ADAPTING BUYER-SUPPLIER RELATIONSHIP PRACTICES IN THE LOCAL INDUSTRY

Latifah Che Amad¹, Abu Bakar Abdul Hamid¹, Norzafir Md Salleh¹ and Chong Siong Choy² ¹Faculty of Management and Human Resource Development Universiti Teknologi Malaysia, Skudai, Johor, Malaysia ²Putra International College, Melaka, Malaysia e-mail: ¹latifah321@yahoo.com, ¹zafir@utm.my, ²scchong@iputra.edu.my

ABSTRACT

This study examines the types and extent of supplier development activities undertaken by an identified manufacturing firm, along with the importance of supplier development goals. Data was collected through a cross-sectional survey of 26 respondents, consisting of officers, engineers, managers and senior managers from various sections within the buying firm's organisation. The analysis is based primarily on descriptive statistics. The results reveal that the supplier-specific factors are more prominent predictors of the outcomes of the supplier development efforts as compared to the other factors. The manufacturer's focus on the supplier development programme appears to be a short-term, results-oriented approach involving limited or no significant efforts on the side of the buying firm. There is evidence indicating that the manufacturer has not fully utilised the expertise of its suppliers in designing its products, since there is lack of supplier involvement in the early stages of the design and development activities. The overall results point to numerous deficiencies in the supplier development programme. Practical implications are provided in light of the findings.

Keywords: supplier development programme, descriptive analysis, manufacturing firm, Malaysia

INTRODUCTION

The significance of suppliers' roles in contributing to the performance of buying firms has been widely documented (Birou & Fawcett, 1994; Carr, Kaynak, Hartley, & Ross, 2008; Corsten & Felde, 2005; Cousins, Lawson, & Squire, 2008; Gonzalez, Quesada, & Mora Monge, 2004; Handfield, Krause, Scannel, & Monczka, 2000; Larson & Kulchitsky, 1998; Kannan & Tan, 2004; Laugen, Acur, Boer, & Frick, 2005; Leenders, Nollet, & Ellram, 1994; Sanchez-Rodriguez, Hemsworth, & Martinez-Lorente, 2005; Wagner, 2006; Wong, 2002). This is hardly surprising, considering the increasing reliance of buying firms on their external supply base for product development, quality, productivity, and technology. Due to global competition, inventory reduction and staff downsizing,

many buying firms have moved to retain only core competencies, outsourcing a large part of the buying firms' activities. As a result, suppliers are being asked to assume additional responsibilities of various kinds, such as earlier participation in product development, managing inventory for customers, delivering smaller lot sizes to narrowing delivery windows, producing near-perfect quality, providing steady price reductions, and more. To a large extent, the external suppliers are now considered an extension of the buying firm's organisation (Monczka, Trent, & Handfield, 1998). The changing role of supplier is probably the reason why Laugen et al. (2005) identify supplier strategy as one of the emerging best practices of buying firms.

Acknowledging the importance of suppliers, many world class commercial companies have devised aggressive, continuing development activities with their suppliers, popularly termed "supplier development programmes". These programmes aim to help them improve any and all areas of their businesses, including management, financial and technical aspects. Their philosophy is that stronger and more capable suppliers are able to allow the entire enterprise to reduce costs, streamline operations, and minimise defective products. As a matter of fact, most of these companies not only permit their suppliers to offer improved capabilities to other customers (including their competitors), but require it. They believe that this will help to create high performing suppliers, able to be more responsive to their own needs and subsequently be more competitive in the marketplace.

Another advantage of the supplier development programme relates to potential deficiencies in the supplier's performance. Kay (2005) describes the scenario in which suppliers do not meet delivery schedules and disrupt the supply chain, resulting in the shutdown or rescheduling of production lines. This can cause huge losses to the buying firms and contradicts the buying firm's efforts to increase competitiveness through squeezing costs out of their supply chain. In addition, Kay (2005) also documents the fact that poor supplier performance can account for not only billions of dollars in product recalls, but even customer deaths. She cites a notorious example of how Ford Motor Co. lost USD3 billion after it recalled more than 13 billion defective Bridgestone/Firestone tires used on its vehicles. The experts estimated that the faulty tires may have caused as many as 250 deaths. Such problems, combined with today's dynamic and global business environment, demand that buyers evaluate and manage their suppliers' deficiencies. Suppliers that fail to meet performance standards can cost buyers a bundle in actual expenditure, customer satisfaction, and lost business. In this regard, the supplier development programme is implemented to bring poor suppliers back on track (Handfield et al., 2000).

Notwithstanding the popularity and the benefits of the supplier development programme, many companies have yet to embrace this idea due to the time, resources and knowledge required. There also appears to be a number of cultural and business barriers causing the supplier development programme to vary considerably across companies and sectors (Benton, 2005; Kay, 2005). In view of the significance of supplier performance and its ubiquity, the triumph of such development programmes is critical for both research and in practice. The need for a study of this nature also stems from the fact that the majority of existing studies have been conducted in developed economies, such as the US, Europe and Japan. Little attention has been paid to developing countries, such as Malaysia. Insofar, there has been only one Malaysian study, which was constrained to the Malaysian government's initiatives in encouraging supplier development through the Vendor Development Programme (VDP) (Abu Bakar, 2002). It leads one to safely conclude that little is known about the supplier development programme and how it relates to manufacturing firms in Malaysia, in particular.

This research aims to fill the vacuum by investigating the supplier development programme in a manufacturing firm in Malaysia. Specifically, it explores the types and extent of supplier development activities undertaken. This paper also discusses the four major factors affecting supplier development efforts: suppliers' commitment, support from the suppliers' top management, effective communication between the buyers and suppliers, and the attitude of the buying firms towards supply base. A review of the published literature indicates that only a handful of studies have examined all of these factors in a single setting (Abu Bakar, 2002). In addition, this paper explores the importance of supplier development goals. A perennial understanding of the issues examined may inform decisions regarding the pre-requisites necessary to fuel supplier improvement initiatives. It also helps to discover the weaknesses of current efforts and guide improvements.

The rest of the paper is organised as follows. The next section reviews relevant literature. The methodology is presented next, followed by the empirical results and analysis. The subsequent section presents the discussion and the implications of the findings. The final section deals with the research limitations and explores possible avenues for future research.

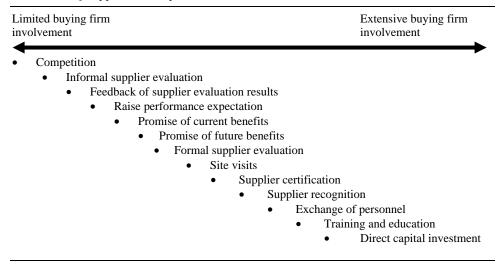
LITERATURE REVIEW

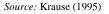
Krause and Ellram (1997) examined the factors contributing to supplier development success, identifying a comprehensive range of buying firms' efforts in their supplier development activities. An informal supplier evaluation revealed

that these efforts vary significantly, from a request for improved performance to the training of the supplier's personnel and investment in the supplier's operations. To ease understanding, Krause (1995) synthesises the various factors into a continuum of supplier development activities (Table 1). At one end, activities toward the "limited" side of the continuum tend to require relatively little effort from the buying firm. On the other hand, activities toward the "extensive" side of the continuum tend to be hands-on, requiring relatively greater effort from the buying firm.

Table 1

Continuum of supplier development activities.





Watts and Hahn (1993) conclude that supplier development activities are likely to have a short-term focus that is targeted at improving the performance of suppliers' products or services (rather than a long-term focus aiming to improve the capabilities of suppliers, for example). A similar finding was reported by Abu Bakar (2002) in which the Malaysian buying firm surveyed tended to focus its supplier development programme on short-term impacts on product quality, price and delivery.

Factors Affecting Supplier Development Efforts

A review of the literature indicates that there are four factors affecting supplier development efforts. They have garnered impressive theoretical and practical support and are explained in the following sub-sections.

Supplier's commitment

Morgan and Hunt (1994) define relational commitment as the existence of beliefs held by exchange partners that an ongoing relationship with another party is so important that maintaining it warrants maximum effort. Their study investigated the association between relationship commitment and cooperation, the longevity of the relationship, willingness to compromise, and trust in a tire manufacturer/ dealer. They found commitment to be positively associated with all of the factors surveyed. Similarly, Handfield et al. (2000) insisted that a lack of supplier commitment will lead to the failed implementation of improvements related to the supplier development programme. Handfield and colleagues termed such a lack of commitment a "supplier-specific pitfall".

Support of supplier's top management

Krause (1999) conducted an empirical study to look at factors leading to the utilisation of supplier development. He found that top management's recognition of the importance of the purchasing function is a significant factor leading the buying firm to adopt the supplier development programme. However, the buyer organisation's enthusiasm will lead to nowhere if the supplier does not share the same aspiration; the outcome is even worse if the supplier believes that such efforts will benefit the buyer alone. As such, Leenders and Blenkhorn (1988) opine that the buying firm's top management must interact with the supplier's top management in order to persuade the supplier to accept the supplier development challenge. It is imperative for the supplier's top management to recognise the need for continuous improvement (Monczka, Trent, & Callahan, 1993) as well as the benefits bestowed on both parties. Undertaking a supplier development programme requires both the buyer and supplier to invest time, personnel and financial resources. The investment required is even greater if the buyer intends to build the supplier's capability through process-oriented supplier development efforts, where measureable results do not come quickly (Hartley & Jones, 1997). Such a long-term investment will only be successful if the supplier's top management supports the supplier development efforts (Monczka et al., 1993).

Communication

Carter and Ellram (1994) investigated the impact of inter-organisational alliances in improving supplier quality. They found that good communication and trust are required to facilitate information exchange regarding an organisation's existing design to suppliers. This is particularly important when proprietary technology is at stake. In addition, a supplier needs to have a clear understanding of the end product's final application. Such communication is critical to achieving the true benefits of quality improvement at the supplier level. The finding confirms Galt

and Dale's (1991) research on ten firms from various industries in the United Kingdom. Mohr and Spekman (1994) conclude that the higher the communication quality in buyer-supplier relationships (as measured in terms of accuracy, timeliness, adequacy, and credibility), the higher is the satisfaction with buyer-supplier relationships. This is because frequent and timely communication could assist in resolving disputes, as well as in aligning perceptions and expectations between the two parties (Morgan & Hunt, 1994). The importance of effective communication has also been reflected in Abu Bakar's (2002) study. He found that a lack of communication between the parties involved in the VDP contributed to this government-initiated development programme lacking effectiveness.

Buying firm's attitude toward supply base performance

In an empirical study looking at the factors influencing inter-organisational cooperation in supplier development, Krause (1995) suggests that inadequacies in the supplier's performance and capabilities, if dealt with aggressively and proactively, have the potential to lead to improvements in the supply base's performance and capabilities. This suggests that the attitude of the buying firm can have a significant impact on the supplier's performance and capabilities. This is confirmed by Krause and Ellram (1997), who concluded that organisations benefiting from successful supplier development efforts are generally more proactive and involved in the suppliers' activities and performance. This includes, among others, the formal evaluation of the supplier and the feedback of results, supplier recognition, the training and education of supplier's personnel, and investment in the supplier's operations. In order to ensure that the programme's objectives are met, Abu Bakar (2002) recommends dynamic and periodic evaluations as well as progress monitoring among the participants of the supplier development programme.

In conclusion, the preceding literature has established a comprehensive range of supplier development activities, which depend on the extent of the buying firm's involvement. However, empirical evidence seems to point in the same direction as many of the development programmes: namely, towards the short-term. The literature identifies four major factors affecting the supplier development efforts. These elements will be examined in the current study. The next section presents the methodology.

METHODOLOGY

Based on the objective outlined, this study focuses on the supplier development programme undertaken by an electronics manufacturing firm located in Johor

Bahru, Malaysia, with local suppliers providing the firm with made-to-order commodities. The results are based on a self-reporting questionnaire.

The questionnaire consists primarily of two sections. The first section consists of 13 questions on the types and extent of supplier development activities. The second section contains nine questions on supplier development goals. An extensive review of literature made these constructs operational. Respondents were asked to rate the 13 questions on a five-point scale (i.e., 1 = always to 5 = never; and 1 = very important to 5 = very unimportant for the nine questions asked in the second section). The questionnaire was piloted before dissemination, thereby achieving face validity.

The survey respondents include officers, engineers, managers and senior managers from various departments (i.e., purchasing, marketing, planning, engineering, design and development, and quality) within the manufacturing firm. A total of 33 employees received questionnaires. However, only 26 responses were found to be suitable for further analysis. Seven questionnaires were ignored due to incomplete or missing data.

The next section presents the research findings.

RESULTS AND ANALYSIS

Background of the Firm

The firm employs about 480 employees and is involved in the design and development of electrical products and electronics carrying its own brand name. In Malaysia, the firm's products have captured about 30% of the targeting market segment. In addition, the products are exported to Singapore, Indonesia, China and the Middle East. More than 50% of the cost of the materials is due to made-to-order commodities supplied locally. Besides the design and development of its own products, the firm's business activities also include being a contract manufacturer of printed circuit board assemblies for multinational customers in Holland, Poland, Singapore, Japan, and China. The firm is significantly reliant on suppliers, making it an ideal target for this study.

The Types and Extent of Supplier Development Activities

Table 2 indicates that the buying firm has often relied on a verbal or written request to improve its suppliers' performance and/or capabilities (mean = 2.00), as well as the promise of future benefits. The consideration of future business (mean = 2.46) is also important. The activities adopted to a lesser extent are those

relating to the use of two or three suppliers to create competition among the suppliers (mean = 2.62), the promise of current benefits such as higher volume order (mean = 2.69), assessing the supplier through informal evaluation on adhoc basis (mean = 2.92), and inviting supplier's personnel to the buying firm's premises in order to increase awareness of how their product is used (mean = 2.92). Meanwhile, the buying firm hardly adopts activities such as the training and education of the supplier's personnel (mean = 4.15), the use of certification programmes to certify the supplier's quality (mean = 4.50), recognition of the supplier's operations (mean = 4.96). However, the high standard deviation scores found in many of categories imply inconsistencies in the respondent's answers.

Table 2

Type and	extent of	supplier	developmen	t activities.

Supplier development activity	(1)	(2)	(3)	(4)	(5)	Mean	SD
Verbal or written request that the supplier improve its performance	9/26 34.6%	9/26 34.6%	7/26 26.9%	1/26 3.8%		2.00	.894
Promise of future benefit such as consideration for future business	4/26 15.4%	12/26 46.2%	5/26 19.2%	4/26 15.4%	1/26 3.8%	2.46	1.067
Use of two or three suppliers for this purchased item to create competition among suppliers	5/26 19.2 %	9/26 34.6%	5/26 19.2%	5/26 19.2%	2/26 7.7%	2.62	1.235
Promise of current benefits such as a higher volume order of the purchased item	3/26 11.5%	10/26 38.5%	7/26 26.9%	4/26 15.4%	2/26 7.7%	2.69	1.123
Assessment of supplier's performance through informal evaluation, which takes place on an ad-hoc basis with no set procedures	2/26 7.7%	8/26 30.8%	8/26 30.8%	6/26 23.1%	2/26 7.7%	2.92	1.093
Inviting supplier's personnel to your site to increase their awareness of how their product is used	2/26 7.7%	7/26 26.9%	10/26 38.5%	5/26 19.2%	2/26 7.7%	2.92	1.055
Site visits by your firm to supplier's premises to help supplier improve its performance	2/26 7.7%	1/26 3.8%	14/26 53.8%	5/26 19.2%	4/26 15.4%	3.31	1.050
Assessment of the supplier's performance through formal evaluation, using established guidelines and procedures	2/26 7.7%	2/26 7.7%	9/26 34.6%	11/26 42.3%	2/26 7.7%	3.35	1.018

(continued on next page)

Supplier development activity	(1)	(2)	(3)	(4)	(5)	Mean	SD
Use of four or more suppliers for this purchased item to create competition among suppliers		1/26 3.8%	7/26 26.9%	10/26 38.5%	8/26 30.8%	3.96	.871
Training/education of the supplier's personnel		2/26 7.7%	5/26 19.2%	6/26 23.1%	13/26 50.0%	4.15	1.008
Use of a supplier certification programme to certify supplier's quality, thus, making incoming inspection unnecessary			5/26 19.2%	3/26 11.5%	18/26 69.2%	4.50	.812
Recognition of supplier's achievements/performance in the form of awards			2/26 7.7%	1/26 3.8%	23/26 88.5%	4.81	.567
Investment in the supplier's operation				1/26 3.8%	25/26 96.2%	4.96	.196

Table 2 (continued)

Note: (1) always; (2) often; (3) sometimes; (4) seldom; (5) never; (SD) standard deviation

Table 3 shows that the majority of respondents have rated improvements in product quality, delivery, and cost reduction as among the most important goals of the supplier development efforts. Meanwhile, improvement in the supplier's capabilities comprising technical, management and financial aspects have been rated at lesser degrees of importance. Three of the items recorded standard deviation scores of more than 1.0, implying inconsistencies in the responses.

Table 3

Importance		

Goals of supplier development programme	(1)	(2)	(3)	(4)	(5)	Mean	SD
Improve quality of purchased item	21/26 80.8%	3/26 11.5%	1/26 3.8%	1/26 3.8%		1.31	.736
Reduce cost of purchased item	18/26 69.2%	4/26 15.4%	3/26 11.5%	1/26 3.8%		1.50	.860
Improve delivery performance	14/26 53.8%	9/26 34.6%	2/26 7.7%	1/26 3.8%		1.62	.804
Increase supplier's service/responsiveness	9/26 34.6%	16/26 61.5%	1/26 3.8%			1.69	.549
Improve supplier's technical capability	7/26 26.9%	12/26 46.2%	3/26 11.5%	2/26 7.7%	2/26 7.7%	2.23	1.177

(continued on next page)

Table 3 (<i>(continued)</i>
-----------	--------------------

Goals of supplier development programme	(1)	(2)	(3)	(4)	(5)	Mean	SD
Improve product development capability	6/26 23.1%	8/26 30.8%	7/26 26.9%	2/26 7.7%	3/26 11.5%	2.54	1.272
Reduce existing supply base	3/26 11.5%	3/26 11.5%	16/26 61.5%	2/26 7.7%	2/26 7.7%	2.88	.993
Increase supplier's management capability	2/26 19.2%	5/26 19.2%	13/26 50.0%	2/26 7.7%	4/26 15.4%	3.04	1.113
Increase supplier's financial strength	1/26 3.8%	1/26 3.8%	15/26 57.7%	5/26 19.2%	4/26 15.4%	3.38	.941

Note: (1) very important; (2) important; (3) neutral; (4) unimportant; (5) very unimportant; (SD) standard deviation.

DISCUSSION AND IMPLICATIONS

The results reveal that the manufacturing firm analysed focuses on supplier development activities requiring little or no involvement on its own part, except its substantial reliance on its suppliers. It is obvious that the firm has no intention of developing closer relationships with its suppliers, and even more so to invest in their operations. In addition, the findings suggest that the firm has a short-term, results-oriented focus in product quality, delivery and cost reduction. This is reflected in the empirical results, where the manufacturer attempts to reduce the supply base and use numerous suppliers in order to guarantee high supplier performance. There is a lack of emphasis on the activities that lead to improving the supplier's capabilities. To some extent, the findings on the development of the supplier's product and technical capabilities were mixed, as reflected by the higher standard deviation scores. The findings also show that the firm has not fully utilised the expertise of its suppliers in its product design and development activities. The results are very much in line with the findings of prior studies (Abu Bakar, 2002; Wagner, 2006; Watts & Hahn, 1993). Abu Bakar (2002) reasoned that the small orders of commodities made by the manufacturer against the suppliers' overall outputs has rendered the buying firm less influential in pushing its suppliers to make improvements. This also confirms prior findings where very few organisations have managed to develop an intensive supplier development programme (Anonymous, 2000; Benton, 2005; Kay, 2005). This underscores the challenges facing the initiation of a supplier development programme as reported in the literature, i.e., trust, security, other competing initiatives, lack of resources, participation and support, time and knowledge (Batson, 2002; Frahm, 2003). Overall, these findings point towards the essence of initiating of a proper supplier development programme.

It is imperative that the buying firm consider revising its existing supplier development programme. Its current short-term and results-oriented approach is incapable of ensuring sustainable improvements among the suppliers. This is because the suppliers are not equipped with the capabilities to continue the improvements once left to function on their own. The buying firm ought to realise that the rewards for undertaking a long-term supplier development initiative are well worth the effort. Some of the benefits of a good supplier development programme include reduction in sourcing cycle time, time-tomarket, lower inventory costs, improved quality, reliability and manufacturability of new designs, increased responsiveness to customer needs and market dynamics, and improved collaboration and knowledge sharing across the extended enterprise (Jones, 2002). Besides, suppliers that comply with the buying firms' requirements benefit by obtaining continued business (Kay, 2005). Armed with these positive impacts, the buyers and suppliers should be able weigh them against potential risks in order to calculate the impact of a successful supplier development programme.

Suppliers are often asked to improve their performance, implying deficiencies. As production and service outsourcing increases among most companies, a successful supplier development programme should begin even when the buying firms select potential suppliers. Research suggests that a proper selection process is becoming critical in today's competitive operating environment. It helps buyer organisations achieve high quality products and customer satisfaction (Gonzalez, et al., 2004; Vokurka, Choobineh, & Vadi, 1996). Pressey, Tzokas and Winklhofer (2007) opine that the "fit" between buyer and supplier firms' competitive strategies and organisational culture must be given due emphasis. Besides, it is probably rewarding if the commitment and attitudes of the suppliers, particularly of the top management, toward the development programme, can be ascertained from an early stage so as to avoid supplierspecific pitfall (Handfield et al., 2000). This is in light of the fact that both parties' co-operative behaviours are strongly influenced by the expected continuity of the relationship (Johnston & Kristal, 2008). Therefore, their positive attitude and commitment toward the programme will have a direct and significant impact on the buying firms' performance (Kannan & Tan, 2004). Other selection considerations by the buying firms include cost, technology, quality, investment in development and design, and management- and service-oriented indicators such as business philosophy, management and strategic plan, and response time. For final supplier decisions, buying firms should rely either on cross-functional teams or inputs from their plants, or both.

The results show that there is very little formal assessment of the supplier's performance. Even if there is assessment, evaluation is carried out on rare occasions and on an ad-hoc basis and with no clear procedures. This suggests that

a formal supplier evaluation system must be established to monitor the suppliers' performance on a periodic basis so that appropriate feedback and corrective actions can bring the poor performing suppliers back on track. It is vital that frequent visits are made to the supplier's firm as a means to assess their performance. As echoed by Primo, Dooley, and Rungtusanatham (2007), a buying firm's reaction to a supply failure is important because buyer dissatisfaction may induce related development or switching costs. When the buying firm is satisfied with its supplier development efforts, it is likely to invest more resources and exhibit a greater willingness to share information with its suppliers (Krause & Ellram, 1997). Among the common metrics buying firms could use to evaluate their suppliers include aspects on cost, delivery, innovation, product service and/or quality (including defect rate), quality programme, responsiveness, technology, administrative, and customer service. To be effective, awards can be presented to the best suppliers as a means to recognise their achievements and to motivate them to maintain and/or improve their performance level. In addition, the buying firm can rely upon the supplier certification programme in order to minimise inspection and to guarantee consistent performance delivery. However, undertaking such a development programme requires the willingness of both the buyer and supplier to invest time, personnel and financial resources, the reason many development programmes fail. The top management of the supply firms must understand that such initiatives require time before delivering results and that their continuous and mutual support is vital for the programme's success.

Once the supply base is in place, it is vital for the buying firms to develop and foster a close relationship with their suppliers, in order to ensure continuous and sustainable improvements. Monitoring supplier performance alone is insufficient, but rather the close proximity between buyers and suppliers provides critical differentiation between high and low performers (Cousins et al., 2008). In this case, effective communication between the parties is necessary to foster strong trust and satisfaction. The findings suggest that the manufacturing firm should invite the supplier's personnel to its premises on a regular basis in order to increase awareness of how their product is used. This can act as a means to relay the buying firm's expectations to the suppliers as well as to provide the suppliers with a clear picture of how their components fit into the firm overall. In addition, many buyers appreciate the convenience of suppliers being available for quick meetings and consultations and vice-versa. Without communication, the success of the supplier development programme is cumbersome and may not be forthcoming.

The increasing competitive parity in the areas of cost and quality has forced manufacturers to seek other sources of competitive advantage with new product development rapidly becoming the focal point in the quest for sustained growth

and profitability (Birou & Fawcett, 1994). In this regard, it is of paramount importance for the manufacturers to recognise the expertise of their suppliers by involving them in new product development from the early design stages. Buying firms ought to remember that the essence of today's new product development strategies is the simultaneous development of the product and the accompanying manufacturing process. This enhances quality, reduces costs, and shortens lead times. Their involvement could promote better resource utilisation, the development and sharing of technological expertise, and network effectiveness (Birou & Fawcett, 1994). However, the use of new technology requires skilled workers from the suppliers' side. The development programme must capture this requirement by offering some level of training and/or education to the suppliers' personnel, which is missing in the practice analysed in the current study.

CONCLUSION AND SUGGESTIONS FOR FUTURE RESEARCH

Successful companies have learned the importance of having a supplier base that they can rely on to provide services and materials consistently and on time, and can consistently meet specification requirements. These can only be achieved through partnerships where both of the partners share common interests and are willing to go the extra mile for one another, creating loyalty and financial success. As the Malaysian economy has long relied on a strong and diverse manufacturing sector, a proper supplier development initiative can facilitate the performance improvements needed to ensure that suppliers successfully supply and strategically partner the manufacturers, thus ensuring the competitiveness of Malaysian firms in the global economy. In addition, businesses, government and educational institutions may use these current findings to drive or assist the improvement efforts of both buyers and suppliers.

The findings reported in this study need to be interpreted with caution due to limitations that warrant further research. The limited sample size implies that the findings may not be generalised. Second, although this study is conducted in a developing country context, the impact of cultural forces on the success of this programme has not been examined. These limitations open the venue for future research to provide further information. Future research may shed more light by increasing the sample size across different industries or even cross-culturally. In addition, correlating the variables with a set of performance measures using advanced statistical techniques and/or by incorporating new variables may yield interesting results.

REFERENCES

- Abu Bakar, A. H. (2002). Vendor development programme: A Malaysian case study. Proceedings of Asia Pacific Economics and Business Conference 2002 (pp. 115– 122). Selangor: Universiti Putra Malaysia.
- Anonymous. (2000, June 15). Half work with suppliers, half don't. From *Purchasing Magazine*, http://www.purchasing.com/article/CA138933.html
- Batson, R. (2002). Getting started in a supplier improvement initiative. *Proceedings of the 56th Annual Quality Congress*, Denver, from ABI/INFORM Global.
- Benton, W. C. (2005). The influence of power driven buyer/seller relationships on supply chain satisfaction. *Journal of Operation Management*, 23, 1–22.
- Birou, L. M., & Fawcett, S. E. (1994). Supplier involvement in integrated product development: A comparison of US and European practices. *International Journal of Physical Distribution & Logistics Management*, 24(5), 4–14.
- Carr, A. S., Kaynak, H., Hartley, J. L., & Ross, A. (2008). Supplier dependence: Impact on supplier's participation and performance. *International Journal of Operations & Production Management*, 28(9), 899–916.
- Corsten, D., & Felde, J. (2005). Exploring the performance effects of key supplier collaboration: An empirical analysis into Swiss buyer-supplier relationships. *International Journal of Physical Distribution & Logistics Management*, 35(6), 445–461.
- Carter, J. R., & Ellram, L. M. (1994). The impact of interorganizational alliances in improving supplier quality. *International Journal of Physical Distribution & Logistics Management*, 24(5), 15–23.
- Cousins, P. D., Lawson, B., & Squire, B. (2008). Performance measurement in strategic buyer-supplier relationships: The mediating role of socialization mechanisms. *International Journal of Operations & Production Management*, 28(3), 238–258.
- Frahm, S. (2003). Supplier development: A survey of risks and benefits. From North Carolina State University Web site: http://scm.ncsu.edu/public/facts/facs030807.html
- Galt, J. D. A., & Dale, B. G. (1991). Supplier development: A British case study. *International Journal of Purchasing and Materials Management*, 27(1), 16–22.
- Gonzalez, M. E., Quesada, G., & Mora Monge, C. A. (2004). Determining the importance of the supplier selection process in manufacturing: A case study. *International Journal of Physical Distribution & Logistics Management*, 34(6), 492–504.
- Handfield, R. B., Krause, D. R., Scannel, T. V., & Monczka, R. M. (2000). Avoid the pitfalls in supplier development. *Sloan Management Review*, 41(2), 37–50.
- Hartley, J. L., & Jones, G. E. (1997). Process oriented supplier development: Building the capability for change. *International Journal of Purchasing and Materials Management*, 33(3), 24–29.
- Johnston, D. A., & Kristal, M. M. (2008). The climate for co-operation: Buyer-supplier beliefs and behavior. *International Journal of Operations & Production Management*, 28(9), 875–898.
- Jones, K. (2002). Source smart: The need for supplier management. From Management Business Technology Magazine, http://www.mbtmag.com/toc-archive/2002/ 20020801.html

