

MALAYSIAN ACCOUNTING REVIEW

Contents

The Accounting World Post-Enron, Tyco, Vivendi, Worldcom, Xerox...:
Reflections On Being Part Of The Solution

Do External Auditors Perform A Corporate Governance Role
In Emerging Markets? Evidence From East Asia

The Relevance Of Value Chain Analysis For SMEs:
A Case Study

Directors' Remuneration And Firm Performance: Malaysian Evidence

Quality Of Worklife And Organizational Commitment Among
Malaysian Public And Government Accountants

Using The Hofstede-gray Framework To Argue Normatively For
An Extension Of Islamic Corporate Reports

Value-Relevance Of Accounting Numbers:
An Empirical Investigation Of Purchased Goodwill

Materiality Judgments On Audit Opinions

Early Adoption Of MASB 22 (Segment Reporting)
By Malaysian Listed Companies

Utilizing A Structured Case Method In Financial Accounting
Within A Problem-based Learning Framework



UNIVERSITI TEKNOLOGI MARA

INFOREC



MALAYSIAN INSTITUTE
OF ACCOUNTANTS

C O N T E N T S

- 2** The Accounting World Post-Enron, Tyco, Vivendi, Worldcom, Xerox...: Reflections On Being Part Of The Solution
Shahrokh M. Saudagaran
- 13** Do External Auditors Perform A Corporate Governance Role In Emerging Markets? Evidence From East Asia
Joseph P. H. Fan and T.J. Wong
- 46** The Relevance Of Value Chain Analysis For SMEs: A Case Study
Sakthi Mahenthiran and Fatimah Bujang
- 57** Directors' Remuneration And Firm Performance: Malaysian Evidence
Salleh Hassan, Theo Christopher and Robert Evans
- 68** Quality Of Worklife And Organizational Commitment Among Malaysian Public And Government Accountants
Mustafa Mohd Hanefah, Ali Yusob Md Zain, Razali MAT Zain and Hamzah Ismail
- 81** Using The Hofstede-Gray Framework To Argue Normatively For An Extension Of Islamic Corporate Reports
Maliah bt. Sulaiman and Roger Willett
- 106** Value-Relevance Of Accounting Numbers: An Empirical Investigation Of Purchased Goodwill
Muhd Kamil Ibrahim, Marzita Mohd Said, Radziah Abd Latif and Zaleha Abd Shukur
- 124** Materiality Judgments On Audit Opinions
Takiah Mohd. Iskandar
- 139** Early Adoption Of MASB 22 (Segment Reporting) By Malaysian Listed Companies
Wan Nordin Wan-Hussin, Noriah Che-Adam, Nor Asma Lode and Hasnah Kamardin
- 153** Utilizing A Structured Case Method In Financial Accounting Within A Problem-based Learning Framework
Jeffrey Faux

THE RELEVANCE OF VALUE CHAIN ANALYSIS FOR SMEs: A CASE STUDY

Sakthi Mahenthiran
Butler University, USA

and

Fatimah Bujang
Universiti Teknologi MARA, Malaysia

Abstract

This is a case study undertaken to highlight the importance of undertaking value chain analysis for small and medium sized enterprises in Malaysia. The study uses Porter's (1985) five-force analysis and Riley's (1987) cost driver analysis to highlight the value of reconfiguring the existing value chain of the furniture industry. Major contribution of this study is to highlight the role government subsidies have played in fragmenting this industry and shaping the existing value chain. Additionally, the study speculates as to the reasons why management accounting practices such as activity based cost management are wrongly perceived as being not relevant by the small family owned company that is investigated in this study. Study also highlights some of the weaknesses such as the lack of professional management skills in Small and Medium Enterprises (SMEs) to reconfigure the value chain and improve their profitability.

INTRODUCTION

Presently the small and medium sized enterprises in Malaysia are facing challenging times. The country is going to be joining the Asean Free Trade Area in 2005 and it is a member of the WTO, all of which are going to accelerate global competition. Additionally, the Malaysian government has indicated its wish to begin withdrawing the subsidies it has provided over the last two decades for SMEs owned by Bumiputra owners. It is not clear whether these Bumiputra owned SMEs are ready for these changes and if not why not? This study is an attempt to use value chain analysis to explore the issues in a small furniture manufacturing company that is Bumiputra owned and operated. The study constructs a value chain for the furniture industry and a profitability table that shows the gross margins of each player in the value chain. The analysis section uses Porter's (1985) five-force analysis to elaborate on the findings from the figure and the table. The discussion and conclusion section summarizes the findings using cost driver analysis suggested by Riley (1987).

