Study Of Importance Of It Adoption And Information Sharing As A Parameter Of Logistics And Supply Chain Practices On The Overall Performance Of The Hotels In Nagpur Region

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Abstract
Supply chain management is the management of flow of material and information forward and reverse in a manufacturing firm or a service firm. Logistics management is of planning, organizing, and managing activities affecting the production and services. Hotels are one such service providers that are highly influenced by the SCM and logistics practices. This paper attempts to gain understanding of the importance of supply chain and logistics practices in the hotels in Nagpur region. Research was conducted to understand the impact of IT adoption and Information sharing as important contributors to efficient Supply Chain practices. The findings of the paper are that IT adoption and Information sharing have positive impact on the overall performance of the organization. Though the impact of Supply chain practices is not dominating the organizational performance but are definite contributors of the organizational performance.

Keywords: Supply chain management, logistics, Organizational performance, Information Technology

Introduction
Hotels play a very important source of food for the people who are out of homes. So in the city like Nagpur where the students population from outside is highly rising, middle class people willing to pay for the hotel services at weekends instead of taking home food and establishment of star rated hotels in the city, hotel industry is on boom. And it is this facility that facilitates the further attraction of guests towards a place because it makes their visit more convenient. A hotel refers to a commercial establishment providing lodging and meals on temporary basis to its customers.

The city of oranges has got a five star with the Pride Hotel. Barely half a kilometre from the airport, the Hotel is strategically located between the city and the industrial belt- Buti Bori, in a lush green, pollution-free environment. The Radisson Blu Nagpur hotel’s location is ideal for business travelers visiting the city, since it features two dedicated business floors and a convenient business center. Tuli group is the central India’s finest chain of hotels and resorts completes 20 years of its reliable services in 2013. The five beautifully architecture, oriental and ageless hotels and resorts are the jewels in the crown of Tuli group. Some of the other hospitality majors such as The Kamat Group of the Orchid chain of hotels, the Sun and Sand Group, Hyatt & Leela have purchased land and plan to begin work soon. Taj Group is also coming up with a hotel in the much-touted Empress City.

Because of the establishments of these big brands in Nagpur, small hotels and the restaurants called as the budget hotels have become cautious as the middle class in Nagpur is now willing to avail various services in the lifestyle or luxury segments and food instead of going to a regular restaurant.

Supply Chain Management
Supply chain management (SCM) includes all the activities including generation of goods and services from the suppliers ‘suppliers to the customers’ customer. It mean managing across traditional functional areas in the company and managing interactions external to the company with both its supplier and customer.

Supply chain management is closely related with the concept of best practices. Adopting supply chain management initiatives first and the most importantly requires that companies should have a long-term view. They must have an extensive focus on all the mediums that are deployed in the transformation process of the raw materials to end-user consumable. Top management commitment is also essential at this point. Organizations should redesign how business is done at every level in and outside the organization.
In today’s changing hotel environment, it is important to apply cost-saving strategies to the logistics and supply chain functions such as inventory management, logistics management, procurement management. 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. While trying to focus on these functions it is equally important to understand that management system may change depending upon the type of hotel either a single hotel or a chain of hotels. We are very used to using supply chain when it comes to chain of firms that supply same raw material from its head office to the chain of hotels it has all over. And the supply chain sounds relevant to such organisation also. But very little or sometimes no emphasis have been given to the material and information flow, which ultimately contributes to supply chain and logistics, in single hotels.

Following figures gives the difference between the supply chain management and logistics management of single and chain of hotels.
Organisational Performance
Organizational performance comprises the actual output or results of an organization as measured against its intended outputs (or goals and objectives).

Organizational performance encompasses three specific areas of firm outcomes: (a) financial performance (profits, return on assets, return on investment, etc.); (b) product market performance (sales, market share, etc.); and (c) shareholder return (total shareholder return, economic value added, etc.). The term Organizational effectiveness is broader.

Objectives Of Research
a) To study the overall impact of IT adoption, as an instrument of logistics and supply chain, on the overall performance of the hotels.
b) To study the overall impact of Information sharing and information quality, as an instrument of logistics and supply chain, on the overall performance of the hotels.

Hypothesis Framed:
H1: Firms with high level of IT adoption practice will have high level of organizational performance.
H2: Firms with high level of information sharing and information quality practice will have high level of organizational performance.

Supply Chain Parameters under Study:
a) Level of information sharing:
Information sharing has two aspects: quantity and quality. Both aspects are important for the practices of SCM and have been treated as independent constructs in the past SCM studies. Level (quantity aspect) of information sharing refers to the extent to which critical and proprietary information is communicated to one’s supply chain partner. Shared information can vary from strategic to tactical in nature and from information about logistics activities to general market and customer information. Many researchers have suggested that the key to the seamless supply chain is making available undistorted and up-to-date marketing data at every node within the supply chain. By taking the data available and sharing it with other parties within the supply chain, information can be used as a source of competitive advantage. Moreover, the effective use of relevant and timely information by all functional elements within the supply chain as a key competitive and distinguishing factor.
b) Quality of information sharing
It includes such aspects as the accuracy, timeliness, adequacy, and credibility of information exchanged. While information sharing is important, the significance of its impact on SCM depends on what information is shared, when and how it is shared, and with whom. Information sharing can radically improve the way global companies and their partners do business, especially in the wake of increasingly globalization and outsourcing, which has and will continue to have a profound effect on supply chain operations. By exchanging information such as inventory levels, forecasting data, and sales trends, companies can reduce cycle times, fulfill orders more quickly, cut out millions of dollars in excess inventory, and improve forecast accuracy and customer service.

c) IT adoption
Adoption of IT in the operations has been very effective and efficient. The effective use of IT provides the firms edge and the competitive advantage. For Supply Chain Logistics to be effective, IT is highly regarded as the enabler. Supply chain helps many organizations in delivering the products to customers both upstream and downstream and many functional areas within the organization. IT allows the companies to communicate and coordinate between different value adding activities with their partners and between functions within their own operations. IT adoption has always helped a firm in cost reduction, increasing flexibility, increasing response time, and improving customer service. Hence it stands to be an important variable under study.

