Maximizing the Utilization of Universiti Utara Malaysia's Executive Development Center through Proper Supply Chain

Engku Muhammad Nazri E. A. Bakar, Masnita Misiran School of Quantitative Sciences, Universiti Utara Malaysia, Sintok, Kedah, Malaysia Email: enazri@uum.edu.my, masnita@uum.edu.my

Abstract: This study proposes a supply chain model for the Excecutive Development Center of Universiti Utara Malaysia (EDC-UUM) to enhance the usability and the visibility of EDC-UUM, thus increasing the demand for EDC-UUM services and indirectly, the profit as well. Specifically, this study embarks on two objectives which are to determine the resources available and opportunities that can be grabbed to strengthen the functions and usability of EDC-UUM and to develop a supply chain model for EDC-UUM that will incorporate all the resources and opportunities so that the demand for and the utilization of the training/seminar rooms and hotel rooms can be increased. To achieve the first objective, a SWOT analysis is conducted by assessing the current practice and future plans of EDC-UUM. The second objective is achieved by studying the characteristic of a hotel supply chain, and then maps the supply chain to suit the characteristics of EDC-UUM. In this report, the supply chain model focuses only on the first and second tier for EDC-UUM's product development that directly involves the use of local community members.

Keywords: Supply chain; room occupancy; mapping; SWOT analysis

Introduction

Since the 1970's, quality management has been a preeminent strategic focus of companies. In the 1980's, topics like lean and flexible manufacturing, and just-in-time became the means for companies to gain a competitive advantage in a quality-management environment. Now, globalization and the evolution of information technology have provided the catalysts for supply chain management (SCM) to become the strategic means for companies to manage quality, satisfy customers, and remain competitive [1].

SCM can be defined as the systematic, strategic coordination of the traditional business functions and the tactics across these business functions within a particular company and across businesses within the supply chain, for the purposes of improving the long-term performance of the individual companies and the supply chain as a whole [2]. Interested readers can refer to some other definitions in [3], [4], and [5], to name but a few.

Supply chain, on the other hand is "the alignment of firms that bring products or services to market" [6] or can also be defined as "a network of facilities and distribution options that performs the functions of these materials into intermediate and finished products, and the distribution of these finished products to customers" [7]. It consists of all stages involved, directly or indirectly, in fulfilling a customer request.

The supply chain not only includes the manufacturer and suppliers, but also transporters, warehouses, retailers, and customers themselves [8]. Furthermore, it also includes purchasing, manufacturing, warehousing, transportation, customer servicing, demand planning, supply planning and SCM. It is made up of the people, activities, information and resources involved in moving a product from its suppliers to customers.

Recognized or not, supply chains exist in both service and manufacturing organizations, although the complexity of the chain may vary greatly from industry to industry and firm to firm. Every organization has a unique chain (Roberts, [9]).

Background and Objective of Study

The Executive Development Centre of Universiti Utara Malaysia (EDC-UUM) started its operations in September 2006 as a training and seminar venue cum hotel. Specifically, EDC-UUM was established to perform several objectives:

- To act as Universiti Utara Malaysia (UUM)'s training hotel, not only to the students and staff of UUM, but also to all the other learning institutions as well as other government institutions and corporate bodies.
- 2. To generate income for UUM.
- To provide a unique, friendly, pleasant service, and atmosphere for UUM guests.
- 4. To create employment opportunities in the hotel industry to the potential local community.

Presently the General Manager who is responsible for the entire operation of the EDC-UUM establishment holds responsible over the overall EDC-UUM operation and answerable to the Vice Chancellor of UUM. He is accountable to the management team, overall management of hotel staff, budgeting and financial management, creating and enforcing business objectives and goals, managing projects and renovations, management of emergencies and other major issues involving guests, employees, or the facility, public relations with the media, local governments, and other businesses.

At present, the demand for training and seminar rooms as well as hotel rooms mostly come from UUM itself with some occasional demand from outside of UUM. Although the yearly revenue generated has already exceeded its operating cost for the past three years, record shows that the utilization rate of the seminar and training facilities as well as hotel rooms is still rather low. Thus, there is a need for the EDC-UUM management to increase its effort to improve and enhance its marketability.

UUM and its surroundings have a lot to offer. As a management university, UUM has plenty of management training experts. Its well-preserved training grounds, green campus, large student population, good highway connection, and its location that is very near to Thailand as well as a few other universities are some other plus points. All these should be capitalized by the EDC-UUM management to generate optimal revenue.

Currently, however, there is no concerted effort done by either the EDC-UUM management or the UUM management to really think of how to utilize the available opportunities. Therefore, it is high time for both the management teams to properly strategize EDC-UUM's functions.

The purpose of this study was to therefore help the EDC-UUM management to come up with a proper strategy to enhance the usability and the visibility of EDC-UUM, thus increasing the demand for EDC-UUM services and indirectly, the profit as well. Specifically, this study embarked on the following objectives:

- 1. To determine the resources available and opportunities that can be grabbed to strengthen the functions and usability of EDC-UUM.
- To develop a supply chain model for EDC-UUM that incorporate all the resources and opportunities so that the demand for and the utilization of the training/seminar rooms and hotel rooms can be increased.

Literature Review

As stated earlier, supply chain is defined as "a network of facilities and distribution options that

performs the functions of these materials into intermediate and finished products, and the distribution of these finished products to customers" [7]. For the purpose of a hotel's supply chain, perhaps the definition by Joseph L. Cavinato, Ph.D., C.P.M., director of ISM's Center for Strategic Supply Leadership (CSSL) and ISM professor of supply management at Thunderbird, The American Graduate School of International Management, is more appropriate. He defines it as "the appropriate linkage between a supplier, the organization (the hotel), and its customers for maximum benefit" [10]. The supplieroriented linkages involve raw materials, information, capital, and expertise, among others, while customer-oriented linkages may cover regular customers and new customers.

Supply chain exists externally and internally, thus requiring cross-functional effort, and more importantly, it is multi-tiered in the sense that it spans beyond the hotel's immediate suppliers and customers [9]. However, it is not logical to focus on each tier extensively. In some cases, a fourth-tier supplier might not even be known. However, understanding that the supply chain has multiple tiers, beyond just a supplier and a customer, will help the hotel management know what to focus their efforts and time on while making good decisions that do not negatively affect other tiers.

Any hotel's supply chain applications should comprise of relationships of the hotel with its suppliers (backward linkage) and tourism/customers intermediaries (forward linkage) [11]. Among the key factors to consider in a hotel supply chain model are financial and non-financial measures, as well as high collaborators and low collaborators [10]. Furthermore, for the non-financial measures, in addition to product flows, all information flows and services must be traced as well [9].

Information is crucial in any hotel's supply chain. It is used for two purposes namely, in coordinating daily hotel activities related to the functioning of the other drivers in the chain, and in forecasting and planning to anticipate and meet future demands [12]. Other than information, the hotel must also have the ability to meet the dynamic competition that exists in today's market environment [13]. To remain competitive, the hotel management should place more emphasis on understanding its competencies or capabilities [14].

According to [15] there are four types of competencies. They are competencies for service organizations, competencies for the human resources function, competencies for the operations function, and competencies for the marketing function. To enable competitiveness, the innovation aspect, which is lacking in the hospitality sector, including the hotel

sector [16], should be given more attention. Four types of innovations that deem appropriate in the hotel industry are management, external communication, service scope and back-office [17, 16] However, group the innovations into four clusters: (1) a service-or product-related cluster, (2) a market-related cluster, (3) a process-related cluster, and (4) an organization-related cluster.

Until very recently, there are limited researches, both empirical and conceptual, that examine the concept of SCM within tourism sector ([18] - [23]). Furthermore there were only 44 tourism SCM studies prior to 2009 with 66% published in 2008 and 2009 [22]. Out of that none focuses on hotel supply chain.

Developing the Supply Chain Model for EDC-UUM

In developing the supply chain model for EDC-UUM, we followed the steps suggested by [9]: Step 1: Defining and understanding the characteristics of the hotel supply chain. This includes knowing the market the hotel serves and the types of hotel services demanded [12] as well as determining some factors that are believed to be the sources of EDC-UUM's superior performance in terms of both financial and non-financial aspects, as well as the high and low contributors in EDC-UUM. The later can be achieved through a SWOT analysis [24].

In the case of EDC-UUM, customers come from UUM community itself, university guests and training and workshop participants from private and government institutions. Meanwhile, guests demands come in the form of rooms, training facilities, restaurant (F& B), and recreational activities (spa, health centre, jungle trekking, etc.). The recreational venues and facilities actually belong to UUM and therefore are not under EDC-UUM's direct management, but since EDC-UUM is a part of UUM, and some users of these recreational activities opt to stay in EDC-UUM, it is appropriate to include these recreational activities as part of the demands.

Next, we conducted a SWOT analysis for EDC-UUM by seeking information from EDC-UUM's board of directors as well as from some of its loyal customers and literature. The result of the analysis is given in Table 1 below:

Table 1. EDC-UUM's Swot Analysis

Strength Strong commitment of the General Manager which has a vast experience in hotel management. Energetic, highlymotivated, potential and metals and strong bureaucratic controls that tend to eliminate the EDC-UUM's competitiveness. Highly dependent on

- dedicated human capital. In addition EDC-UUM offers attractive compensations, perks and other benefits as most of the staff are appointed under the government scheme compared to those working in independent hotels in the same locality.
- The only budget hotel with premium facilities and services in its locality.
- Accessible to many university indoor and outdoor facilities.
- Worldwide internet booking, convenient counter for walk-in guest and mobile booking (via telephone).
- Ready market from the university population through in-house training,
 student activities, convocation, university guests.
- Availability of many training experts in various areas.
- Practicum students always
 available for hotel use.
- Free high speed wifi connection.
- EDC, although is a training centre, its functions are like those of a well-established hotel.
- Inventory/storage for certain items such as plants is handled by the university nursery.

Opportunity

- Situated in the Northern Corridor Economic Region (NCER). Among NCER main trusts is to transform and expand tourism sector in the region.
- Those who patronize EDC UUM network
 internationally and locally.
 Therefore EDC-UUM
 stands a prospect to obtain
 large market share
 through effective
 marketing strategy and
 strong management team.
- Strong support from the management of the UUM to the extent of directing all departments to give priority to EDC-UUM as a

- UUM's Registrar and Bursar Office on recruitment process and financial procedures.
- Located at a secluded locality and low occupancy rates compared to industry rates.
- EDC-UUM is patronized mainly by government agencies and internal guests (staff and students of UUM). Insufficient group travelers and corporate guests.
- Difficult to get public transport.
- Most of the management team may have strong base of academic background, but may lack of corporate experiences in hotel management.
- The appointed management from UUM lecturers may have conflicting interest between business opportunities or academic advancement.
- The hotel is backed up by the University. This may promote lack of resilient needed in the growing of a hotel chain, since the challenge to survive is lesser than the independent hotel.

Threat

- Direct and indirect competition from low budget (including guesthouses and lodging), budget and premium hotels in the district.
- Those who patronize EDC- Insufficient support from UUM network students and alumni.
 - Insufficient support from state and local government.
 - Bound to government procedure.
 - The constant changes in management team.
 - The emergence of small hotels in the surrounding area.
 - Since most clients are from UUM, late

- venue for their functions.
- Cheap labor and service from local community.
- UUM has a School specializing in legal system, thus providing cheaper fees in the legal matters compared to using consultation from private firm.
- The hotel can boost its finances by trying to develop the hotel not only as the accommodation and seminar purposes, but as a hub to many other interactive activities for the locals and outsiders.
- UUM has training experts, training grounds, green campus, large student population, good highway connection, and is close to Thailand as well as a few other universities.

- payments, and last minute cancellations happen quite often, leading to loss of opportunity.
- Employability policy difficult to terminate employees due to government policy

Step 2: Mapping the supply chain. This will help EDC-UUM to identify its links and gaps in its services. The map will show, graphically, where the hotel's time and efforts would be best spent. To map this EDC-UUM's supply chain, we relied on a model suggested by [10], which later used as a framework for getting started, as suggested by [25]. The mapping is as in Figure 1. The aspects involved are:

- A. Executive management
- B. Product development
- C. Sales and marketing
- D. Market research
- E. Account receivable
- F. Operation
- G. Account payable
- H. Supply management
- I. Finance
- J. Legal

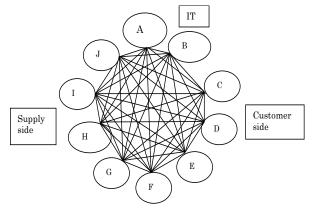


Figure 1. Supply chain model for EDC-UUM (Adapted from Richard Tapper, Environment Business & Development Group, 2003)

From Figure 1, it seems that in order to achieve the objective of increasing the demand for hotel facilities, the focus should be given to the product development, sales and marketing, market research, operation, and supply management.

Step 3: Developing the specific supply chain model. Once again, we followed the suggestion by [10], i.e. a supply chain can be divided into two linkages: supplier-oriented linkages (involving raw materials, information, capital, and expertise) and customeroriented linkages. The supply chain will be given in the next section.

Supply Chain Model Involving the Utilization of Local Community

Now that the focus areas have been identified, we combined the strengths and the opportunities, whenever possible, for the construction of the specific supply chain model. In this paper however, we are going to show only the supply chain model that involves the utilization of cheap labor and experts from the local community. Specifically, we proposed that these cheap labor and experts to be utilized for the following purposes:

- Resident artists unemployed youths can be trained by UUM experts to become resident artists for EDC-UUM. They can be invited to perform during dinner functions or any other functions held at EDC-UUM. The guests will be entertained and given a taste of local culture, performed by local people. In addition, this can certainly reduce the cost of having to invite professional performers.
- 2. Guest cooks occasionally, local, amateur but great cooks can be invited to supply their delicacies as part of the food served at EDC-UUM. This will add color and variety to the menu at EDC-UUM. They of course must be trained by UUM experts to ensure that the service or the food provided complied with the standards.
- 3. Traditional massage services guests can be offered with massage service delivered by traditional masseurs/masseuses upon request. EDC-UUM should keep a list of the available masseurs/masseuses from the nearby area. This is indeed a trend nowadays and being located in a rather secluded location, EDC-UUM's guests will certainly appreciate this massage services.
- 4. Suppliers of food items and raw food materials many local people in the community are farmers. They can be trained by UUM experts to produce quality fresh raw products and these raw products can be supplied to EDC-UUM. This way, the farmers will have a constant income and EDC-UUM can get fresh raw items cheaper and faster.

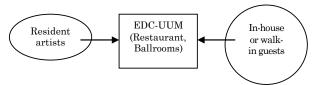


Figure 2. Supply chain involving resident artists



Figure 3. Supply chain involving guest cooks

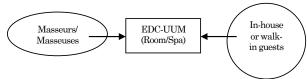


Figure 4. Supply chain involving traditional masseurs/



Figure 5. Supply chain involving local farmers

The supply chain model for each purpose is given by Figure 2, Figure 3, Figure 4, and Figure 5 respectively.

Conclusion

The EDC-UUM supply chain comprises of all goods and services that go into the delivery of EDC-UUM products to consumers. It includes all suppliers of goods and services whether or not they are directly contracted by EDC-UUM or its agents. It also involves many components including accommodation, transport and excursions, food and restaurants, souvenirs, and the infrastructure that supports EDC.

In this paper, we illustrated only supply chain models involving services that can be enhanced and new services that can be introduced through the utilization of the available local community. The next action is for the EDC-UUM management to form a working committee to plan and properly execute the suggestions. Perhaps, if EDC-UUM is not ready to implement all at one go, the management must prioritize their action plan.

Acknowledgment

We would like to thank Universiti Utara Malaysia for funding this research project and allowing us to attend this conference.

