

CORPORATE COMMUNICATION AND INTERNAL SUPPLY CHAIN MANAGEMENT IN MANUFACTURING INDUSTRY

Zuraida Hani Zulkepli¹

Norlena Hasnan²

Shahimi Mohtar³

^{1,2,3} *School of Technology Management and Logistics,
College of Business, Universiti Utara Malaysia
Sintok, Kedah, Malaysia.
zuraidahanie@gmail.com.my*

ABSTRACT

Internal supply chain management can be defined as a set of activities or functions within the firm, which provides products to customers and more attention given to services in manufacturing firms. This process involves a variety of functions in firms such as production, distribution and sales. Internal supply chain management referring as similar to the definition of service in manufacturing. The government aims to promote manufacturing-related services such as product design, research and development (R&D) and central utility supply. This initiative will help to extend the value chain and increase the country's demand for Malaysian goods and services. Therefore, the supply chain plays an important role in directing and controlling the direction of economic development, this process will make it more efficient and effective. In Malaysia, corporate communication plays significant function in ensuring the efficiency of the service operations which subsequently leads to the excellence performance of the manufacturing. Due to the importance of corporate communication in the manufacturing sector, this paper aims to explore the contribution of corporate communication towards the business development in manufacturing industries.

Keywords: *Internal supply chain management, manufacturing services, corporate communication, production, economic growth*

INTRODUCTION

Traditionally, the focus of manufacturing industry has been on strategies related to product technology innovation, cost reduction and quality improvement and it depends on market conditions. Recent changes occurring in the business environment such as market globalization, increasing competitiveness among developing countries, changes in customer demand and increasing consumer awareness has made it difficult to rely on the traditional strategy alone. In addressing the new challenges, the number of manufacturing firms have increased and have shifted their focus from pure manufacturing to a combination of manufacturing and services (Neely, 2008).

These business trends have led to an increase in manufacturing services and it is described in the literature, such as "service infusion" (Eggert, 2011), "product-service system" (Johnstone, Dainty and Wilkinson, 2009) and "servitization" (Baines, Lightfoot, Benedettini and Kay, 2009). The growing number of research and publication in the manufacturing services seems to indicate that the intangible part of the services in manufacturing has been recognised as the competitive advantage as well. The manufacturing sector recorded a moderate growth of 7.3%, which contributed to the economy in the second quarter of 2014 (Bank Negara Malaysia, 2014). The performance of the manufacturing sector in January to November 2014 increased sales by 6.1% to RM600.1 billion, and in the same period, the number of employees has also increased by 1.5% to 1,030,383 people, an increase in productivity stood at 4.6% in RM582,421, this makes the overall manufacturing index increased by 5.9%, and an increase of 3.7% in November 2014 compared to the same month in the previous year (Department of Statistics, 2015) for domestic demand and a recovery in the external sector. These statistics illustrate the manufacturing sector is expected to perform better in the future. In addition, Malaysia also has been listed as the world's leading manufacturing location in the new conformity index by Cushman and Wakefi eld (Business Circle, 2014).

Service management literature has repeatedly stressed the important role of corporate communication in the service (George, 1986; Gronroos, 1990). The service studies focuses on the interaction in which both consumers and service personnel play an important role in influencing the service performance (Gronroos, 2008; Vega-Vazquez, Revilla-Camacho & Cossio, 2013). Therefore, only when the organization is fully aware of the principles of effective communication, they will be able to achieve their goals and improve their performance. Communication plays significant function in ensuring the efficiency of the service operations which subsequently leads to the excellence performance of the manufacturing (Headley and Choi, 1992). Due to the importance of the service in manufacturing, this study is interested to focus on internal supply chain management or similar meaning with service performance. The study also discusses the role of corporate communication in supporting the service practices particularly in the context of manufacturing industries.

LITERATURE REVIEW

Internal Supply Chain Management

Internal supply chain management can be defined as a set of activities or functions within the firm aims to provide products to customers. Meanwhile, external supply chain management is inter-organizational linkages with customers and suppliers (Mabert and Venkataramanan, 1998; Barratt and Oke, 2007). An integrated internal supply chain is necessary to generate the customer service and the excellent performance of the firm (Ellinger, Daugherty and Gustin, 1997; Germain and Iyer, 2006). There are many articles on the issue of manufacturing services. In the last three years, the number of scientific articles has increased significantly. However, the majority of previous studies only examine the service as a separate function in a manufacturing firm (Brown, Gustafsson and Witell, 2009). Issues of innovation, management, strategy, marketing, acquisitions and initial contacts were analyzed from the perspective of service, but only in the context of a separate industrial services. However, the perspective of the service is not extended to manufacture the product,

and it remains to be dealt with a conventional manufacturing. Therefore, to expand the scope of the study is limited for the moment (Mathieu, 2001; Brax, 2005). Previous studies on the relationship between services and products have proposed concepts and classifications (Kowalkowski, Kindstrom and Brehmer, 2011; Windahl and Lakemond, 2010), assessed the importance of employees in creating client relationships (Theoharakis, Sajtos and Hooley, 2009) and analyzed approaches for combining services and products (Kucza and Gebauer, 2011). All of these studies were based on either archived information or multiple case studies involving organizations acting in various markets. Previous study has been explored “best practices” in the effort by product firms to integrate service activities into their product business (Ulaga and Reinartz, 2011).

The literature shows that a firm’s transformation into an integrated product-service provider requires more than simply adding service to existing products (Gebauer, Ren, Valtakoski & Reynoso, 2012). Although the assumption among several firms manufacturing products that offer the service is quite easy to set up (Gustafsson, Brax and Witell, 2010), the development of effective, deliverable, and profitable service offerings poses a far greater challenge than the manufacture of products only (Jacob and Ulaga, 2008).

Therefore, service is always embedded in the manufacturing value chain. In recent years, the development of a service economy has changed the way and activities of traditional services through the use of new technology-based services. Manufacturing firm now has more employees to carry out R&D, manage business information and accounting. This is due to the increased use of computerized systems capabilities brought about by advances in IT. The situation is encouraging firms to employ many people to be inducted into the field of marketing and advertising, and this reflects the development of customer communication channels can be constructed through the use of internet and social media.

The Drivers for the Offering of Services in Manufacturing

Supply chain management has an important role to improve the efficiency and productivity of the firm. Firm is involved in an organization to create product and transmitting it to the end user. Though the main measures taken to improve the efficiency and productivity of the manufacturing industry, including the alignment of performance in terms of budget, quality of service, quality of materials and the time of delivery; however, there is still room for improvement in the supply chain management for the manufacturing industry. Service and product bundling is currently being used to boost the growth of manufacturing firms in new markets (Raddats and Easingwood, 2010; Auguste, Harmon and Pandit, 2006). Combining services and products allows manufacturers to increase the value of their offerings, thus making cost competition more difficult and making their offerings unique and sustainable in the face of competition (Hewitt, 2002; Porter and Ketels, 2003; Schmenner, 2009). The provision of products and services increases profit margins and the size of orders (Wise & Baumgartner, 1999; Stremersch and Tellis, 2002; Gebauer and Friedli, 2005). Manufacturers can increase their revenues by adding services to their offers. This increase can be two to three times higher than the revenue arising from product sales alone (Wise and Baumgartner, 1999; Windahl, Andersson, Berggren and Nehler, 2004; Ward and Graves, 2005).

The service offerings influence the buying decisions (Mathieu, 2001; Gebauer and Fleisch, 2007) and unveil new business opportunities (Mathe and Shapiro, 1993; Gebauer, Friedli, and Fleisch, 2006; Gebauer and Fleisch, 2007; Wise and Baumgartner, 1999). Thus, service provision can become a consistent and explicit business strategy (Baines, Lightfoot, Benedettini and Kay, 2009a). Services can improve the relationship between the supplier and the buyer (Raddats, 2011), increasing the supplier's knowledge about the buyers' needs. Such knowledge improves the development of new products and services (Mathieu, 2001; Malleret, 2006). The provision of services may also increase the confidence that clients have in their supplier (Vandermerwe and Rada, 1988) and can even make them dependent upon the supplier. The improvement in the buyer-supplier relationship leads to a stable, interactive and long-term connection between the parts (Verstrepen, Deschoolmeester and Van Den, 1999). Example of the successful adoption of service strategy include Cable & Wireless "value generating integrators" (C&W, 1999). These examples illustrate how manufacturers are moving along the value chain. Basically, this movement consist on adding services to the product offers (Baines et al., 2009a; Baines, Lightfoot, Peppard, Johnson, Tiwari, Shehab and Swink, 2009b).

Furthermore, changes in the pattern of producer services indicate how firms have responded to economic factors and various business, the three main drivers of manufacturing firms that use the service have been identified and discussed in further detail in this section:

Table 2.2
The main driver of consumption of services in manufacturing firms

The main driver of consumption of services in manufacturing firms
1) The firm is looking for an opportunity to move low-skill production work to low-wage locations and to focus efforts to develop their intellectual property with high-skill locations with favorable regulatory environment.
2) Firm has been using a variety of new technologies, especially technologies related to information and communication technology (ICT), aims to reduce costs and improve production efficiency.
3) The desire to strengthen ties with customers through the provision of services related to the product. The firm uses a new type of service that will be set and adjusted for the product, increasing the chances for a premium price and improve its market position.

Barriers in Internal Supply Chain Management

The biggest obstacle to conducting ISCM in order to succeed is through reliance on reports by managers based on the standard cost system. Here are some of the obstacles identified:

Operational elements

Difficulty in maintaining qualified employees to perform the services was mentioned by all of those interviewed as an important barrier to offering services. This problem becomes more of a concern if one considers the high turnover rate of trained personnel in the service divisions. As has been previously mentioned, many employees leave service positions after a certain amount of time due to the constant travel required by these occupations. Interviewees in Australia, United States America (USA), Canada, Brazil and United Arab Emirates (UAE) believe that minimization of the distance between the locations of resources (spare parts, support installations and personnel) and clients is essential for successful service delivery. This requirement is most problematic in countries with only a small amount of installed equipment and in regions where equipment is spread across a large geographic area for example, UAE and Canada. Sharing the operational structure necessary for providing ISCM was considered to be a problem by the interviewees in France, USA, Canada and Brazil. Those interviewees believe that the manufacturer's service providers should have their own parts inventory, finance department and service teams. Fundamental differences between the service culture and the product culture appear to be one factor that influenced the interviewees' opinion.

Knowledge management

In the opinion of the interviewees from Australia, USA, Canada and Brazil, the knowledge derived from the time spent building a relationship between a potential client and the manufacturer is an essential element of successful service offerings. This relationship allows the manufacturer to better understand the specific techniques and operations required by its clients. The interviewed managers emphasized that it is not enough for the manufacturer to deeply understand its own products; rather the manufacturer must also demonstrate that the prices of its service offerings provide tangible benefits for its clients. Therefore, the manufacturer should build a relationship with its clients to enhance its understanding of the clients' needs and the value of those needs.

Corporate Communication

Corporate communication is a method in which the firm with medium and large size production base is communicating with employees, shareholders and customers. Corporate communications department needed by firms to promote effective communication between both internal employees and external audiences. Although it is a corporate communications department, indoor and outdoor activities should be separated. This is because both require a different approach to managing them. Corporate communications manager responsibilities usually involves the following adjustments balance between internal and external audiences, to deal with all the public relationship (PR) issues (the firm introduced the useful of media or special events) and the organization of conferences. All these obligations are necessary to create a corporate culture, corporate identity and brand equity through the media inside and outside.

Effective communication process is dependent on the background of the firm and the will to succeed in the long term (Purves, 2005). Communication is to understand the

interaction with other people every day to exchange information. At the organizational level; communication can be divided into external and internal communications. Internal communication is the communication that occurs between the organization's management and internal stakeholders (Welch and Jackson, 2007), while the external communications also focus on audiences outside the organization (Saunders, 1999). Internal communications manager is responsible for the plan's strategic goals (publication) and motivate employees. External communications manager responsibility is geared more towards dealing with outsiders such as publicity and social activities.

As mentioned by Lundkvist and Yakhlef (2004) the process of communication and social interaction with customers is the key to successful products and services. This means that communication is important in connecting employees and employers, or employees and customers in the process of services in manufacturing. Therefore, communication plays a role in providing the motivation to improve employee performance, and very important in influencing the competitiveness of the organization.

CONCLUSION

As a conclusion, internal supply chain management is important for ensuring the survival, growth and development of manufacturing industry. The government also needs to promote manufacturing-related services such as product design and central utility supply. This initiative will help to extend the value chain and increase the country's demand for Malaysian goods and services. Meanwhile, communication is important in connecting employees and employers, or employees and customers in the process of services in manufacturing. This is to ensure that productivity is improved according to the standard set. Since the productivity of the organization is highly dependent on the technology capability, managers need to do their best to communicate effectively with their employees to improve productivity. Nevertheless, only when the organization is fully aware of the principles of effective communication, they will be able to achieve their goals and improve their performance. Therefore, this motivated this study to identify the effect of communications towards internal supply chain management, particularly in the manufacturing industry.

REFERENCES

- Auguste, B. , Harmon, E. and Pandit, V. (2006), "The right service strategies for product companies", *The McKinsey Quarterly* , Vol. 1 No. 1, pp. 40-51.
- Baines, T.S. , Lightfoot, H.W. , Benedettini, O. and Kay, J.M. (2009a), "The servitization of manufacturing: a review of literature and reflection on future challenges", *Journal of Manufacturing Technology Management* , Vol. 20 No. 5, pp. 547-567.
- Baines, T. , Lightfoot, H. W., Peppard, J. , Johnson, M. , Tiwari, A. , Shehab, E. and Swink, M. (2009b), "Towards an operations strategy for product-centric

- servitization”, *International Journal of Operations and Production Management* , Vol. 29 No. 5, pp. 494-519.
- Bank Negara Malaysia (2014). Developments in the Malaysian economy. *Quarterly Bulletin*.
Second Quarter 2014.
- Barratt, M., & Oke, A. (2007). Antecedents of supply chain visibility in retail supply chains: A resource-based theory perspective. *Journal of Operations Management*, 25, 1217-1233.
- Brax, S. (2005), “A manufacturer becoming service provider – challengers and a paradox”, *Managing Service Quality*, Vol. 15, No. 2, pp. 142-155.
- Brown, S.W., Gustafsson, A. and Witell, L. (2009), “Beyond products”, *Wall Street Journal*, June, p. 22.
- Business Circle. (2014). *High-value manufacturing – Malaysia’s next frontier* (14 May 2014).
Available at <http://www.businesscircle.com.my/high-value-manufacturing-malaysias-nextfrontier>.
- C & W (1999), *Global Outsourcing and The Networked Economy: Telecom’s Opportunity to Deliver Real Competitive Advantage*, Cable and Wireless, London.
- Department of Statistics. (2015). *Index of industrial production, Malaysia* . November 2014.
- Eggert, A. (2011). ‘Revenue and Profit Implications of Industrial Service Strategies,’ paper presented at Manchester Business School, University of Manchester, May.
- Ellinger, A.E., Daugherty, P.J., Gustin, C.M. (1997), ‘The relationship between integrated logistics and customer service’ , *Transportation Research: Part E, Logistics and Transportation Review*, 33(3), pp. 129-138.
- Gebauer, H. and Fleisch, E. (2007), “An investigation of the relationship between behavioural processes, motivation, investments in the service business and service revenue”, *Industrial Marketing Management*, Vol. 36 No. 3, pp. 337-348.
- Gebauer, H. and Friedli, T. (2005), “Behavioral implications of the transition process from products to services”, *Journal of Business and Industrial Marketing*, Vol. 20 No. 2, pp. 70-78.
- Gebauer, H. , Friedli, T. and Fleisch, E. (2006), “Success factors for achieving high service revenues in manufacturing companies”, *Benchmarking: An International Journal* , Vol. 13, No. 3, pp. 374-386.

- Gebauer, H., Ren, G.-J. , Valtakoski, A. and Reynoso, J. (2012). "Service-driven manufacturing: provision, evolution and financial impact of services in industrial firms", *Journal of Service Management* , Vol. 23(1), pp. 120-136.
- George, W.R. (1986). "Internal communications programs as a mechanism for doing internal marketing", in Venkatesan, M., Schmalensee, D.M. and Marchall, C. (Eds), *Creativity in Services Marketing: What's New, What Works, What's Developing*, American Marketing Association, Chicago, IL, Proceedings Series, pp. 83-84.
- Germain, R. and Iyer, K.N.S. (2006). "The interaction of internal and downstream integration and its association with performance, *Journal of Business Logistics*, 27 (2), pp. 29-52.
- Gronroos, C. (1990), *Service Management and Marketing: Managing the Moments of Truth in Service Competition*, Lexington Books/Maxwell Macmillan International Editions, Lexington, MA.
- Gronroos, C. (2008). "Service logic revisited: who creates value? And who co-creates?", *European Business Review*, Vol. 20(4), pp. 298-314.
- Gustafsson, A., Brax, S., & Witell, L. (2010). The future of service business in manufacturing firms. *Journal of Service Management*, 21(6), 557-563.
- Headley, D.E. and Choi, B. (1992), "Achieving service quality through gap analysis and a basic statistical approach". *Journal of Services Marketing*, Vol. 6, No.1, pp. -14.
- Hewitt, P. (2002), "The government's manufacturing strategy", Secretary of State for Trade and Industry, available at: www.dti.gov.uk/manufacturing
- Jacob, F., and Ulaga, W. (2008). The transition from product to service in business markets: an agenda for academic inquiry. *Industrial Marketing Management*, 37(3), 247-253.
- Johnstone, S. Dainty, A. and Wilkinson, A. (2009). 'Integrating products and services through life: an aerospace experience', *International Journal of Product and Operations Management*, 29.5, 520-538.
- Kowalkowski, C. , Kindstrom, D. and Brehmer, P.O. (2011), "Managing industrial service offerings in global business markets". *Journal of Business and Industrial Marketing*, Vol. 26, No. 3, pp. 181-192.
- Kucza, G. and Gebauer, H. (2011), "Global approaches to the service business in manufacturing companies", *Journal of Business and Industrial Marketing* , Vol. 26, No. 7, pp. 472-483.
- Lundkvist, A., & Yakhlef, A. (2004). Customer involvement in new service development: a conversational approach. *Managing Service Quality* , 14, 249-257.

- Mabert, V. A. & Venkataramanan, M. A. (1998). Special research focus on supply chain linkages: Challenges for design and management in the 21st century. *Decision Sciences*, 29/3, 537–552. <http://dx.doi.org/10.1111/j.1540-5915.1998.tb01353.x>
- Malleret, V. (2006). “Value creation through service offers”, *European Management Journal* , Vol. 24, No. 1, pp. 106-116.
- Mathe, H. and R.D Shapiro (1993). ‘Integrating Service Strategy in the Manufacturing Company.’ London: Chapman & Hall.
- Mathieu, V. (2001), “Product services: from a service supporting the product to service supporting the client”, *Journal of Business & Industrial Marketing* , Vol. 16, No. 1, pp. 39-58.
- Neely, A. (2008). ‘Exploring the financial consequences of the servitization of manufacturing’, *Operations Management Research*, vol. 1, no. 2, pp. 103-118.
- Porter, M. and Ketels, C. (2003), *UK Competitiveness: Moving to the Next Stage* , Department of Trade and Industry, London.
- Purves, K., (2005). Meetings & Incentive travel. *Corporate communications*, 34(3), pp.13-15.
- Raddats, C. (2011), “Aligning industrial services with strategies and sources of market differentiation”. *Journal of Business & Industrial Marketing* , Vol. 25, No. 5, pp. 332-343.
- Raddats, C. and Easingwood, C. (2010), “Services growth options for B2B product-centric businesses”. *Industrial Marketing Management* , Vol. 39, No. 8, pp. 1334-1345.
- Saunders, M., (1999). Linking external communication & organizational effectiveness. *Organizational Development Journal*, 17(4), pp. 35-40.
- Schmenner, R. (2009). “Manufacturing, service, and their integration: some history and theory”. *International Journal of Operations & Production Management* , Vol. 29, No. 5.
- Stremersch, S. and Tellis, W. (2002). “Strategic bundling of products and prices: a new synthesis for marketing”. *Journal of Marketing*, Vol. 66, No. 1, pp. 55-72.
- Theoharakis, V., Sajtos, L., & Hooley, G. (2009). The strategic role of relational capabilities in the business-to-business service profit chain. *Industrial Marketing Management*, 38(8), 914–924.
- Uлага, W., and Reinartz, W. J. (2011). Hybrid offerings: How manufacturing firms combine goods and services successfully. *Journal of Marketing*, 75, 5–23.

- Vandermerwe, S. and Rada, J. (1988), "Servitization of business: adding value by adding services". *European Management Journal*, Vol. 6, No. 4, pp. 314-324.
- Vega-Vazquez, M., Revilla-Camacho, M.A. and Cossio, F.J. (2013). "The value co-creation process as a determinant of customer satisfaction", *Management Decision*, Vol. 51(10), pp. 1945-1953.
- Verstrepen, S. , Deschoolmeester, D. and Van Den, R. (1999), "Servitization in the automotive sector: creating value and competitive advantage through service after sales". *Global Production Management*, Kluwer Publishers, Boston, MA, pp. 538-545.
- Ward, Y. and Graves, A. (2005). Through-Life Management: the Provision of Integrated Customer Solutions by Aerospace Manufacturers, Bath University, London (internal publication).
- Welch, M. and Jackson, R.P. (2007). Rethinking internal communication: a stakeholder approach. *Corporate Communications: An International Journal*, 12(2), pp. 177-198.
- Windahl, C. , Andersson, P. , Berggren, C. and Nehler, C. (2004). "Manufacturing firms and integrated solutions: characteristics and implications". *European Journal of Innovation Management* , Vol. 7, No. 3, pp. 218-228.
- Windahl, C. and Lakemond, N. (2010), "Integrated solutions from a service-centered perspective: applicability and limitations in the capital goods industry". *Industrial Marketing Management* , Vol. 39, No. 8, pp. 1278-1290.
- Wise, R. and Baumgartner, P. (1999). "Go downstream – the new profit imperative in manufacturing". *Harvard Business Review*, September-October, pp. 133-141