Organisational Performance Variables Under Study
Organizational performance refers to how well an organization achieves its market-oriented goals as well as its financial goals. The short-term objectives of SCM are primarily to increase productivity and reduce inventory and cycle time, while long-term objectives are to increase market share and profits for all members of the supply chain.

Organisational performance was measured considering the following variables
a) Return on investment (ROI),
b) Market share,
c) Profit margin on sales,
d) The growth of ROI,
e) The growth of sales,
f) The growth of market share,
g) And overall competitive position

h) Competitive advantage: Competitive advantage is the extent to which an organization is able to create a defensible position over its competitors. It comprises capabilities that allow an organization to differentiate itself from its competitors and is an outcome of critical management decisions.
Research Design
Population
As the study deals with the impact of Logistics and SCM practices on the organisational performance of the service industry, the population for this research is the service Industry of Nagpur Region.

i. In this phase of the study, the service industry specifically the hotels of the Nagpur region were taken as the sampling unit of the population.

Sample Unit And Sample Size
This was the first phase of data collection. Samples for the study were taken from the prevailing hotels of Nagpur region.

Sampling unit : hotels, Sampling Size:: 23 Hotels

Method Of Data Collection
Data collection was done through as structured questionnaire. In the first phase of data collection, population was the hotels & restaurants of the Nagpur city. Data was collected through the questionnaire which comprised of 52 statements.

The item scales are five-point Likert type scales with 1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree, 6 = not applicable.

Data Analysis:

Responses of the hotels on inability to implement SCM practices due to poor IT infrastructure

The above chart explains the responses given by the hotels on their inability to implement SCM practices due to lack of IT infrastructure. It was observed that almost 65% hotels believe that due to improper implementation or negligence to the implementation of IT infrastructure in the firms, Supply chain practices could not persist.
Testing Of Hypotheses:

H1: Firms with high level of IT adoption practice will have high level of organizational performance.

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<td>Regression Statistics</td>
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<td>Standard Error</td>
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<td>-0.03</td>
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<td>0.52</td>
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Test of Significance

$ t = 2.5$

From the t value, using t distribution, p value is calculated.

$ p = 0.002$

Hence $ r $ is not significant at 5% level of significance.

So we reject null hypothesis and interpret that there is impact of IT adoption on the overall organisational performance.

Interpret of the results

The multiple correlation coefficient is 0.48. This indicates that the correlation among the independent variable which is Information technology adoption and dependent variable which is organisational performance is positive.

Coefficient of determination is 0.23 which means that the IT Adoption explains the variation in the organisational performance of the organisation by 23%. The 77% remaining are explained by other parameters that remain unexplained.

These unexplained parameters can other SCM parameters like supplier partnership, customer relationship etc.

H2: Firms with high level of information sharing and information quality practice will have high level of organizational performance.
SUMMARY OUTPUT

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<td>IS</td>
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<td>0.12</td>
<td>0.32</td>
<td>0.12</td>
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</table>

Test of Significance

\[ t = 4.7 \]

From the t value, using t distribution, p value is calculated.

\[ p = 0.000118 \]

Hence \( r \) is not significant at 5% level of significance.

So we reject null hypothesis and interpret that there is impact of Information sharing and information quality on the overall organisational performance.

Interpret of the results

The multiple correlation coefficient is 0.72. This indicates that the correlation among the independent variable which is information sharing and information quality and dependent variable which is organisational performance is positive.

Coefficient of determination is 0.51 which means that the Information sharing and Information Quality explains the variation in the organisational performance of the organisation by 51%. The 49% remaining are explained by other parameters that remain unexplained.

These unexplained parameters can other SCM parameters like supplier partnership, IT adoption etc.

Conclusions

a) First hypothesis was that hotels with high level of IT adoption had high organisational performance. The multiple correlation coefficient is 0.48. This indicates that the correlation among the independent variable which is Information technology adoption and dependent variable which is organisational performance is positive. Coefficient of determination is 0.23 which means that the IT adoption explains the variation in the organisational performance of the organisation by 23%. The 77% remaining are explained by other parameters that remain unexplained.

b) Secondly it was hypothesised that hotels with high level of information sharing had high organisational performance. The multiple correlation coefficient is 0.72. This indicates that the correlation among the independent variable which is information sharing and information quality and dependent variable which is organisational performance is positive. Coefficient of determination is 0.51 which means that the Information sharing explains the variation in the organisational performance of the organisation by 51%. The 49% remaining are explained by other parameters that remain unexplained.

Hence it can be concluded that IT adoption and Information Sharing and Information quality has positive impact on the organisational performance of the hotels. Though the impact is not significant but they contribute to the improvement in the performance of the hotels. Hotels need to have better human resources to manage the IT infrastructure. IT adoption here does not mean a very complex setup of computers and use of softwares. But proper use of a computer for data storage, accounts management, customer database, feedback recording and analysis, use of internet, intranet or extranet faculties to
connect to its customers, order receiving, billing etc could make the system more standardized and improve the performance of the hotels.

References:

