

COSTING AND MARKETING AS A SOURCE OF RIVALRY IN THE ROAD

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ABSTRACT

The focus of this study was to assess why a large South African based road freight company (Carrier X) was now losing market share and what strategic actions it might consider to remedy this. There is a high dependence on road freight transport in the South African economy's supply chain so there is opportunity for road freight companies to profit but there are also continual challenges to being chosen as the freighter of choice by customers. The study was conducted with Carrier X staff and conveniently selected freight industry customers in Gauteng, over a period of 4 months. A total of 18 participants were engaged through one-on-one, qualitative, semi-structured interviews by two researchers, one focusing on Carrier X cost analysis additionally assessing the opportunity for the introduction of ABC costing analysis, the other, on Carrier X marketing opportunities. The findings of the study revealed intense competition exists in the road transport industry in South Africa developed over the past decade. Carrier X had not anticipated and strategically planned to manage this competition. This paper makes recommendations on advantages that could be gained by competing on improved cost management and strategic reviewing marketing options to improve the company's long term sustainability.

1. INTRODUCTION

1.1 Background

The South African economy is known to be transport intensive and a major contributor to gross domestic product (GDP) growth in the country (Havenga, Simpson, King, Viljoen, de Bod, and Braun, 2016). The cost of logistics to GDP has made a constant contribution of around 11 per cent per annum since 2009 (Havenga et al., 2016). Counterpoint to this is rising transport operating costs and low barriers to market entry, which create many challenges for firms competing in transport in South Africa. The multiplication of competition in the industry has led to intensified rivalry, as established logistics companies fight to retain their share. South Africa's economic conditions since 2008 to-date have been challenging for third party logistics firms like the researched firm Carrier X (a pseudonym to maintain the firm's privacy). Carrier X has built long-term and mutually beneficial customer relationships through customised offerings (Cui, Hertz & Su, 2010). Carrier X had been a major freight carrier for many years but has of late seen a marked decrease in its profits. Carrier X specialises in transporting products such as chemicals, steel, fuel, powders, mining, gas, and sugar, as well as offering end to end supply chain solutions. Another service provided is a unique, bespoke software internet technology (IT) platform that enables Carrier X staff and clients to eliminate costly bottlenecks for their customers by actively being involved in customer stock management proactively managing

customer inventory holdings. Traditionally for many years Carrier X has employed a differentiated marketing strategy producing non-standardised transport solutions for customers who have until recently valued differentiated features more than they value low cost (Ireland, Hoskisson & Hitt, 2008; Hill & Jones, 2009). Bolton and Myers (2003) note that firms like Carrier X target customers who are relatively price insensitive, leading to premium pricing. Carrier X's long-term contract-based way of doing business relies on a projected financial return as a costing model per contract. This means that the cost of capital and the required return on investments is computed ahead of any signed contract. While this kind of pricing eliminates dubious returns and uncertainty in the project-customer contract, it eliminates the flexibility of a bespoke per-contract stage, pricing strategy. Carrier X requested the researchers to review their costing structure and their customer offerings (marketing) to establish where leakage of profit was occurring. Researcher question 1 was: What are the sources of competitive advantage by the use of marketed products and services for Carrier X? Researcher question 2 was: Can an activity-based accounting (ABC) costing model provide a competitive advantage for Carrier X?

1.2 Problem statement

There is a need for Carrier X to identify ways to create competitive advantages over similar others for Carrier X's viability. If management does not understand the factors affecting their ability to create competitive advantage, the company is unable to craft strategies to enable it to be sustainable. This study aimed to explore possible sources of competitive advantage for this South African firm.

1.3 Research aim

The research aim was to firstly understand the competitive environment within which Carrier X operates. From this, assessing whether ABC costing could be considered as a basis for Carrier X costing, and, to consider adapting the current marketing strategy.

2. LITERATURE REVIEW

Ireland et al. (2008:6) define competitive advantage as "a strategy executed by a firm that competitors are unable to copy or find too expensive to try to copy". Gareche, Hosseni, and Taheri (2013:2210) refer to a competitive advantage as a "set of factors or capabilities that enable the company to demonstrate better performance compared to competitors". What is clear is that to develop competitive advantage can only be properly exploited once an organisation fully understands its competitors, the external factors, and its internal factors (Wen-Cheng, Chien-Hung & Ying-Chien, 2011). Strategies need to improve production efficiency and increase customer satisfaction. The external environment – which consists of the customer marketing environment and the industry environment – creates pressures and boundaries that determine the effectiveness of any strategies pursued (Ireland et al., 2008). Hooley, Piercy and Nicoulaud (2012) suggest that intense rivalry exists in an industry that has many companies - such as has happened in the SA road transport industry. Indiasy, Mwangi, Mandere, Bichanga, and George (2014:77) define the threat of a new entrant as "the possibility that a new competitor can erode the profits of an established organisation in an industry" and in SA this appears to be happening (Havenga et al., 2016). The extent of the threat of a new entrant depends on the existence of barriers to entry and how existing competitors retaliate (Hooley et al., 2012; Indiasy et al., 2014) and the retaliation opportunities for Carrier X will be key to its survival.

2.1 Customer satisfaction with marketed products and services

Customers are regarded as a firm's most valuable assets playing a vital role in attaining profitability (Angelova & Zekiri, 2011). Hoskisson, Hitt, Ireland, and Harrison (2008) note firms should often engage in value chain analysis reviewing how effectively they are transforming inputs to outputs. This enables managers to look for ways to add value in the transformation creating value that is superior to that of the competitors. Internal transformation processes should involve the continuous evaluation of how well processes work and belong together and should be constantly adjusted and redesigned in response to changing external environment (Nilsson, Olve & Parment, 2011) which is why Carrier X requested the researchers to consider ABC costing and usefulness of their current marketing strategy in the current market environment. Hou (2015) explains the internal process perspective as having three important organisational processes: the operations management process, the customer management process, and the innovation process. Hou (2015) notes that with the operations management process, managers define measures that indicate whether the organisation has achieved operational excellence through improving internal processes such as financial costing. With the customer management process, managers must define measures that capture the creation of customer value in terms of what satisfies customers. With the innovation process, managers define measures from their understanding of their operations and customers (Kaplan & Norton, 1996; Hou, 2015). An innovation/competitive advantage gained through value chain analysis requires the firm to identify different strategies to deliver a unique customer value at a competitive price (Hoskisson et al., 2008). Angelova and Zekiri (2011) suggest that price-discounting and product/service differentiation can be competitive weapons and yet this research shows that Carrier X does not adopt them. Hill and Jones (2009) highlight the danger of customer bargaining power for firms like Carrier X when customers have the power to put considerable pressure on the firm demanding improved quality and/or lower prices. These actions by buyers are said to encourage competitive battles among an industry's firms (Hooley et al., 2012) as is currently underway in the SA industry. If there are low/no switching costs it is easy for competitors to attract buyers through pricing and service offerings (Ehmke, Fulton, Akridge, Erickson, Linton, 2004; Hill & Jones, 2009; Hooley et al., 2012).

2.2 Costing

Financial indicators enable an organisation to manage financial results simultaneously monitoring progress in building the capabilities and assets needed for future growth (Heavey, Halliday, Gilbert & Murphy, 2011; Kang & Fredin, 2012). Carrier X has invested heavily in its IT solutions service which creates high exit barriers for it (Hooley et al., 2012) so Carrier X wishes to maintain the use of these IT services in creating customer solutions. These barriers also keep these firms competing even though they may be earning low returns on their investments. The SA road logistics industry has been ravaged by high-price competitive density – that is, it competes heavily on pricing (Jones & George, 2017) – which requires economic growth beyond the normal turnover in order to maintain competitive strength. Hence there is pressure on road trucking to find internal ways of reducing costs and growing profitability (Bokor & Markovits-Somogyi, 2015). The significant effect that logistics costs have on the cost to the end-user of the transported product underlines the need to enhance effective costing techniques and policies to achieve a lower impact on the price-sensitive market that the logistics industry occupies (Chien-Lung & Chun-Hao, 2014). Havenga and Simpson (2018) reveal that customers of the transport industry in SA are highly price-sensitive looking to change their transport providers based on better pricing for their transport needs. Efficient costing focuses on the

use of activity-based costing (ABC) (Hicks, 1999; Lin, et al., 2007). Every ABC model for a firm is built by using variables that are known as “bricks of costing” (Hicks, 1999:162). These ‘bricks of costing’ variables are the data information nuggets needed to derive the final overall cost of an activity. Baykasoğlu and Kaplanoğlu (2008) and, Blowfield and Dolan (2014) criticise traditional accounting systems used by many firms as there is no effort to have cost linked to individual activity. In contrast, ABC methodology is “critical to the measurement of cost and performance of an activity, its resources and cost of each action, assignment of resources to activities and activities to the cost objective based on their use, and recognises the causal relationship of cost drivers to activities” (American Institute of Management Accounting, 2014). Cost distortion by not allocating costs to individual items but rather dividing a total cost by the number of components (traditional accounting), often leads to inappropriate operational efficiency decisions being made, based on data that shows the overall cost of aggregated activities, but does not manage the individual activities that make up the whole (Bokor & Markovits-Somogyi, 2015). It is important to understand an efficiently-mapped road model for daily application in planning Carrier X transport routes. ABC has a real role to play to cost cause-and-effect through the allocation of indirect costs per length of road route because of the ability to trace each cost driver per kilometre (Els, 2014). In transport logistics, this technique of route mapping costing develops a more efficient supply chain model (Nenni, 2013).

3. METHODOLOGY

Two data collection methods were used. Two researchers were responsible for data collection analysing results to give co-joined managerial recommendations. Semi-structured qualitative interviews were carried out by researchers’ 1 and 2 with individual participants. Semi-structured interviews allowed the opportunity to clarify participant responses (Aaker, Kumar, Day, & Leone, 2012). A document review was undertaken by researcher 2 to establish if it would be feasible to adopt ABC costing. Ethical considerations were taken into account at each stage of the research design, data collection, data processing, analysis, and reporting (Malhotra, 2010). The researchers informed all of the participants ahead of time that data would be collected from them through an interview. Participants were given the choice to participate or not in the study. A limitation of the study was that it sought to understand competitive rivalry in the logistics industry only for Carrier X.

3.1 Data collection

An interview procedural guide was developed to direct the interview processes as suggested by Jacob and Furgerson (2012). All interview questions were open-ended in order to elicit responses that provided insight to Carrier X’s problem (Saunders, Lewis & Thornhill, 2016). The researchers made use of judgment (Aaker et al., 2012; Saunders et al., 2016) when selecting customers or individuals employed at Carrier X, to interview. Each type of participant could provide first-hand experience of the levels of competition in the industry, unique strategies being adopted by competitors and, perspectives on why Carrier X was losing market share. Contact with participants was made by email, with follow-up phone calls to arrange an interview. Researcher 1 approached 10 procurement officers for Carrier X customers for interviews and the following seven accepted: four car manufacturers; one pharmaceutical company; one civil engineering company; and one mining company. The selected customers are located in Gauteng the economic hub of South Africa. The diversity of these interviewee industries provided the researchers with a broad scope for understanding customer needs. Researcher 1 also interviewed four Carrier X senior staff: the Marketing Director; two Divisional Directors (Sales); and the

Human Resource Director. By interviewing Carrier X Information Technology (IT) Director and Chief Financial Officer, researcher 2 was able to probe the differentiation costing currently adopted by Carrier X from the perspective of internal staff in so doing reviewing the current internal costing methods. Researcher 2 also reviewed Carrier X's IT maintenance logs, internal budget and financial reports to review how fixed costs are recouped, and how the various departments of the firm raised revenue from each other. For example, how IT charges finance for internal IT services rendered to assess the feasibility of implementing the ABC costing model. Qualitative research is deemed trustworthy if four criteria are met: credibility, transferability, dependability, and conformability (Babbie & Mouton, 2012). To ensure credibility, the researcher must evaluate whether or not the research findings represent a credible conceptual interpretation of the data gathered from the participants' original data. To ensure the validity of this study, the justification for the selected interviewees is that they are users of road logistics services. All employees selected at Carrier X and industry customers came highly recommended by gatekeepers (senior Carrier X staff who decided who the researchers could approach) at their companies. By providing a detailed account of the context of the research undertaken, the researcher can enhance transferability. Both researchers had the responsibility to provide a comprehensive account of their research. A research study is said to be dependable if the research design has sufficient detail to allow another researcher to use it as a blueprint and apply it within the same context to the same participants, and to yield similar results. To ensure dependability for this study, the processes within the study were reported by each researcher in order to enable a future researcher to replicate the work. Conformability measures the extent to which a study's findings are supported by the data collected. In order to increase the reliability of the findings, both researchers used the following procedures: The interviews were recorded on a voice recorder and in the form of notes.

3.2 Data analysis

Both researchers used thematic content analysis to identify, analyse, and describe patterns across the interview data set (Jacob & Furgerson, 2012).

3.2.1 Thematic analysis

The steps provided by Jacob and Furgerson (2012) were used by both researchers in this study on the data collected from the interviews:

- *Familiarise oneself with the data:* All the interviews were recorded then transcribed verbatim to Word™ documents by each of the two researchers;
- *Generation of initial codes:* Ideas that were relevant to the research were systematically captured from the primary data;
- *Search for themes:* literature themes were matched to the interview data. Themes (customer satisfaction; costing) were developed by collating different codes under the identified themes;
- *Review of themes:* The themes were checked to ensure that they were relevant to the research questions. This process was time-consuming, as it was repeated several times to ensure that the most relevant themes were identified;
- *Definition of themes:* All interview transcripts were read and re-read so that the specifics of each were understood in terms of themes;
- *Producing the report:* Each researcher contributed to managerial recommendations.

3.2.2 Document analysis

The costing analysis used by researcher 2 also adopted thematic analysis by reviewing historic data from the IT requests logging system: Hours that each technician spent on closed cases (hours multiplied by closed cases for the specific technician); How much each closed case costs the company for personnel (total case time multiplied by cost to company for the specific technician(s) committed to the problem); The frequency of closed to open cases per technician; Breakdown of the categories, to view how much time is spent on each category e.g., sum all closed applications divided by total time of all cases. This was for all technicians as one combined figure. This gave the researcher insight to the competency for carrier X to implement ABC costing widely across the company.

4. FINDINGS

Carrier X employees agreed that the firm had taken too long to respond to market changes because they had always served such a specialised market where they had few competitors. All interviewees indicated that competitive rivalry had intensified in the previous two years, compared with the preceding years. Participants noted that the industry was open to small players (individuals who own one or two trucks), affirming the growth in the industry (Havenga and Simpson, 2018). In their view lower barriers to entry were now significant but through its size and experience in the industry, Carrier X should have had an advantage but did not seem to leverage it. Participants pointed out that the economic down turn had led to aggressive acquisitions amongst smaller logistic firms to gain more market share leaving larger firms like Carrier X to 'fight it out' against each other on larger contracts.

- *Theme customer satisfaction:* Customers agreed that Carrier X customers operate in very specialised industries and Carrier X has traditionally created very specific logistics solutions for them. Carrier X staff felt that this specialisation by Carrier X to support these customers, has caused it recently to miss out on some other easier market opportunities such as acquisitions that would have gained new customers. Carrier X was considered complacent by some interviewees. Customers had less money to spend on transport but Carrier X had invested in expensive software to support customer requirements and so was unwilling to change customer market products/services. Customers were now putting pressure on Carrier X to reduce prices.
- *Theme costing:* Although Carrier X uses contractual agreements with customers, the terms are now dictated to them by the customer. Hill and Jones (2009) noted that bargaining power lies with customers if they are able to put pressure because of the market giving them enhanced bargaining power. Carrier X could not lower its prices any further and customers were paying a fee to terminate existing contracts to take advantage of cheaper offerings. This price sensitivity in the cost of transportation has direct implications for final product pricing (Hsu & Chiang, 2014). The customer will seek alternative forms of transport at a lower price, protecting their end-product's competitiveness. Carrier X interviewees noted that the firm had no substantive measure of the efficiency of internal shared services. This supports Cooper and Kaplan (1988) that cost drivers per activity need to be known but most firms do not know them. There is no costing of input resources per trip by Carrier X (i.e., the vehicle drivers, fuel, tyres, portion of branch overheads, etc.). The IT department are implementing a type of ABC costing system but up to the point of this research, did not recognise its value as an assessment measure for both costing and efficiency, using it only to prioritise work load.

5. CONCLUSION AND RECOMMENDATIONS

The first conclusion in answer to question 1 is that Carrier X must explore how to offer very specialized software and transport at prices that attract a wider variety of customers. Currently customer bespoke solutions require Carrier X to have high overheads while one-truck companies have limited overheads competing on drastically reduced pricing. As regards research question 2, ABC accounting can provide competitive advantages provided the managerial climate of internal implementation is conducive. As Charles and Hansen (2008) concluded, ABC functions as a performance measure for both individuals and the company as a whole. This supports the concerns of Bangalee and Suleman (2015), Hsu and Chiang (2014), and Bokor and Markovits-Somogyi (2015) who note knowledge of ABC is not widespread, with users deterred by the difficulty of using it. It was recommended that Carrier X improve their costing model by introducing ABC costing to distribute the value of internal specialised IT services across Carrier X departments. Additionally, Carrier X was not found to be calculating their projected profit per contract accurately and restructuring this could help with ensuring expected returns per contract. A further recommendation was that Carrier X co-create service with their customers as customers can provide valuable insight that could lead to the development of new applications of existing resources with new efficiencies. These recommendations use existing Carrier X competencies attempting to extend the value they create to combat industry competition.

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