

## **SUSTAINABLE TOURISM SUPPLY CHAIN AND ICT ROLE IN SUSTAINABLE CONSUMPTION AND PRODUCTION HOSPITALITY**

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### **Abstract**

*In the supply chain, the importance of having tourism is that all the components are resolved to generate revenue, cash, facts, and reliability among the consumer's customers in the supply chain. The supply chain comprises suppliers of goods, and services that go into the delivery of tourism providing the consumers, and this also includes the tour operators, the agents, the various supporters, suppliers, ground handlers, accommodation providers in the tourism industry connected with the supply chain.*

*Tourism supply chain has many components, (as they are called components in manufacturing) which include accommodation, transport, excursion, restaurants, handicrafts, food preparers, waste disposal, and the infrastructure that support tourism, to destinations where they are required. Tourism like all supply chains operates through business to business, and is applied to deliver sustainable performance improvement, in which management plays an important role, with good financial performance in the supply chain.*

*In supply chain the much use of consumable goods have bought in reduction, reuse, re-cycle, approach, with good services, green disposal in the destination required, improve waste management, tourism development facilities, as they have been compelled to have adequate treatment facilities, with the concept for disposal solid, wet waste, re-cycle, water facilities for washable purposes, to give full prevention, protection in tourism supply chain.*

*In supply chain the objective of the study is to analyze the association between supply chain management of tourism industry, from the context of various other industries, consider the strategic importance in supply chain, sharing with the partnership for information, with the sharing of the quality of information, which coincide with some of the unique key factors in tourism industry.*

*A tourism supply chain can be identified upon analyzing the contribution of participants in the value chain, while supply chain in tourism which can be defined as complete evaluation for several reasons of performances, for considering the importance in tourism chain, as unit of performance, tourism can be characterized based on the potential of the tourism organization, the attraction within the location, as tourism chain is unique, in parlance to beauty, considering interaction between different industries. To maintain and manage such uniqueness, and prepare characteristics, each tourism supply chain may need different approval, and analysis in the tourism supply chain.*

**Keywords:** *Performance, Supply chain, Tourism, Uniqueness*

## **Introduction**

In tourism supply chain hospitality is the mainframe of the component, transportation is defined as network, of hospitality, excursion, restaurant, and selling of handicrafts, are some of the activities engaged in different activities which form a part of the tourism supply chain. Supply of food products, and also the use of infrastructure in the tourism supply chain, has been a part of tourism. The information communication technology plays an important role in tourism, travel, hospitability, and integrates the activities in tourism in the industry, which are essential for the success of the tourism industry. Tourism takes full account of the current situations, future economic social environment impact; which can be addressed to the needs of the visitors, confining to the industry environment, and to the application of consumer intentions in the supply chain.

Sustainable tourism is considered as an important aspect in the supply chain, committed to the industry of making low impact on the environment, as they become a part of the culture, and helping to generate future employment. Sustainable tourism is probably making the premier visit in tourism, by giving the importance of the visit, its impact on environment, society, economy, as it involves the primary chance given to transportation to the location, for arrangement of local transportation, accommodation, entertainment, with shopping facilities in the supply chain. Tourism supply chain is always a demand versus

supply game, and focus on demand is to ensure relevant propositions, and is launched to entice customers in travel tourism.

### **Tourism supply chain involves packages in several services:**

1. Travel agencies operators' e-tourism, to finalize tourism.
2. Finalize the tourism package, transport, and accommodation, hotel industry which includes catering, food beverage, leisure services, sports activities, and health services.

The co-operation of a network with good information technology is available within the tourism supply chain, necessarily can represent a competitive advantage to smaller tour operators, wherein there is the availability of better facilities, being more sensitive to competition, in the tourism supply chain.

The correlation between tourism, and sustainability of the tourism industry, is the outcome of the attraction, considered to be the competition of each of the organizations within the tourism industry in the supply chain.

Tourism is a multi-segment industry, where products are consumed on the spot. Tourism industry is also a fragmented industry, with high complexity, due to price sensitivity, nature of demand, and the perishability, intangibility, of the products in the tourism industry which is considered as important in the tourism supply chain.

Tourism supply chain, like all other businesses in the supply chain operates through B2B relationships, and can deliver, bring in sustainability, in performance improvement through good financial performance of the tourism industry, by working to improve the business operation of each supplier in the supply chain.

The difference in the tourism supply chain is that tourists are in demand, along with the product in demand, and the product they procure, which are of high service requirement in higher proportion, and which requires prompt or immediate production so to enjoy the holiday preference in the supply chain.

The most important distribution system applied in the tourism supply chain;

1. First stage: from a primary supplier of services to a consumer through reservation, either directly to travelers.
2. Second stage: where the system involves any middle man or an agent to do the work.

In tourism industry distribution strategy has an impact on development, and it is essential to channel the distribution in an appropriate form the beginning to end to end in supply chain tourism

## **Purpose of the Study**

In supply chain tourism plays an important role, and in particular the well placed are to contribute to the increasing employment in social obligation, improving productivity, and bring in economic growth.

Financing the supply chain tourism, is more sustainable to development as this faces the challenges, which includes finance for different sources, either through private sources, or through public, the impact on green investment tourism, incentives to adopt green tourism, in business practices, in order to develop a prosperous business practices, and comprehensive long term plans, and practices, and ideas for sustainable tourism development in supply chain:

**Green Tourism in Supply chain:** Supply chain is given prominence and priority in the development of green tourism, and requires to examine, and evaluate various manufacturing organization to make, and source to the disposal of the product, that can be coordinated, and controlled as green tourism supply chain, is to be coordinated in the design, manufacturing, maintenance, marketing, and consumption of products in tourism supply chain.