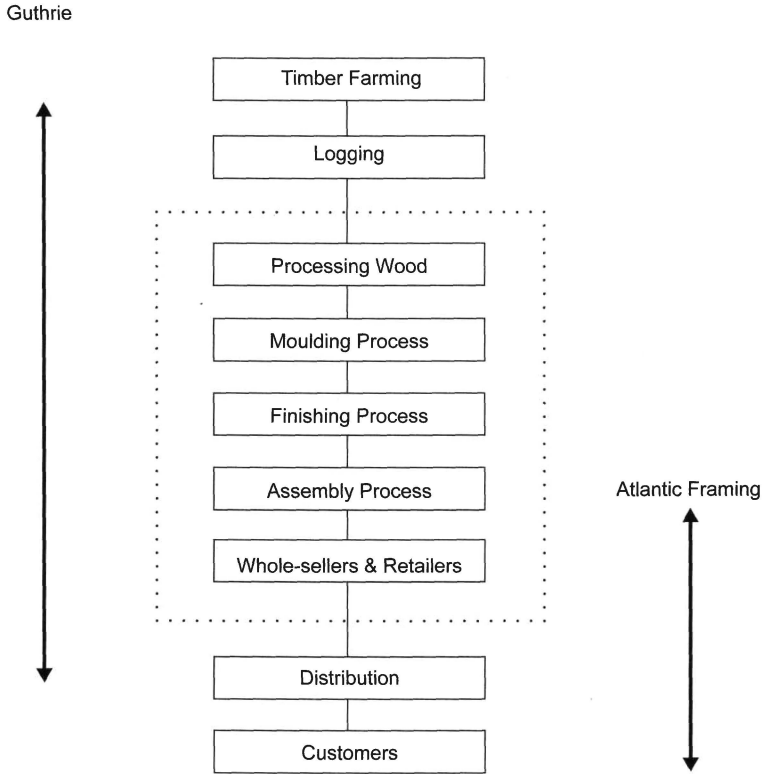
The findings reveal that SMEs may not be prepared to address the changes brought on by global free trade because they have failed to strengthen their existing positions in the value chain. One of the reasons for it is the lack of understanding of value of cost management to improve their current operations and how that in turn can provide them with a competitive advantage. The study also highlights the complex nature of the relations between these companies' strategies and their dependents on government subsidies, which has exacerbated their failure to be prepared to face the changes. The study also shows how the SMEs can reconfigure the existing value chain by directly selling to the consumers so that the role played by agents in generating sales can be reduced. Finally, the study concludes by highlighting the need for good professional management in these companies and the need for research to explore these issues affecting SMEs. These findings have implications for shaping accounting and government policies that are supposed to help Bumiputra owned companies face a more open Malaysian economy.

CONSTRUCTING THE VALUE CHAIN

In this section we construct the value chain of two companies, one for Company F (disguised) that is the subject of this study, and another for Company G (disguised) that is an archival of it. Both these companies are engaged in same parts of the value chain that is shown in Figure 1 in the dash-lined box. However, these companies emphasize different product lines and focus on different segments of the market. Furthermore, because we did not have many details of Company G's costs we assumed that it is comparable to that of Company F. In the discussion section we explore how the differences in the market served by these two companies could affect their profitability and consequently the strategies they pursue.

For comparison purpose we contrast these SMEs value chain with two other public companies: one a Malaysian company by the name of Guthrie Bhd., and another US company by the name of Atlantic Framing. Guthrie is the industry and technological leader in Malaysia, and as shown in figure 1 it operates in most parts of the value chain. In this industry Guthrie has a dominant position in timber farming and logging, and Atlantic Framing dominates in the other end of the value chain. Atlantic Framing is large buyer of furniture from Malaysia for export to other countries including the US. It has agents in Malaysia that negotiate with the local SMEs for large consolidated orders from a position of strength because of the higher prices offered compared to local customers.

FIGURE 1
Value Chain of the Furniture Industry



Production Analysis

The nature of the production technology used is suited for a light manufacturing industry, and it is typical for a furniture manufacturing company. At Company F, there are 24 machinery items that have been obtained from Taiwan, Japan, and Germany and the average machinery is around 10 years old. Currently, company F only operates an 8-hour shift per day; thus, only around quarter to a third of its production capacity is being utilized.

Processing Wood

In Company F, the main raw material used is the timber wood that is known locally as “meranti,” which has the characteristics of rose wood. Additionally, plywood, shed-back, wood glue, nail, screws, sand paper and other related sundry items are used as raw materials. The wood required is sourced locally, stored in warehouses and dried in specific installation to meet production specifications of particular buyers. Often before being moulded (cut to size) into furniture parts, depending on the type of product the timber is placed in drying chambers to assure natural dry down to a certain humidity level such as 25%-35% humidity.

Moulding Process

Moulding involves planning the thickness of the piece and or four-sided moulding of the properly processed wood. This process often requires boring, mortising, toning, and routing the processed wood so that custom pieces can be cut to make the ordered furniture.

Finishing (Polishing) Process

Once the required furniture parts are processed and cut initial polishing with sand paper follows. After polishing they are covered with a primer and lacquering is done. Furniture parts for the export market are lacquered with three layers while domestic furniture parts are lacquered only twice. The next step is to have the lacquered furniture dried and then move it to the assembly area of the plant.

Assembling Process

Since all products are made to order the assembly is a custom process of making them to pre-specified shapes and structures as required in each individual contract.

Marketing Analysis

In the past sales were obtained from third party agents who represented the large local and overseas buyers. Agents mostly provided the furniture design or the concept of what type of furniture their customers wanted from Company F. The production manager is able to help buyers who do not know the exact design specification required to make a piece of furniture. At Company F, this currently is a manual activity.

Before the September 11 (9/11) incidences in New York, in addition to supplying furniture to the local market it also had supplied futon, bunk beds, and dressers to the export markets, mainly to the US. However, after 9/11 agents representing the US market have stopped buying from Company F, and most of the manufacturing has been for the local market. In the local market agents represent the Malaysian government tend to buy low margin items such as tables and chairs for government departments such as the Education Department. For the analysis below standard products include tables and chairs and custom products include bunk bed and futons.

ANALYSIS

Profitability Analysis

Company F does not keep good records of costs by different production processes in the plant hence; we could only obtain the total production costs by product line by going over the jobs costs of each contract. Furthermore, for Company F it does not make sense to breakdown the value chain by the different production processes because it makes custom products. The individual unfinished items at different stages of completion will not have a ready market, and without a market for their intermediate products it is not very meaningful to breakdown the profit margins by the individual production processes along the value chain. Thus, determining the profitability of all four parts of the production processes from processing

wood to assembling the finish products together is adequate for our analysis of Company F’s position in the value chain. To obtain the cost and profitability for the parts of the value chain that Company F does not take part in we used the 2001 annual report of the local public company - Guthrie Bhd. This annual report helped us estimate the profitability of Guthrie’s subsidiaries in timber farming and logging segments of its operations. Essentially timber farming and logging involves the timber-based companies buying the rights to log or extract timber in either virgin or secondary forests from the state governments. To obtain the profitability of the direct store sales to customers by product lines and the commission to the agents paid by the stores we interviewed the owner of a local furniture sales company in Sarawak. Neither Company F nor the furniture sales company interviewed gave us permission to disclose anything more than the summary profitability numbers that are shown in table 1.

**Table 1:
Actual Gross Margins of Company F and Estimated Gross Margins for
Value Chain Parts in which it does not operate**

	Custom Furniture	Standard Furniture
Customer - Store Sales	50%	40%
Distribution	20%	20%
Agents - Whole. & Retailers	10%	10%
Processing to Assembling	10%	20%
Logging & Timber Farming	10%	10%

The analysis follows Porter’s (1985) five forces analysis, which argues that the nature of competition in an industry hinges on five factors: the threat of new entrants, bargaining power of the buyers, bargaining power of the suppliers, threat of substitute products, and the positioning of current competitors within the value chain. To begin a small furniture manufacturing company the initial investments required would be in the range of RM 100,000. In Sarawak, the raw materials are easily accessed and the production technology is fairly basic in nature. For example, for the production of futons and sofas the upholstery can be attached using hand tools, which are used to cut the fabric, bind springs, stretch the fabric, and staple the material to the wood frame. Company F however has purchased machinery to accomplish this upholstery fitting process at a cost of around RM250,000, which probably assures the buyers of greater quality than a manually made piece of comparable furniture. Unfortunately, the amount of the investments required or the quality difference attained using this light manufacturing technology does not provide an overwhelming barrier for new entrants to enter this business. This low barrier to entry combined with government subsidies such as low interest loans for Malay business has resulted in a fragmented industry with many small furniture-manufacturing firms. Additionally, because of the advantages of being in close proximity to the raw material sources these firms are located within a hundred mile radius of Kuching that is the capital city of Sarawak.

The small furniture manufacturers in the Kuching area have relied on agents from the Malaysian capital city of Kuala Lumpur for most of their large orders to the government or to exporters. These agents whom are paid by the buyers are more loyal to the whole sellers and buyers representing the furniture sales companies and governments respectively than to the manufacturers in Sarawak. Consequently, after the September 11th incidence buyers

representing companies like Atlantic Framing of US significantly reduced the number of manufacturers from whom it bought furniture in Malaysia. As a result most of the small producers sales were reduced by as much as thirty-percent to one hundred percent. Atlantic Framing was partly forced to buy only from large manufacturers due to the more stringent shipping regulation imposed by the US government that increased the distribution cost of small orders. Additionally, it's believed by Malaysian companies that US buyers are now biased against buying furniture from Muslim countries. Therefore, these factors along with sheer size of the orders give a tremendous bargaining power to the local agents who drive a hard bargain that adversely affects the profitability of the small local manufacturers. On the other hand, the suppliers of timber to the manufacturers do not have a great deal of bargaining power. The suppliers have to rely on the manufacturers for their timber sales, and unprocessed wood can go bad faster than processed wood. Guthrie is one of the largest suppliers and it tends to use most of the timber it farms, and sells only a small portion of its timber production to outsiders. This may be because Guthrie finds it more advantages to use its timber in-house than sell to the outside market, keeping most of the profits from both farming timber and making the finished products. As shown in Table 1, Guthrie is able to increase its margin four fold from 10% to 40% for making custom furniture products and three fold from 20% to 60% for making standard furniture products by partaking in timber farming to obtaining its own orders and distributing them to customers directly. The only part of the value chain it does not take part in is in retailing to customers. Compared to Company F or Company G only being able to make 10% or the 20% gross margin from manufacturing custom or the standard furniture items respectively. Because of their low profit margins the manufacturers have begun to weed out those suppliers who cannot meet their demands, particularly when it comes to meeting the stringent delivery dates demanded by agents. Therefore, in this value chain the plight of those who log timber in small scale is worse than any other players.

This paragraph addresses the threat of substitutes and the competition between current manufacturers such as Companies F and G in this industry. The threats of substitutes come from two sources: one threat is the variety of choices available to consumers and the other is the threat from the environmental movement that wants to protect forests. For example the owner at the furniture sales store we interviewed noted that customers who come to his store can chose from 350 different combinations of frames and upholstered chairs in all combinations of fabric, skirts, pillows, and springs. When this range of choices is multiplied by the number of different types of furniture (e.g., plastic, steel) and the furniture stores in a given location it is believed that customers can be offered millions of possible combinations for a product they want to purchase. As a result the choices available to customers within this industry are vast. The second threat comes from the fact wood furniture unlike other types of furniture is perceived by customers as causing forests to be plundered by the wood furniture manufacturing industry. However, the longstanding policy is that in virgin forests companies can only cut marked (mostly rubber) trees, and unmarked trees cannot be cut. Regardless, because of their perceptions customers tend to buy less and less of wood furniture and more of plastic furniture, believing that it will help the cause of preserving pristine environments. These threats from substitutes coupled with the fact that this industry is dependent on the level of disposable income of their customers makes long-term survival in this industry by small manufactures without reconfiguring the value chain very difficult.

Finally, there is intense competition among the small manufacturers whom make very comparable products and are located in close proximity to each other. So much so that price

wars, intense proliferation of new makes and models, and advertising slugs offering cheap financing and discounts all erode the profitability of these SMEs. It does not help that these SMEs are family owned because business rivalry is only made intense because of their family rivalry. Therefore, except for the manufacturers relative power over suppliers of timber all the other forces suggested by Porter (1985) are so serious a threat to their survival in their current form that the authors believe that of the two broad recommendations below the one to reconfigure the value chain as it is currently depicted in Figure 1 is the most promising.

