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# Logistics and Supply Chain Management in the Hotel Industry: Impact on Hotel Performance In Service Delivery

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Logistics and Supply Chain Management in the Hotel Industry: Impact on Hotel Performance  
In Service Delivery

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## **PART ONE**

### **Introduction**

In today's changing business environment, there is an increased focus on delivering value to the customer at the cheapest possible costs. Hotel companies, both big and small, must focus on how to offer products and services while keeping costs low. The current recession has affected businesses from all over the world, including the hotel industry (Brodsky, 2009).

Starting from the sharp decrease in corporate, group and leisure travel demand due to the global financial crisis, hotel occupancy rates have fallen in properties around the country. MGM Resort International, which owns a dozen properties in Las Vegas and employee workforce of 50,000, represents 12% as the state's biggest source of revenue (Mason, 2012). In spring 2011, MGM Resort International (MGM) barely escaped from declaring bankruptcy due to its long-term debt (Garrahan, 2009).

Today, with fifteen of the largest hotels in Las Vegas located on the Strip with room availability of 62,000, each hotel company is looking to be more attractive than their competitors (Tse, 2009). In an industry which is labor intensive many hotels are forced to make bolder and more visible moves in costs reduction to their operations. It comes as no surprise that much of these costs cutting efforts have been focused on payroll and other employee associated costs, like hiring freezes, cuts in employee perks, reduction of bonuses, and reductions in base salaries (Jones, 2009).

One area of the hotel industry that is usually left out in cost cutting efforts is its logistics and supply chain operations. A well established logistics and supply chain management system

can help the hotel industry give individual hotel companies a sustainable competitive advantage. The use of the right logistics and supply chain strategies helps not to only improve the quality and service of the hotel company, but drive down costs.

Companies like Amazon and Wal-Mart, two of the world's largest retailers, continue to grow due to the way they use their logistics and supply chain management to reduce costs and in turn to provide products and services at a lower cost to customers (Bonney, 2012). Both companies continue to thrive while their competitors, such as Best Buy and Sears struggle to stay alive.

This paper will focus on the role logistics and supply chain management plays in the hotel industry and the impact its practices have on the performance of hotel companies through costs reduction practices and properly managing its logistics and supply chain. For example Hilton Hotels have implemented logistics and supply chain practices in the company's operations to help save costs. According to Don Miller, regional director of supply management for Hilton, "Ten years ago, we were behind the curve compared to other hotel companies" (Terry, 2007, p.2). Hilton was typically faced with the challenge of dealing with different suppliers and distributors in their operations.

Logistics and supply chain management are usually used at operational, tactical, and strategic levels in the retail, automotive, health care and manufacturing industries. The hotel industry can benefit from the comprehensive and integrated practices of logistics and supply chain management, by delivering a consistently reliable and high quality service at the best costs. The paper will focus on defining logistics and supply chain management and how various practices have been used to reduce costs and the competitive advantage of logistics and supply

chain in the hotel industry. The final part of the professional paper will focus on how logistics and supply chain management practices can be implemented across the hotel industry.

### **Purpose**

The purpose of this professional paper is to identify and describe the way logistics and supply chain management practices can be used for costs savings. As hotel companies manage and operate their properties, they should focus on several aspects such as logistics management, inventory management, information technology, procurement and distribution, lean and green supply chain practices. Finally, this paper explores the competitive benefits that come from applying these concepts. Part three will contain a set of recommendations how they can be utilized in the hotel industry.

### **Statement of Objective**

Much research has been done on the growth of logistics and supply chain management and how it aims to improve profitability and ability to deliver value to the customers through practices that help save costs in different industries like manufacturing (Ellram, La Londe, & Weber, 1999). The goal of the paper is to identify the effects of logistics and supply chain management practices and how it can be utilized in the future to gain a competitive advantage.

### **Justification**

In 2012, the hotel industry continues to feel the stress from the economic downturn and reduced vacation and company travel across much of the world. Forecasts expect the hotel industry to see a 60% increase in occupancy rates which accounts for a 0.2% increase down from the 2% previously forecasted ( Hotel outlook, 2011). Furthermore, despite declines across most

major regions of the world since 2008, operating performance is improving as hotels are focusing on preserving both the top and bottom line.

As stated by Michael Fishbin, National Director of Hospitality Services, Ernst & Young LLP. “There is little doubt that most markets in the current economic climate are challenging at best and growth will be hard to come by for most operators and as a result, this year we will see hotel companies continue to focus more of their time on cost reduction than in improving operating efficiencies in their hotels”(Ernst & Young, 2009, p.1).

Focusing on the logistics and supply chain management area of an organization’s operations has helped a wide variety of industries become logistics powerhouses as part of their operations performance. If used in the hotel industry to help improve efficiencies and reduce costs, hotel companies will not only save money, but will also position themselves to be leading players in the industry.

### **Constraints**

Using existing literature this study is going to take a 360 degree look at how logistics and supply chain management practices can help hotel companies from a cost perspective. Due to the lack of research conducted on cost cutting using logistics and supply chain management in the hotel industry, much of the research discussed will be based on current knowledge and personal experience from working seven years in the logistics and supply chain industry, as well as information from different industries which will be adjusted to the needs of the hotel industry. Another constraint is the broad scope of the study because it focuses on multiple practices within logistics and supply chain management.



## **Glossary**

**Logistics Management** - Logistics management is a supply chain function that plans, implements, and controls the efficient, flow and storage of goods, services to meet customers' requirements. Logistics management is an integrating task that coordinates all logistics activities, as well as integrating these activities with marketing, operation management, finance, and information technology Council of Supply Chain Management Professionals (CSCMP, 2011).

**Supply Chain Management**-Supply chain management focuses on the management of supply chain activities to help to take advantage of customer value and attain a sustainable competitive advantage. It represents effort by supply chain firms to develop and run supply chains in the most effective and efficient ways possible. Supply chain activities focus on product development, sourcing, production, and logistics, as well as the information systems needed to coordinate these activities. (Handfield, 2011)

**Hotel Industry**-The hotel industry is a billion dollar industry that mostly depends on the availability of free time and disposable income. The hospitality industry covers a wide range of organizations offering food service and accommodation, meeting and events, gaming, entertainment, recreation and tourism services (STR Global, 2012).

## **PART TWO**

### **Literature Review**

#### **Introduction**

Competition in the US hotel industry continues in 2012. According to STR Global in May 2012, there was an increase of 3.4 % in occupancy to 63.4 %, the average daily rate saw a 3.1% gain to \$107.64, and a 6.6% leap in revenue per available room to \$68.30 (HotelNewsNow, 2012). In today's hotel environment, many hotel properties have started to understand that improving efficiencies in the hotel industry is not the only factor to consider, but their whole logistics and supply chain management operations need to be competitive by focusing on costs reduction. The literature review section will contain a detailed definition of logistics and supply chain management and the different practices used in the hotel and other industries. Last, the literature review will focus on why these practices have not been used in the hotel industry as a costs reduction strategy.

#### **Definition of Logistics and Supply Chain Management Concepts**

Logistics management started in the 1950s due to how complex it was for companies to ship products to customers at the right time. The concept of logistics management which is part of a company's supply chain involves the movement of products and services to the customers. The Council of Supply Chain Management Professionals (CSCMP, 2011) defines logistics management as:

“Logistics management is that part of the supply chain management that plans, implements and controls the efficient, effective forward and reverse flow and storage of goods, services and related information between point of origin and the point of consumption in order to meet customer requirements”(p.1).

From the definition, the core idea of logistics management is to meet customers' needs through optimizing movement of products and services within the company. Some activities in logistics management include inbound and outbound management, sourcing and procurement, planning and customer service at strategic, tactical and operational levels (CSCMP, 2011). Logistics professionals use their knowledge of the different logistics areas to coordinate resources in an organization through monitoring the flow of products and services.

Wilson (2009) writes that, with the growing understanding of logistics management as an area of competitive advantage, logistics management still faces some problems because companies still consider logistic management functions as a separate part of their operations from other company activities. Another key principle of logistics management is figuring out the competitive areas they need to focus on in their operations. Due to the continuous change in the logistics environment, it is important to take action promptly to fulfill customers' needs to help build and maintain customer value. Hence, only when logistics management strategies are based on the needs of the company, can they gain a competitive advantage (Gammelgaard & Larson, 2001).

The concept of supply chain management was introduced in the 1980s and today due to the attention given to supply chain management the definition has gone through a significant number of changes. The Council of Supply Chain Management Professionals (CSCMP, 2011) defines supply chain management in the following way:

“Supply chain management encompasses the planning and management of all activities involved in sourcing and procurement, conversion, and all logistics management activities. Importantly, it also includes coordination and collaboration with channel partners, which can be suppliers, intermediaries, third

party service providers, and customers. In essence, supply chain management integrates supply and demand management within and across companies” (p.1).

There are higher competition and customer expectations in the supply chain market in areas such as product availability and flexibility in operation, due to many companies focusing on how their supply chain can make them competitive in the market. As the definition of supply chain management continues to gain attention from companies, academicians, many corporations are applying supply chain management practices in their businesses (Gibson, Mentzer & Cook, 2005).

The definitions of supply chain management have been considered from literature in operations management, marketing, product design, finance, and information technology. The definitions have given knowledge on how these processes are integrated within and outside the company to provide a cohesive and costs-effective advantage against the competition (Mentzer, DeWitt, Keebler, Min &, 2001).

CSCMP (2011) implies that supply chain management is successful when the goal of getting the right product to the right customer at the lowest costs is achieved. This is a situation that will give the highest level of service to the customer and higher competitive advantage to the company. Therefore, supply chain management touches on the mixture of different supply chain activities to help maximize a company’s profit and total value.

## **Current Practices**

### **Procurement Management**

Procurement practices are used in the logistics and supply chain industry to support operational needs of the company by focusing on how purchasing is done, how the product is received from suppliers, building relationships with vendors and managing the procurement process by identifying opportunities and managing internal operations (Fantazy, Kumar, & Kumar, 2010). In today's procurement environment, importance has been placed on reducing costs during purchasing which leads to the best costs and value to its customers. Companies like Wal-Mart who go straight to the manufacturer, are very strong when they negotiate their price with vendors and make sure no other company is getting their products at the same low price. For example TJX companies the off-price retail store, makes their procurement strategy transparent by spending a lot of time with vendors to better understand their price structure and their strategy to best reduce costs.

According to Robert Lindsay, a buyer in charge of food and beverage procurement at the Venetian /Palazzo in Las Vegas, his hotel purchasing is done on a two week rotation using the company's master distribution plan philosophy which includes one to three vendors. They ask for the best price and promotions to help save on costs through the lower prices. In their procurement process they, try to stay within a 1 - 5% value as part of their product costs strategy (R. Lindsay, personal communication, June 15, 2012).

Due to the Venetian /Palazzo large structure and chain of events, a purchase has to go through to get processed. A study was done on their purchase order strategy to evaluate the steps

it takes to generate a single purchase order. The study showed it took \$75 to process a single purchase order. They reversed their strategy to cut down on these processes which lead to few drops and fewer invoices to generate up the chain. The procurement process has also helped the Venetian /Palazzo, consolidate purchasing that has led to larger discounts and improved service from suppliers, increased speed in the flow of important information, and reduced the time necessary for ordering. Robert Lindsay has also seen improvements in the company's relationship with vendors and an increase in the accuracy of orders (R. Lindsay, personal communication, June 15, 2012).

At the Four Queens, the manager in charge of purchasing, Wayne Bach, mentions that with its procurement process it focuses on three bids for 90% of its products. He tries to use specific vendors, using a specific rotation and adjusts based on the value of the products. The Four Queens uses procurement software which has helped them operationally match orders easily, improve auditing, and enable staff to more easily verify and track orders. The Four Queens has also seen a reduction in inventory levels and the costs associated with inventory (W. Bach, personal communication, June 13, 2012).

The Venetian/Palazzo and Four Queens, like many other hotel companies, use procurement software called Stratton Warren to manage the whole procurement process via e-commerce. The change from the usual ordering process was because the previous system did not give accurate information on supply chain issues (Kothari, Hu, & Roehl, 2005). Stratton Warren has been integrated with other systems like warehouse management and financial systems to help gain better visibility and control of their procurement process and prevent any industry

procurement challenges, like issues with purchases, deliveries, pricing, and quality standards, as well as help suppliers spend more time creating value for the hotels.

For example, Hilton Hotels changed their procurement strategy by combining buying into national contracts for its various brands, and using local providers where it makes financial sense. Hilton Hotels makes sure they build strong relationships with suppliers for good deals, and then negotiate markups with the distributors that handle warehousing and delivery. Also as part of their strategy to control the whole supply chain process, they are making changes internationally by focusing on integrating their international procurement (Terry, 2007).

### **Distribution Management**

The role of distribution management is to get the right goods, to the right customer, at the right time. Distribution management is used as a strategy to minimize the transportation costs required to move goods from its network of suppliers to the company for consolidation, before being sent to the customer (Zhang, Song, & Huang, 2009). Retailers like Target continue to build distribution centers at strategic locations across the United States. Target uses its distribution management to supply a majority of its inventory to its stores, which helps provide replenishment faster (Tirschwell, 2008).

At the Four Queens and Venetian /Palazzo properties in Las Vegas, vendors and suppliers ship directly to in-house property warehouses, which serve as their own distribution centers. The Venetian/Palazzo which is a convention driven property and the Four Queens which is an older and smaller property are sometimes faced with the challenge of a lack of space to store huge inventories, making them particularly vulnerable to stock-outs and other forecasting errors.

The Four Queens hotel has separate areas for full pallets, cases, and specific item picking of food orders. The hotels make sure they frequently monitor picking operations which involves selecting food orders for the chef, special request from guest, and for various restaurants in the property, throughout each shift and make needed adjustments, like moving pickers from full pallets to case picking depending on the workload. According to Wayne Bach, anytime products are moved in the warehouse, they make sure the move is reflected by a transaction. This helps prevent any integrity issues with the inventory. The Four Queens has also implemented a cycle count program to help eliminate physically taking inventory count which has helped them in the area of costs saving and time (W. Bach, personal communication, June 13, 2012).

At the Venetian/Palazzo several techniques help reduce touches in the warehouse, as well as its picking operations. According to Robert Lindsay, investments in warehouse management systems have helped save costs since employees are picking directly to the carton, removing dedicated packing locations. Also they changed the way product arrives for the different departments by having orders arrive simultaneously on the dock for the different departments that require the same product. The only challenge with this is the changes in the way orders flow, which vary based on the order, day and hour. Even with the challenges, the ultimate goal is to have orders arrive at the same time and have their systems flexible enough to take in small timing changes when necessary. Since the Venetian/Palazzo is a convention property, it makes sure as customer requirements change, it has the products available in the warehouse (R. Lindsay, personal communication, June 15, 2012).



## **Logistics Management**

Logistics management practices focus on areas like transportation management and picking of orders. Effective logistics management operations lead to a higher revenue flow, costs structure improvements, and reduction in transportation costs if all operations are streamlined correctly. Wal-Mart is the retail company with the best logistics management strategy because it uses its own trucks to service its stores from their distribution centers (Hoske, 2009).

The Four Queens has a vendor compliance program, where they notify vendors about how their product should arrive. The integration of operations with suppliers has helped hotel properties achieve the utmost throughput and highest efficiency, in the least amount of time. Another key factor working with suppliers has helped provide products designed for easy management within their facility due to issues like space and staffing. (W. Bach, personal communication, June 13, 2012).

According to Robert Lindsay, at the Venetian/Palazzo, their logistics management strategy involves the relationship between procurement as well as vendors. They both are held accountable for checking and evaluating vendor performance, observing at what percentage of the suppliers purchase orders conform to requirements, and where they are conforming in area of pack size clarification and consolidating orders when they have big drops and correct pricing on invoices that match the bid. The goal is to get to 100% compliance which does not always happen. Although direct communication with the suppliers typically occurs through procurement, the property's dock workers identify issues and provide immediate feedback to the

procurement staff who communicates with the supplier (R. Lindsay, personal communication, June 15, 2012).

One challenge at the Four Queens is the fact that since it does not use a centralized ordering process, vendors have hundred of purchase orders and the limited amount of dock staff and the heat in Las Vegas, makes scheduling deliveries difficult and expensive. Suppliers are forced to use less than truckload (LTL) carriers to send orders to individual properties instead of sending items in truckload (TL) quantities. In contrast, through Wyndham's centralized purchasing system, the company is able to receive favorable pricing and make certain that vendors are reliable by further reducing overall costs. Wyndham also uses its internet based inbound transportation tools to help control visibility into which suppliers are actually ready to ship and the quantity through its web based scheduling capabilities (Wyndham Hotels & Resorts, 2012). Many hotels across the country have started purchasing products using this strategy since it minimizes order status and delivery time uncertainty.

### **Inventory Management**

Inventory management practices help companies place orders accurately as well as maintain different assortments of products and supplies. Inventory management systems are used to create reports and track costs on which suppliers and vendors have the best costs as well as used to reconcile or adjust inventory after physical counts (Aluri & Munnang, n.d).

Companies like Wal-Mart have developed their inventory management strategy to focus on the needs of their customers. Wal-Mart gives store management the power to manage their unproductive inventories. Information technology plays a big part in inventory levels for Wal-Mart by making sure customers get the products they want (Ricker & Kalakota, 1999).

Wal-Mart manages their inventory through suppliers using automated ordering systems which connect vendor's computer with Wal-Mart distribution centers and stores. When an item is identified as low in stock, a message is sent to the vendors to replenish the store or distribution center (Ricker & Kalakota, 1999). This helped Wal-Mart focus on their stock levels and know which products sold the most, while vendors were able to lower costs and pass on the saving to Wal-Mart through better prices.

At the Four Queens monthly inventory counts are conducted to help prevent discrepancies with products and supplies. For high ticket items physical counts are done daily. The Four Queens understands that if inventory is not managed properly, it means dissatisfied customers, cash stuck in warehouses and slower sales (W. Bach, personal communication, June 13, 2012).

Today, to help streamline inventory management in stocking and receiving orders, the most popular inventory management equipment, developed by Motorola, have bar code scanning capabilities, make inventory immediately visible from the moment the delivery arrives, and can be instantly reconciled with the order. This has lead to real-time information which can help reduce errors, correct out of stock issues, and create accuracy (Motorola Solutions, 2012).

Similar inventory management solutions have helped retail companies like JCPenney, Kohl's, and Lowe's reduce errors from manually managing inventory. For example, when I worked for JCPenney we saw an increase in productivity and reductions in costs for carrying excess inventory since we were able to correctly track current inventory. In every stage of a company's logistics and supply chain, inventory exists and inventory costs to the company are

between 25% to 40% of its value. In the hotel industry, the importance placed on proper inventory management is vital to maintain a competitive advantage (Ruteri & Xu, 2009).

According to Robert Lindsay at the Venetian/Palazzo, their inventory management strategy is to stay well stocked with the supplies and products they need to run their operation since this helps provide consistent service to their clientele. Their strategy focuses on keeping a proactive eye on usage and communication on a regular basis with their internal and external customers. Venetian/Palazzo has established an inventory management practice of buying what they need depending on its use, which helps establish a correct par-level based on their 72 hour forecasting. The company continues to update its inventory management systems to do different things like track sales and available inventory, and as well as communicate with suppliers in real-time. Also to ensure that costs arising from inventory are minimized, they have adopted the first in-first out (FIFO) inventory policy (R. Lindsay, personal communication, June 15, 2012).

Retailers such as Home Depot stock thousands of product from all over the world and they understand that with those kinds of numbers, an effective, well-organized inventory management and control system is needed (Maloney, 2009). For example, Lowe's inventory system helps it maintain low prices by telling the distribution centers and customers which products are selling and when items will be available in the store since its inventory system is connected to its Point of Sales System (POS). The systems ensure the store always has enough of what the customer wants and balances that goal against a retailer's financial need to maintain as little stock as possible (Maloney, 2009).

## **Green Supply Chain**

Green supply chain focuses on how companies require their suppliers and distribution partners to deliver final products in areas of manufacturing, transportation, and saving money by optimizing with green solutions. Green supply chain management in the hotel industry can be seen in three different areas; procurement, manufacturing, and distribution activities. These days green supply chain is an important logistics and supply chain strategy, that helps companies achieve profit and market share by using green practices (Herrera, 2011).

In a company's logistics and supply chain management, going green is important for participants and it creates a win-win position for both the company and environment. For example, the Venetian/Palazzo, which is a convention driven operation, has seen an increase in guest demand for environmentally friendly products. Robert Lindsay mentions that most of their customers consider it important that they have good environmental record. The customers who are looking for green products are ready to pay premiums of 5% or more for green products. As part of the Venetian /Palazzo's green strategy, they look into local purchasing options focusing on areas like southern Utah, Pahrump, northern Nevada and southern California for chicken, beef and dairy products. Currently the Venetian/Palazzo is working with vendors who adopt green principles and best practices like recycling and reducing energy consumption which will lead to lower purchasing costs (R. Lindsay, personal communication, June 15, 2012).

Marriott International and many large suppliers for the hotel industry have launched the Hospitality Sustainable Purchasing Consortium with the aim of setting up a Hospitality Sustainable Purchasing Index as a purchasing guide for the hotel industry. Scores will be on a 0-5 point scale focusing on components like corporate social responsibility, environmental impact,

and sustainability (Herrera, 2011). The Hilton's Doubletree Hotel in Oregon is a good example of green logistics and supply chain. The hotel purchases 60% of their supplies from within a 500 mile radius for its restaurants. InterContinental Hotels Group have a code of conduct and monitoring programs for its suppliers to help create sustainable supply chains (Green Hotelier, n.d).

Levi Strauss & CO is another great example of a company that focuses on green supply chain practices in its procurement, manufacturing, and distribution operations. The company makes sure that procurement activities include the reduction, reuse, and recycling of materials in the process of purchasing and they make sure materials are only purchased from green partners. Manufacturing requires products with low environmental impacts. In its distribution facilities they focus on packaging and space utilization in the warehouse and trailers to cut down on excessive handling (Levi Strauss & CO, 2012).

### **Information Technology**

Information technology practices focus on the information available within the supply chain. Companies integrate and use multiple systems to distribute information about customer orders electronically which help to save costs. For example, information technology has changed the manner in which businesses interact with suppliers and customers (Gunasekaran & Ngai, 2004). Today different information systems are integrated, like Point of Sales, to help forecast data, monitor inventory levels and sales trends, and in turn companies have seen cycle time reduction, quicker order filling, inventory at the right safety stock level, and customer service improvements.

7-eleven has been able to use Radio-frequency identification (RFID) technology to help integrate accurate data, information systems, better process optimization, and system communication through the use of information technology in their logistics and supply chain operations through system integration. Also with the use of information technology, it has been able to exchange real-time data within the supply chain (Supasansanee & Kasiphongphaisan, 2009).

Robert Lindsay at the Venetian /Palazzo believes that, information technology is an important, efficient, and effective supply chain strategy. The Venetian /Palazzo uses a strategy of collaborative planning, forecasting, and replenishment and through this system integration they not only share information with their logistics and supply chain partners, but also jointly make decisions to improve performance. Also vendors are able to enter electronic bids in the company's system, which and has lead to better forecasting and allows multiple users to see items (R. Lindsay, personal communication, June 15, 2012).

One of the biggest challenges with information technology at the Four Queens and the Venetian/Palazzo is the poor flow of information which ultimately affects areas of the hotels supply chain in areas of costs, flexibility, and delivery of goods and services. These days many hotel companies are beginning to understand the role information technology plays in the coordination between different parts of the supply chain and the impact on supply chain performance (W. Bach, personal communication, June 13, 2012).

Information technology continues to differentiate small and big hotel chains in the industry that are faced with the issues of vendor and office applications not working with each other, which has lead to a gap between sales and procurement systems that affect forecasting.

For example, Hilton Hotels identified the lack of integration between the different systems like purchasing, inventory, and accounts payable as leading to incorrect data. Hilton Hotels fixed their system integration issue and adapted a strategy where there was a standardized supplier and products across their properties (Terry, 2007).

### **Lean**

The concept of lean started in the manufacturing and automobile industry focusing on waste reduction to help increase or add value to the customer's experience as well as to increase profits. The use of lean practices has helped companies become more customer-focused, flexible, and profitable. Reduced cycle times have given companies, the ability to deliver every time at the same costs to the business and improved working capital positions from reduced inventory using total quality management strategies (Abdi, Sohrab, & Mohammad, 2006).

According to Jason Frost, engineered standards project supervisor at TJX companies, lean is used as their main strategy for operational improvement, to improve overall supply chain outcomes, and challenge process improvement in their distribution centers. In addition, lean principles are used to engineer improvements in store replenishment processes and have also been extended to other areas of the business (J. Frost, personal communication, June 28, 2012). Lean has by practice been associated with the elimination of waste in business processes. Lean was initially concentrated on improvements in manufacturing operations, but has since been seen in different industries to broaden supply chain improvements in industries like the hotel industry.

In the hotel industry, the concept of lean is used to help control and maximize internal effectiveness. It helps customers continue to get the best service by focusing on how they can



save during production and costs reduction. The Four Queens and Venetian/Palazzo use lean to improve different supply chain processes, such as inbound trailer cycle times and space utilization at their properties. Lean adds superior process and cycle time speed, as well as drops operational costs. In today's competitive hotel environment with a lot of pressure to gain shorter product life cycles and with changing customer demands, the Venetian /Palazzo adopted a Just-in-Time strategy to their operations to adapt to new customer demands (R. Lindsay, personal communication, June 15, 2012).

Starwood Hotels & Resorts Worldwide, applied lean practices to their operation and saw a \$100 million in profits to its bottom line by adding value through optimizing, simplifying, and streamlining operations (Ante, 2007).

Amazon uses lean logistics to deliver higher logistics and supply chain performance, and give its clients a competitive advantage in its fulfillment centers across the country. Amazon's lean strategy has helped the company reduce waste, see fast turnaround times, and reduce costs in operations. To implement lean practices, Amazon uses industrial engineers to design warehouse plans that simplify inbound and outbound flows, maximize efficiency, and provide high space utilization (Sandoval, 2002).

### **Underutilization of Logistics and Supply Chain Practices in the Hotel Industry.**

The different practices mentioned above indicate that logistics and supply chain management can be used to help save costs in the hotel industry. From the literature review there is a primary focus on quality, costs and service, reliable suppliers, short delivery cycles, and innovation in logistics and supply chain practices. A few hotels companies like Hilton

Hotels have applied these practices in their operations, but hotels that have not utilized these practices are still at a low level (Birk, 2008).

One issue with using logistics in supply chain in the hotel industry is its complex nature, since it involves many areas of the business process. The complexity in logistics and supply chain management practices depends on the number of variables to monitor and control, inventory levels, kinds of vendors required, and revenue are considered complex variables. The way orders are delivered are sometimes not uniform. For example, due to the complex nature of picking orders and reducing shipping costs, many companies have implemented wave planning software where orders are assigned into waves then picked simultaneously. The adoption of wave planning strategies has helped picking efficiency and overall workflow. Complexity can also be found in the relationship between inventory management, picking orders, and storage, focusing on how each action affects each other up the chain.

Another reason why logistics and supply chain management is not utilized in the hotel industry is that hotel professionals do not have the skills in different logistics and supply chain functions. Hotel managers being able to lead the project, execution and controlling of cross-functional logistics and supply chain solutions, which could be at an internal level or in areas of supplier relationship collaboration, manufacturing customization, and service delivery (Ante, 2007).

Hotel companies do not utilize logistics and supply chain management because managers only focus their functional skills on procurement and inventory management activities leaving out important areas like lean and green supply chain practices (Fedele, n.d). It is important for

managers to work at an operational level and become subject matter experts to be able to understand the challenges involved with day to day issues.

The hotel industry does not have enough qualified individuals with leadership capabilities to organize projects both internally and externally with partners. To help make logistics and supply chain projects successful. It is important for hotel managers who can demonstrate experience in this complex and competitive environment, to evaluate and establish solutions, and to implement change both in the company and with supply chain partners. This will ensure that initiatives are integrated correctly (Wilson, 2009). Other important skills are problem solving, communication and project management. Managers are also not technology developed and do not know how to deal with the challenges of technology selection, execution, and application through interacting with the different systems like purchasing, inventory and warehouse management.

Another possible reason why logistics and supply chain management are not fully utilized in the hotel industry is because they are considered only operations management tools. In today's changing business environment having an effective and efficient logistics and supply chain management strategy continues to be important in industries like automotive, manufacturing, and retail. However, its practices can be spread to the service industry where hotel companies like Hilton and Starwood Hotels have tweaked their logistics and supply chain strategies and operations in areas of purchasing to help manage and optimize logistics and supply chain to help keep costs low (Ante, 2007).

The costs and time it takes to implement logistics and supply chain practices can be an issue for the hotel industry because of its fast pace. Due to the dynamic nature of logistics and

supply chain management, implementation comes with a lot of challenges and issues to overcome. For example at my current employer, Levi Strauss & CO, the distribution center is going through an expensive *Breakthrough* project that has affected the business process due to system and construction integration issues, which have affected scheduled go live dates. Costs especially with implementation, setup, training people, and stabilizing the go live process, are high. Last it is important during the implementation process for each member to have the same interest and commitment to the project.

Resistance to change is a normal reaction by employees at all levels. Some of the reasons are because employees do not understand why the change is needed and employees are scared they do not have the skills for change. This poses a threat since managers do not understand how to effectively manage and embrace change with new processes (Fedele, n.d). When implementing logistics and supply chain management, managers forget to focus on the big picture which could add value and increase competitive advantage in the hotel industry.

The final reason for this underutilization is that turnover rates in the hotel industry are very high because organizational culture and leadership issues are not positive, which lead to issues such as understaffing and low morale. This makes it difficult for managers to implement logistics and supply chain practices since weak retention strategies leads to constantly training and hiring, and training costs which managers do not want to deal with (Bonn & Forbringer, 1992).

## **Conclusion**

Logistics and supply chain management practices which help reduce costs and deliver high quality service to customers are still underutilized in the hotel industry even with its success in hotel companies like Wyndham Worldwide and Hilton Hotels in their operations. The research has shown that efforts on eliminating waste in hotel operations are valid and important ways to reduce costs through adopting logistics and supply chain practices, one area that hotel managers overlook in their operating budgets. It is important that in today's competitive environment, hotel companies need to make commitments to learn how these practices provide superior customer service and return on investment.

The literature review also revealed a low level of understanding by the hotel industry of how logistics and supply chain practices can be applied in the service industry. The use of logistics and supply chain management practices in the hotel industry will teach managers the best mixture of practices to implement in the complex logistic and supply chain network. A lot of solutions need to be considered to guarantee that hotels benefits from these practices to help catch up with the fast growing competitive market. Factors like technology, skill sets, and capital investment play a big role in the success of logistics and supply chain practices in the hotel industry.

Finally, this section focuses on what the future holds for the hotels and managers that adopt these practices in their operations and how logistics and supply chain management practices with a great degree of operational and costs efficiency will contribute to sustaining a competitive advantage.

## **PART THREE**

### **Introduction**

The literature review has shown the role logistics and supply chain management can play in a company's performance, such as the hotel industry. In today's changing hotel environment and with the complex nature of logistics and supply chain management, steps need to be implemented to improve product quality and service to attain a competitive advantage. It is important for hotel companies to focus on improving logistics and supply chain efficiencies as well as reducing costs. According to the literature review, if logistics and supply chain management practices are used in the hotel industry as in other industries like retail and manufacturing, the industry will see the following benefits:

- Logistics and supply chain management practices can save hotels between 8% to 15% of costs that can be used for other business processes.
- Logistics and supply chain management practices can lead to a reduction in order errors through the use of electronic devices with IT applications that can improve the speed of orders through data exchanged with other members of the supply chain.
- Logistics and supply chain practices can help manage inventory costs with *Just-in-Time* strategies and software that manage the procurement, and inventory at the property level.

Even with all the benefits stated above, more hotels need to be proactive by combining the different logistics and supply chain practices into a cohesive link between vendors, logistics, procurement, and transportation. This will make hotel companies dominate players in the market

while they save money. Part three will serve as guide on how to implement logistics and supply chain management in the hotel industry from a tactical, strategic and operational level.

### **Results**

In today's competitive environment there is an increased interest in logistics and supply chain management practices since performance is not only determined by actions and decision, but also the improvements on return on investment and greater profitability. Even though logistics and supply chain is considered an operations management strategy in the hotel and other service industries, they can use these strategies to help add value to their properties.

The literature review has shown that for successful participation in the hotel industry, logistics and supply chain collaboration and integration are important at all levels. Collaboration can help the hotel industry gain competitive advantage by improving the overall performance through a group approach, rather than independently. Increased collaboration by logistics and supply chain partners will lead to an easy and synchronized approach that helps create lower costs and higher profits since there is better flexibility and improved utilization of resources.

Logistics and supply chain integration helps with sharing benefits, resources, and risk which helps create complete process efficiency and effectiveness. Compared to a single company integration also allows faster delivery of products of good quality at a low costs which helps identify issues and solutions immediately, since integration adds information on new ideas (Naslund & Williamson, 2010).

In hotel logistics and supply chain management, supplier partnerships and relationships are very important. The long-term partnership helps the organization and its suppliers achieve

major benefits through their direct, long-term union, and encourage joint planning and problem solving efforts. These strategic relationships allow hotels to work well with a small number of vital suppliers who are prepared to share accountability for the success of the products and work together to reduce inefficient time and effort.

Relationships are used to improve customer satisfaction and prevent customers from going to the next hotel. With changes to customization and personalized service for customers, building relationships has become important for corporate survival. The relationships allow hotels to differentiate themselves from competitors, maintain loyalty, and in turn pass off value to its customers (Li, Ragu-Nathan, Ragu-Nathan & Subba Rao, 2006).

Hotel companies that use logistics and supply chain management strategies experience a high level of information sharing based on the quality and quantity of information. This has to do with how information is communicated between the different partners (Yang, H & Fu, 2007). The level of information shared is used as a basis of competitive advantage, since together they understand the needs of the final customer better and can respond quicker to changes.

The biggest issue with implementing logistics and supply chain management in the hotel industry is its complex nature. From the literature review, as service levels can be improved to meet customer expectations, so can the nature of logistics and supply chain management (Vickers & Kodarin, 2006). For example, the Four Queens in Las Vegas will request 2,000 products based on its small size, while the Venetian /Palazzo will order 20,000 based on its larger size. Both hotels need to use different logistics and supply chain strategies to make sure the right products are available for customers. The different levels of complexity create a



situation where the different hotels manage their complexity better than other hotels in areas of costs reduction and achieving higher return on investment.

Bad system integration is another obstacle facing the implementation of logistics and supply chain practices in the hotel industry, since the different systems used do not interface with each other. This affects hotel operations since poor integration between accounts payable, purchasing, and inventory provide inconsistent information. This makes it harder for hotels to get the best prices and products from suppliers (Gunasekaran & Ngai, 2004).

Another issue with implementing logistics and supply chain strategies in the hotel industry is change. Change can be very shaky which leads to intense, challenging, and uncomfortable situations since it is seen as a bad thing. In the hotel industry there is resistance because people feel adopting logistic and supply chain strategies will lead to changes in their current employment status and possible fear of the unknown in the new job. Also seasoned management find it hard to play an important role in the change process since they feel the old strategy has worked in the past and no change is needed. (Fedele, n.d)

Even with all the problems involved with implementing logistics and supply chain management in the hotel industry, the literature review has shown its success with companies like the Hilton, Four Queens, and the Venetian/Palazzo. Using logistics and supply chain management practices improve value and performance for customers by capitalizing on costs saving opportunities. According to David Depkon, Vice President of Purchasing Operations, for Hilton Supply Management, “A properly run supply chain management program can save a hotel 8% to 15 %”( Higley, 2004). Pushing the envelope and developing more cohesive logistics and

supply chain management strategies will help save time and money as operating margins grow tighter.

### **Logistics and Supply Chain Implementation Recommendations**

IBM'S 2009, Global Chief Supply Chain Officer Study conducted for the metals and mining industry mentions that 82% of companies believe that, the increase in supply chain competition is very aggressive in today's logistics and supply chain environment. The competition has led to new revenue opportunities which represents new competition. The article talks about how it is important for companies to implement better strategies to reduce costs and manage the complexity of logistics and supply chain management by collaboration and sharing information across the network, as well as using analytics and simulation to evaluate the increasing complexity (IBM, 2009).

Different concepts have been developed to understand how the successful implementation of logistics and supply chain management can be achieved. For the hotel industry logistics and supply chain activities are grouped into tactical, strategic and operational levels to help create a more systematic approach by focusing on how implementation will happen from a higher level, then linking that to long-term goals and finally how these results translate in the short-term.

#### **Tactical Level**

**Executive support.** The tactical level of implementation of logistics and supply chain management focuses on steps that are taken at a higher level for successful implementation. It is important that, during the tactical stage of implementation there is 100 % executive support and buy-in from senior managers and having the right people in place who understand the value

logistics and supply chain implementation will bring to their properties. Managers need to take a lead in communication and making sure all employees understand why the initiatives are essential to the company's business strategy. For example, when Owens & Minor decided to implement logistics and supply chain management practices in their distribution centers, the executive management team played a big part in its transition, by helping spread knowledge on the benefits the new strategy will bring, as well as transferring that knowledge to others in the company from purchasing, finance, and supply chain teams to ensure active collaboration. (Harps, 2002)

**Visibility and Control.** It is important to have visibility and control to implement logistics and supply chain practices to help make better decisions. The hotel environment has seen an increase in the need for visibility and control to help understand the decisions made by vendors and suppliers to help managers make well-informed logistics and supply chain decisions (Partridge, 2011). This helps hotel managers make important decisions on parts of costs in areas of transportation and shipping. Pat Welch of Adaco Services, who provides software to the hotel industry, states that "That lack of control, coupled with the volume of product that hospitality companies manage, causes them to lose money that should go to the bottom line." Technology plays an important part in visibility and control since it gives hotels a good picture of inventory at the property and suppliers are able to monitor operations through real-time data within the network, as well as to implement efficient procurement strategies with better controls (Terry, 2007, p.2).

**Benchmarking.** This goal of benchmarking during logistics and supply chain implementation is to enhance design and operational effectiveness. It is important for hotel managers to measure set targets against results in the different areas of operation like order filling, transportation, and vendor compliance. Hotels can use information from benchmarking to improve processes and make better decisions. Organizations like the Supply Chain Council use the supply-chain operations reference (SCOR) model as a benchmarking tool, where there is a great deal of information on best practices and data on benchmarking analysis for members to use as a source of reference when implementing logistics and supply chain management in their operations (Naslund & Williamson, 2010).

**Creative solutions and risk taking.** The goal of developing creative solutions and willingness to take risk during logistics and supply chain implementation is important since a lot of focus has been placed on reducing costs and increasing margins wherever possible. This helps focus on negotiating better costs and focus is placed on the customer's demands. For example, Yum! Brands Inc uses a third party to negotiate its procurement for all its restaurants by using a strategy called redistribution. This strategy helps to cut costs since goods bought from the different manufactures are stored in one warehouse and transported to their stores using truck load (TL) instead of less than truck load (LTL) carriers which are more expensive (Partridge, 2011). In the area of risk taking, it is important for managers to be willing to take risks and challenge the status quo, since logistics and supply chain management focuses a lot on innovation. It is important for hotel managers to take a critical look at how they currently run their operations and ask why they do what they do. This helps challenge each manager to look at their logistics and supply chain functions from a fresh perspective. Managers have to establish

themselves as leaders by coaching their logistics and supply chain teams to think differently, and give them the power to look at things in a new way (Harps, 2002).

### **Strategic Level**

**Change management.** The strategic level of implementation of logistics and supply chain management is linked to the long-term benefits over a period of time. Change management plays a big part in logistics and supply chain implementation in different areas, from making changes to the whole process or fixing issues with vendors. With the fast pace of the hotel industry during implementation, it is important for managers to think and act in real time to help enable innovation and change, as people will always challenge the process. Developing a clear vision also helps the team with the change process, since it gives a clear picture of which aspects of the operation are changing, which in turn gets employees more motivated about the process and its future. Lastly it is important to create and manage the change process with trust and over communication within the whole supply chain network to help understand the requirements and impact on future hotel logistics and supply chain operations (Harps, 2002).

**Think Lean and Green.** Even though lean started in the automotive industry, it can be used in any business process like in the hotel industry. Hotel managers need to use lean strategies when logistics and supply chain is implemented immediately instead of later. Since lean is focused on the end user, the main focus during implementation is to maintain profitability, save money, and add value that fulfills customer needs. During the lean implementation phase, it is important for managers to identify the service value stream focusing on design layout, development, procurement, and distribution process strategies. In the hotel

industry, lean practices help in the optimization of logistics and supply chain from start to finish. Hotel managers need to ensure that, while maximizing efficiencies, one function does not improve at the expense of the other. Lastly it is important that service is flowing efficiently by identifying any bottlenecks, and once identified managers need to add activities that add value without interruption (Abdi, Shavarini & Hoseini, 2006). While lean initiatives focus on cutting down on activities that do not add value to the logistics and supply chain management process, green thinking focuses on the environmental issues involved when implementing logistics and supply chain management practices. During implementation, hotels need to focus on things like environmentally friendly packaging of products from suppliers as well as carbon-footprint reduction in transportation to help lower costs and provide a competitive advantage. In today's logistics implementation, with the increase in environmental compliance requirements, high costs related to logistics, supply chain sustainability, and corporate social responsibility programs, green solutions are vital in hotels logistics and supply chain management (Herrera, 2011).

**Top talent and Accountability.** When implementing logistics and supply chain management in any company, it is important to be able to sustain the implementation, which involves building a solid foundation that includes top managers to drive the process with deep expertise in logistics and supply chain functions and business skills. Starbucks recruits from top logistics and supply chain management programs and provides ongoing training for current employees (Cooke, 2010). In the hotel industry, this will help companies focus on quality and costs. Starbucks also uses rotational programs to help increase skills as processes continue to improve over time. Hotel managers need to make sure that, even though employees understand

their job responsibilities and understand how the decisions they make will take the company to the next level, holding employees accountable plays a big part in its success.

**Right information technology.** Today as information technology has become an important and integral part of every business process, when implementing logistics and supply chain management in the hotel industry, it is important to have the capabilities of ensuring that most company decisions are done at the speed of light. With the right information technology, the hotel can communicate information on supply chain and demand changes easily in areas of inventory, distribution, transportation, and logistics management, since the accurate information is produced due to the analytical and visibility capabilities to make efficient business decisions quickly (Harps, 2002).

### **Operational level**

**Costs.** The operational level of logistics and supply chain management implementation focuses on decisions that are related to how to make the tactic approach happen in the short term. Today hotel costs associated with logistics and supply chain strategies have placed the emphasis on increasing efficiency and reducing total costs to stay competitive (IBM, 2009). During implementation, costs need to focus on purchase and inventory costs. It is important to monitor purchase costs with products that have a short life cycle and have to be replenished frequently, since hotels usually buy too many stock-keeping units (SKU) for the same use. It is important that during implementation, hotels have a product portfolio and suppliers that are consistent and develop a strategic relationship with each other to help keep costs down in the process. Inventory costs during implementation need to focus on supplier relationships and using strategies like just-in-time inventory to reduce inventory costs in the hotel industry. Inventory

costs can be cut down by forecasting, planning, and scheduling orders in the most costs-efficient way which allows the hotel to react to changes in demand and supply (Constantine, Ruwadi, & Wine, 2009).

**Simplifying complexities.** It is important in logistics and supply chain implementation for hotel managers to manage strategies to eliminate complexities that do not add any value to the organization. It is important that logistics and supply chain functions are broken down into different areas based on which areas matter the most in the supply chain. This segmentation helps hotel managers easily identify the relationship between costs and price with suppliers and helps in negotiating better prices (Constantine, Ruwadi, & Wine, 2009). For example, one way Starbucks eliminated complexities in its logistics and supply chain transformation, was they made changes to how coffee beans were delivered to its processing plants. They decided to build facilities in those regions that helped reduce lead times and labor costs. (Cooke, 2010). This makes it important during implementation for hotel managers to regularly look at their logistics and supply chain operations and eliminate complexities that do not add value.

**Right metrics.** Applying key performance indicators (KPI's) to logistics and supply chain operations during implementation is vital to help monitor how well suppliers and vendors are meeting set targets, which helps improve top and bottom line performance. Starbucks created a weekly scorecard to monitor third party carrier performance in areas of costs, service, and productivity agreed upon with their partners (Cooke, 2010). Applying KPI's to operations will help create transparency, improve costs, and help serve customers better, as well as lay the foundation for future logistics and supply chain initiatives.



**Risk management.** Considering risk management is critical during logistics and supply chain implementation for hotel managers in order to evaluate risk associated with implementation in their strategy. Managers should have a good understanding of the benefits involved with sharing risk information across the network. It is important to be able to manage risk, using information available on the difficulties of monitoring risk and to be able to react to risk through the use of standardized information (IBM, 2009). Hotel managers need to make use of past history as a benchmark for future risk and it should be used by hotel managers as a tool to achieve better logistics and supply chain visibility.

### **Conclusion**

In today's changing hotel environment, it is important to apply costs saving strategies to the different logistics and supply chain functions such as inventory management and logistics management to optimize end-to-end costs and efficiency. Companies with low logistics and supply chain costs usually give managers the power to make changes to the whole process. Hotel managers need to focus their attention on changing customer demands and should be able to identify the costs benefits that can be derived from utilizing logistics and supply chain management costs saving strategies.

The implementation guide was broken down into three different levels from tactical to strategic to operational to make sure the different groups involved in implementation do not see the long-term goals in different ways. If the logistics and supply chain management guide above is executed correctly and adjusted based on the changes in the environment, the hotel industry will be able to use these strategies as a guide to gain a competitive advantage.

### **Recommendations for Future Research**

This study was based on literature and articles mainly from the retail and manufacturing industry and personal experience working in the logistics and supply chain industry for seven years where the competitive advantage of logistics and supply chain in costs reduction has been the main focus. This study showed that there has been a lack of research done in the hotel industry on the importance of logistic and supply chain management practices. This shows that researchers need to extend their studies beyond the retail and manufacturing industry to include the hotel industry on how the use of logistics and supply chain management can be an area of costs saving for the industry. This will help hotels decide on the best combination of practices to implement in their operations.

There are many important factors that can be used to implement logistics and supply chain management strategies in the hotel industry as a competitive advantage to save costs. Most of the research found focused on only procurement, leaving out important areas like logistics, distribution, and transportation management. The final recommendation is a study that should to be conducted to explore the organizational size and logistics and supply chain structure to examine the impact on supply chain practices and competitive advantage.

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