References

- 1. Russell, S. Roberta, and Taylor, W. Bernard, Operations Management: Quality and Competitiveness in a Global Environment (5th Edition). New Jersey: John Wiley & Sons, Inc., 2006.
- 2. Mentzer, J. T., and Min, Soonhong, Defining supply chain management, *Journal of Business Logistics*, 22(2), 2001, pp. 1-25.
- 3. Harland, C.M., Supply Chain Management, Purchasing and Supply Management, Logistics, Vertical Integration, Materials Management and Supply Chain Dynamics, in Slack, N (ed.) Blackwell Encyclopedic Dictionary of Operations Management. UK: Blackwell, 1996, p. 5.
- Hines, T., Supply Chain Strategies: Customer Driven and Customer Focused, Oxford: Elsevier, 2004.
- Lambert, Douglas M., Supply Chain Management: Processes, Partnerships, Performance, 3rd edition, Florida: Supply Chain Management Institute, 2008.
- Lambert, D. M., Stock, J. R., and Ellram, L. M., Fundamentals of Logistics Management, Boston, MA: Irwin/McGraw-Hill, 1998.
- Ganeshan, Ram, and Terry P. Harrison, An Introduction to Supply Chain Management, Department of Management Sciences and Information Systems, 303 Beam Business Building, Penn State University, University Park, PA, 1995.
- 8. Chopra, S., and Meindl, P., Supply Chain Management: Strategy, Planning, and Operations, Upper Saddle River, NJ: Prentice-Hall, 2001.
- Roberts, J. S., The Buzz about Supply Chain, *Inside Supply Management*, 14(7), 2003, pp. 24 – 27.
- 10. Kotler, P. and Armstrong G., *Marketing*, Singapore: Prentice Hall, 2006.
- Ozturen, Ali ve Sevil, and Guven, Supply Chain Management as a Sustainable Performance Booster for the Accommodation Enterprise: Evidence from North Cyprus Tourism Sector, International Journal of Business and Management, 4(2), 2009, pp.37-43.
- Hugos, M., Essentials of Supply Chain Management, Hoboken, New Jersey: John Wiley & Sons, inc., 2003.
- 13. Prahalad, C. K., and Hamel, G., The Core Competence of the Corporation, *Harvard Business Review*, 68(3),1990, pp. 79-91.
- Prahalad, C. K., and Hamel, G., Strategy as Field of Study: Why Search for a New Paradigm?, Strategic Management Journal, 15, 1994, pp. 113-118.
- 15. Aung, May, The Accor Multinational Hotel Chain in an Emerging Market: Through the Lens of the Core Competency Concept, *The Service Industries Journal*, 20(3), 2000, pp.43-60.

- Ottenbacher, M. and Gnoth, J., How to Develop Successful Hospitality Innovation, Cornell Hotel and Restaurant Administration, 46(2), 2006, pp. 205-222.
- 17. Orfila-Sintes, F. and Mattsson, J., Innovation Behavior in the Hotel Industry, *Omega*, 37, 2009, pp. 380-394.
- 18. Municina, S. and Popovici, V., Logistics and Supply Chain Management in Tourism, *The Logistic of Merchandise*,10(24), 2008, pp. 122-132.
- 19. Kozak, N., Uysal, M. and Birkan, I., An Analysis of Cities Based on Tourism Supply and Climatic Condition in Turkey, *Tourism Geographies*, 10(1), 2008, pp. 81-97.
- Zhang, X., Song, H. and Huang, G.Q., Tourism Supply Chain Management: A New Research Agenda, *Tourism Management*, 30(3), 2009, pp. 278-287

- Simon, V. and Roy, J., Global Service Supply Chains: An Empirical Study of Current Practices and Challenges of a Cruise Line Corporation, *Tourism Management*, 30, 2009, pp. 128-139.
- Piboonrungroj, P. and Disney, S. M., Tourism Supply Chains: A Conceptual framework, *PhD Network Conference*, Nottingham, UK, 1-3 July, 2009, pp. 132-149.
- 23. Rusko, R. P., Kylanen, M., and Saari, R., Supply Chain in Tourism Destinations: The Case of Levi Resort in Finnish Lapland, *International Journal of Tourism Research*, 11(1), 2009, pp. 71-87.
- 24. Day, G. S., The Capabilities of Market-Driven Organizations, *Journal of Marketing*, 58, 1994, pp. 37-52.
- 25. Cavinato, J. L., Flynn, A. E., and Kauffman, R. G., *The* Supply Management Handbook, Seventh Edition, United States: The McGraw-Hill Companies, 2006.