RECOMMENDATIONS

Strengthening a Company's Existing Position in the Value Chain

Based on traditional cost analysis one would conclude that for Company F to survive has to manage its costs by carefully looking at ways to reduce them. A deeper analysis for the causes of the high production costs identified the plant overhead costs as the one that needs to be reduced. Following Cooper and Kaplan (1990), recommendations for managing overhead costs we undertook a basic activity based cost (ABC) analysis and found the root cause of the overhead cost burden as being the substantial unused production capacity. Hence, following Cooper and Kaplan, the recommendation would be not to charge the cost of unused capacity to the currently manufactured products to avoid the problem known as the "death-spiral." Essentially this means that when a company allocates increasing overhead costs to a decreasing sales volume, this results in increasing overhead burden rates and the prices have to be increased to cover the increasing costs. Increasing prices to cover overhead costs will result in further decreases in sales, and this cycle continues until the company prices itself out of the market and can no longer generate sufficient sales to be in business. A closer analysis of the reason for the unused capacity revealed that the company had build its production facilities so that it can bid on multi-million dollar orders from large customers such as the Malaysian government. Furthermore, as a Bumiputra company it was eligible for grants that were directly proportional to the size of the plant it built. Hence, larger the plant bigger the subsidiary (e.g., subsidized loans) it obtained from the government. For these reasons the family owners were of the opinion that the existing orders had to recover the costs of both used and unused capacity. Therefore, the efforts to implement ABC were abandoned because the company felt that it was a price taker in the market with little or no influence over price. It is believed that this will continue to be the case as long as SMEs rely on the agents for their large orders.

The problems facing Company F was more financial than product costing. The subsidized loans it had taken meant that in the last three years it had only to repay a 5% interest, but beginning in 2003 it has to start repaying both the capital and interest. Meeting this increased obligation has been made difficult because of the loss of sales, particularly; the profitable exports sales to the US. Hence, company F only has two options to survive it can either obtain additional loans preferably those that are subsidized by the government or it had to find ways to significantly increase sales immediately so that it can improve its capacity utilization. The recommendations to obtaining more loans for a SME that is already highly leveraged would not be wise. However, this option is made tempting to bumiputra businesses owners by the government policy requiring government banks to provide low interest rate loans to such companies. Consequently, the SME's tend not to embrace significant efforts to improve efficiency by managing costs, instead choosing to pursue avenues to obtain more subsidized government loans.

Strengthening a Company's Links in the Value Chain

Closely held family businesses that are in financial difficulty are not likely to be acquired by larger public companies nor are they likely to consolidate with their competitors whom are occupying the same parts of the value chain. For example, the rivalry between Company F and Company G is such that any suggestion to even share their resources and facilities so that cost can be lowered would not be entertained by either of them. Therefore, the rational recommendation is for Company F is to get closer to its final customers by reducing its dependence on agents. Going from selling to agents who represent whole sellers to directly selling to customers is a major challenge for any company more so for a small company that lacks marketing talent. Previously there were no middle level managers in Company F, the owner handled all the sales and purchasing and the family members did the rest from production management to managing the finances mostly on a part-time basis. To begin to reconfigure the value chain by relying on self-generated sales has resulted in the need to create a marketing middle management team that can liaison with the government contractors and overseas buyers. This internal change while costly has resulted in Company F being successful in bidding for a large multi-million ringgit government contract to make tables and chairs for the Education Department. The need to execute this contract successfully while overcoming its woes has led to this company to appreciate the need for professionals to put its house in order. These changes are in line with what transaction cost economics would have hypothesized, which states that as the cost of carrying out transactions via market mechanisms such as agents increases those operations will be bought in side a company so that transactions costs can be reduced and profits can be improved (Williamson, 1979). Therefore, this move to get closer to the customer should improve the profitability of Company F bringing it an additional 10% increase in profits that was previously earned by agents who had no loyalty to it.

The costs of managing the distribution and logistics of getting the finish products to the final customer in a timely manner are an additional challenge for Company F. Having an additional layer of middle managers may not be an adequate solution because of the poor transportation infrastructure between Sarawak and other parts of the world. In a country like US that has good infrastructure for sea and air transportations and companies like Federal Express, outsourcing this process of the value chain is an option that is not available to the SMEs in a non-developed country. However, for Company F obtaining this new contract from the government has put it in a better position now to obtain additional government subsidized loans and focus on profitably completing the contract. It should realize that government orders could be a "double-edged sword." For example, it has to realize the drawbacks of going directly to customer like the government, which is that it has now committed its capacity to make standard products in large volume. Consequently, it has lost the flexibility of choosing custom jobs with higher margins and supplying to private buyers. The pros and cons of this product mix choice would be discussed below.

DISCUSSION AND CONCLUSION

Company G unlike Company F seems to have been successful in continuing to obtain overseas orders from agents. Based on the profitability analysis shown in table 1 one would question whether it is wise for Company F to obtain orders for their custom product lines. Based on the efforts it takes to obtain custom orders and to manufacture them to specifications

one would at least expect an equal profit as those obtained from a standard product line. Based on Company F profitability numbers in table 1 this seems not to be the case, standard furniture seems to be making twice as much profit than custom furniture (20% vs. 10%). This anomaly may be because of the fact that Company G's cost and profitability statistics are different from that of Company F. If Company G has had better capacity utilization statistics than Company F it probably does a better job managing its fixed production costs. Anecdotally it is believed that Company G's production-manufacturing technology is newer and better, and it has good relations with agents than Company F. Therefore, if Company F chooses to compete in the custom product line segment and rely less on government contracts, which is likely to be a less reliable source for new business in the future, it is going to have to take serious steps to manage its costs. Further, even in the short-term it is unlikely that the government would continue to provide preferential treatment to inefficient manufacturers. Therefore, SMEs and Company F in particular have to realize that no company can survive without continually strengthening its current position it occupies in the value chain.

Riley (1987) has provided a list of cost drivers a company can use to strengthen its competitive advantage by either providing "equivalent customer value for a lower cost" (i.e., a lower cost strategy) or by "providing better customer value for equivalent costs" (i.e., a differentiation strategy). Following Riley, the cost drivers are broken into two groups: (1) structural cost drivers; and (2) executional cost drivers. Briefly, the structural cost drivers include scale economies that affect the size of a company's operation, the scope of a company's operations, which in turn is affected by the degree to which a company is vertically integrated, experience in executing its operations, the process technologies used in each step of the value chain, and the complexity of a company's operation that is affected by the number of product lines it offered. If these structural cost drivers are used to evaluate the three Malaysian companies in our value chain it is self-evident why Guthrie is the industry leader. It is the most vertically integrated company that is able to capitalize on its scale and scope economies that is generated by being in most parts of the value chain. The SMEs, those are companies F and G are burdened by the complexities of offering vast array of products to their customers, and their limited experiences. Further, without the advantages that accrue from scale and scope of operations these two companies are likely going to be struggling for their survival without government assistance.

The executional cost drivers list offered by Riley's (1987) provides hope for Company F's survival. These drivers include: work force commitment, beliefs and achievements of the company with regard to product quality, extent of capacity utilization, and exploiting linkages with suppliers and customers. As elaborated in the analysis section, Company F has taken steps to strengthen its linkages with its suppliers and customers by getting closer to them. Consequently, it has understood the need for an empowered professional middle management that is committed to helping it increase its sales and execute the orders profitably by directly selling to customers. Reconfiguring the value chain so that it need not rely on agents is the cost advantage it can gain for the expenses involved in creating a layer of middle managers in the company.

Value chain analysis probably can have a lot of value to SMEs to improve their position in an industry. It can for example vividly illustrate why these companies seem to have to rely on government subsidies for their long-term survival. An interesting proposition would be to investigate whether those SMEs that have professionals middle level managers have better

performance than those who do not? Findings from such an investigation can have policy implications for both the relevance of management accounting for SMEs and the government regulations that are intended to help them face the challenges in an open economy. This study has highlighted that there are strong structural reasons why management accounting is not practiced seriously in SMEs and why certain classes of SMEs are more likely to fail without government subsidies than others. These important issues can only be investigated by undertaking a more comprehensive study of the value chains in different industries that have benefited in the past from a variety of different government subsidies.

Careful consideration has to be given in making any sweeping conclusions from this very limited study of one company located in one part of the country, and operated by a Malay business owner. It may be a problem that is heightened because of the concentration of many small furniture manufacturers whom are in close proximity to one another. Regardless, of who owns an SME it may not be a problem with companies that are well managed professionally. However, we believe that answers to such basic questions would be an invaluable first step in helping SMEs. What types of managers marketing vs. accounting/finance managers are more important to which industries and why? . These and other broader questions can probably be better answered by undertaking value chain analysis of different industries in a very systematic fashion.

REFERENCES

Cooper W and Kaplan R (1990), "Cost Classification in Unit-Based and Activity-Based Manufacturing Systems", *Journal of Cost Management*, (Fall).

Porter, M. E (1985),. *Competitive Advantage: Creating and Sustaining Superior Performance*, New York: Free Press

Riley R (1987), *Note on Value Chain Analysis in Cases in Shank J, Cost Management – A Strategic Emphasis*, South-Western College Publishing, Ohio: Cincinnati.

Williamson O. E, (1979), "Transaction Cost Economics: The Governance of Transactional Relations", *Journal of Law and Economics*, 22:3-61.