**Inventory strategy in supply chain tourism:** The most important strategy is the inventory classification that attracts tourism as the activities that coincide with accommodation, transportation, class of products that are necessary to match with an understanding or as per visitor's demand, satisfaction, destination, and to ensure that the expectations are met as per requirement in tourism supply chain.

**Customer service strategy in the tourism supply chain:** by providing accommodation, flight details, and an attraction of tourist destinations, which are a vital part of the tourism industry in the tourism supply chain.

**Customer satisfaction integration:** in tourism supply chain integration that links all the entities in supply chain preferably the manufacturers, the suppliers, distributors, the potential customers, who cooperate, to form a supply chain, which include cities, places, and the development of the required products into a single structure of organization, with greater integration process in tourism to form a tourism supply chain.

Sustainable tourism business can also develop the existing business in tourism, and attract a better view in business, bring in better opportunities in the tourism supply chain, and bring in better revenue in the supply chain, as it also contributes to the reputation of the organization operating the tourism supply chain. The supply chain that contributes with quality to improve, and to provide better customer service, with contribution to increase customer satisfaction, strength, bring in value, enhance publicity, and marketing of tourism opportunities, and to have better opportunities, acceptance in the tourism supply chain.

## **Literature Review**

In supply chain tourism (comparison) examines the characteristic of the different types products, identifies, explores, issues, and the concepts of tourism, although there is an emerging progress, but is uneven, and most of the progress focus on marketing activities, and fully considering the range of suppliers, involves range in provisioning and consumption of tourism products. Tourism industry nature and characteristics, and its supply chain in the areas of demand

management, two-party relationship, supply management, inventory management, coordination, information technology.

**Concept of tourism in supply chain:** Tourism supply chain industry comprises suppliers, operators, tourists and other organizations, and tourism supply chain, purchasing various resources, and transferring them to services, and support which finally goes into the hands of the tourists.

Supply chain tourism is also determined by the comprehensive products of the travel industry in the supply chain, which necessarily cannot supply all the services required in coordination with relevant tourism aspects in the supply chain.

On tourism supply chain, the operators level the supply chain management, incorporates planning, scheduling management activities which concerns purchasing, supplier's selection and internal logistic movement in collaboration with marketing personnel.

**Features: Supply chain as compared to traditional** manufacturing industry, supply chain tourism is characterized by high complexities, risk, and very important is the quality control aspect in supply chain tourism, complexity of the tourism products, also leading to complexity of the tourism leading to complicated process in supply chain tourism.

The requirement of high quality, coordination, allocation, and a reasonable resource allocation, and if uncontrollable a good quality of service may not be admissible in catering, accommodation, good transportation, supplier efficiency, which are the aspects that face

challenges, and it is necessary for the travel enterprises to coordinate with any semi-finished product, necessary for tourist in supply chain, and control product quality in supply chain.

**Problems faced by supply chains in tourism:** Tourism is basically to satisfy the needs of the tourist, either domestic or internationally, however the allocation of the needs is to be optimized. Tourism does lack any special innovation in supply chain, which is caused by intensive market competition, in the field of supply chain. Any depth of tourism, experimental ideas, and supplies pertaining to high class content, becomes insufficient in the supply chain.

## **Research Methodology**

### **Primary Data**

In supply chain tourism it is to identify the role of mobile technology in achieving sustainable and smart tourism, from the technology, and development, practices under tourism. Tourism is a process that collects, and consolidates the primary data on the destination, provider on-site, experience, to users with the support of mobile technology and creates value of business, source of data includes the physical infrastructure, social connection, government human interference, and the integrated effort to focus on efficiency and sustainability.

Tourism in the supply chain has also given preference to individual travelers, with relevant information on arranging trips, relevant maps, routing, having made through Internet of Things facilities.

Based on supply chain tourism many scenic spots have come back on competitive terms, and this way of marketing, and reception centre, at various tourism spots, has made e-commerce to get in touch with tourists spots in supply chain, with reference to accommodation, catering, and entertainment, various activities, bringing in improved conditions in tourism supply chain.

In this junction many travel enterprises are gradually losing their positions of their potential in the market, hence a diversified tourism supply chain has been adopted to personalize tourist's spots in the supply chain.

In the tourism supply chain travel enterprises are provided with risk which are become complicated, as they are unable to respond to the market changes, the climatic changes, in tourism supply chain, this has led to changes in supply chain, this consequence has led to short term benefits, thus ignoring the scenic spots, which result in damages to environment, due to various climatic changes, as they have no influence on the tourist spots that exist in tourism supply chain.

## **Secondary Data**

In order to bring in sustainable tourism in supply chain, is that planning should be developed to manage tourism activities from a perspective point of view, which in the long run may become an obstacle, and on the other hand reduce the damage caused to tourism, on travelling, like maintaining the secondary data on ecological balance of tourism, industry, and protection, development of tourist spots, sports

facilities,(water skiing) in tourism supply chain, as this becomes an obligation, in order to improve the quality and economy of the country in tourism supply chain.

Tourism in supply chain should have the responsibility to protect culture, environment scene, water sports activities, and medical programs, thus reducing damage to environment, and chose low carbon transportation, E-commerce tourism in supply chain.

Platform to develop mobile App, which has changed the way to obtain information, proper delivery, results in tourism supply chain. Tourism development in the supply chain has realized the time and space, limitation, of the traveler, that can deal with suppliers with the capability of getting other information directly. Tourism development in the supply chain is collectively analyzing travel information that should be beneficial to make quick decisions, and improve products and services in the tourism supply chain.

## **Discussions/Findings**

In tourism development supply chain consumer habits have changed radically, along with the technological development, travel consumption habits, and the search for digital information. