from the use of leverage in terms of managerial efficiency since it decreased the reserves available for discretionary spending and costs needed to be controlled tightly in order to maintain a reasonable pricing strategy. From the content analysis of the annual reports during this period, there was not much mention of new products affirming that PQR Ltd was adopting a cost leadership strategy. The long term debts increased the agency costs which motivated managers to be more efficient and limited the pursuit of objectives not in shareholders' interests.

The second period 2004-2007 saw a change in PQR Ltd’s leverage-performance relationship which had turned negative. The total number of new products launched and registered locally and internationally registered a dramatic increase especially in 2007, indicating the change in strategy. During this time more competitors had also entered the market, and PQR Ltd needed to increase their innovative capability and enhanced their ability to keep up with their competitors’ innovations. This period heralded the start of product differentiation strategy, whereby the constraints of increased debt likely impeded managers’ creativity and innovation. Product differentiation firms also face high uncertainty, as they place their bets on products that have not yet crystallized, making it undesirable for PQR Ltd to use a greater amount of debt. Additionally, during this period, PQR Ltd also made plans to widen its geographical territory in terms of market and manufacturing plants.

Table 1: Long Term Debt Ratios and Performance Ratios of PQR Ltd

Year	2007	2006	2005	2004	2003	2002	2001	2000	1999
Total Debt to Equity Ratio	1.49	1.58	1.50	0.98	1.08	1.13	1.13	1.09	0.90
Total Debt to Asset Ratio	0.59	0.60	0.59	0.44	0.48	0.49	0.49	0.48	0.43
Long Term Debt to Equity Ratio	0.18	0.30	0.29	0.01	0.03	0.05	0.08	0.03	0.04
ROA	0.10	0.04	0.06	0.13	0.13	0.14	0.14	0.13	0.12
ROCE	0.15	0.04	0.09	0.22	0.20	0.22	0.22	0.21	0.23



Graph 2: Comparison between Leverage and Performance

Conclusion

Each division in PQR Ltd has very clear objectives and action plans to achieve the long term strategic vision of PQR Ltd as a whole. PQR Ltd vigorously pursues

its vision 'to be the preferred brand in healthcare, in the markets we choose to serve' through the involvement of its organizational members in working out action plans and objectives. The participation of organizational members in translating the long term vision and mission into short term objectives enables not only the cascading of strategic vision and mission from the corporate level to the various business units, but also enhances the understanding of the vision and mission of the company by every organisational member. This entails higher service standards and objectives for the various business units as a whole. The vision thus becomes a visible present tenet upheld by every division and member and is not an invisible distant goal somewhere in the future. PEPSI puts it within the firm grasp of every member.

As the acronym goes, PEPSI starts with "P" which stands for productivity of resources. Every division in PQR Ltd clearly understands how this is translated into their action plans. For example, the manufacturing division aims to maximize utilization of the machine, minimize manufacturing down time and maximize throughput but at the same time maintain its quality. The warehouse division encourages its staff to multitask and be flexible to move from one task to another and from one location to another in order to improve its productivity. In terms of expansion and growth "E", PQR Ltd grows not only organically in increasing the number of subsidiaries but also in terms of number of new products. From being a localized company at the offset, PQR Ltd has now extended its boundaries globally. The other "P" emphasizes people, whom the company recognizes as its greatest asset and no expense is spared in training them to become better workers. Its manufacturing and process systems, "S" have grown by leaps and bounds with the introduction of the 5 black belt Six-Sigma projects in 2007 and the operationalisation of PIERS in 2007. In the course of expanding its horizon, PQR Ltd also continues to project its image, "I" through the branding of "P" in its quality products. The image of PQR Ltd is also honed by their various corporate social responsibility efforts in creating value for their stakeholders.

The understanding of the vision and mission of the company by all employees in PQR Ltd is reinforced through visualizing them as a house. The concept is translated into a picture of a house, where the roof is the vision and the mission is the support for the roof. The 5 pillars, PEPSI supports these 2 structures. The pillars stand on the floor, which represents their values and below this floor is the foundation, which represents the various operational objectives and action plans. The vision and mission are translated into comprehensible forms for every level of staff, from the top managers to the factory floor workers, ensuring understandability and consequently the actualization of the vision and mission through PEPSI. It is clear that PQR Ltd enacts a combination of deliberate and emergent strategy embodied in its mission and vision statements to gain significant

competitive advantage over its rivals through the interactive and diagnostic use of both financial and non-financial management accounting.

A greater insight is gained through the analysis of data gathered from the annual reports of PQR Ltd to analyse the impact of its business strategy on the leverage and performance relationship. The analysis interestingly reveals two distinct periods where there is a difference in the leverage and performance relationship as a result of implementing different business strategies at different times.

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