- Kannan, V. R., & Tan, K. C. (2004). Supplier alliances: Differences in attitudes to supplier and quality management of adopters and non-adopters. *Supply Chain Management: An International Journal*, 9(4), 279–286.
- Kay, E. (2005). Ways to measure supplier performance. From *Purchasing Magazine*, http://www.purchasing.com/toc-archive/2005/20050303.html
- Krause, D. R. (1995). Interorganizational cooperation in supplier development: Influencing factor. Unpublished doctoral dissertation, Arizona State University.
- _____. (1999). The antecedents if buying firm's efforts to improve suppliers. *Journal of Operations Management*, 17, 205–224.
- Krause, D. R., & Ellram, L. M. (1997). Success factors in supplier development. International Journal of Physical Distribution & Logistics Management, 27(1), 39–52.
- Larson, P. D., & Kulchitsky, J. D. (1998). Single sourcing and supplier certification: Performance and relationship implications. *Industrial Marketing Management*, 1(27), 73–81.
- Laugen, B. T., Acur, N., Boer, H., & Frick, J. (2005). Best manufacturing practices: What do the best-performing companies do? *International Journal of Operations & Production Management*, 25(2), 131–150.
- Leenders, M. R., & Blenkhorn, D. L. (1988). *Reverse marketing: The new buyer-supplier relationship.* New York: The Free Press.
- Leenders, M. R., Nollet, J., & Ellram, L. M. (1994). Adapting purchasing to supply chain management. *International Journal of Physical Distribution & Logistics Management*, 24(1), 40–42.
- Mohr, J., & Spekman, R. (1994). Characteristics of partnership success: Partnership attributes, communication behavior, and conflict resolution techniques. *Strategic Management Journal*, 15(2), 135–152.
- Monczka, R. M., Trent, R. J., & Callahan, T. J. (1993). Supply base strategies to maximize supplier performance. *The International Journal of Physical Distribution* & Logistics Management, 23(4), 42–54.
- Monczka, R. M., Trent, R. J., & Handfield, R. B. (1998). Purchasing and supply chain management. Cincinnati, OH: South Western College Publishing.
- Morgan, R. M., & Hunt, S. D. (1994). The commitment-trust theory of relationship marketing. *Journal of Marketing*, 58, 20–38.
- Pressey, A., Tzokas, N., & Winklhofer, H. (2007). Strategic purchasing and the evaluation of "problem" key supply relationships: What do key suppliers need to know? *Journal of Business & Industrial Marketing*, 22(5), 282–294.
- Primo, M. A. M., Dooley, K., & Rungtusanatham, M. J. (2007). Manufacturing firm reaction to supplier failure and recovery. *International Journal of Operations & Production Management*, 27(3), 323–341.
- Sanchez-Rodriguez, C., Hemsworth, D., & Martinez-Lorente, A. R. (2005). The effect of supplier development initiatives on purchasing performance: A structural model. *Supply Chain Management: An International Journal*, 10(4), 289–301.
- Vokurka, R. J., Choobineh, J., & Vadi, L. (1996). A prototype expert system for the evaluation and selection of potential suppliers. *International Journal of Operations* & Production Management, 16(12), 106–127.

- Wagner, S. M. (2006). Supplier development practices: An exploratory study. *European Journal of Marketing*, 40(5/6), 554–571.
- Watts, C. A., & Hahn, C. K. (1993). Supplier development programmes: An empirical analysis. *International Journal of Purchasing and Materials Management*, 29(2), 11–17.
- Wong, A. (2002). Sustaining company performance through partnering with suppliers. International Journal of Quality & Reliability Management, 19(5), 567–580.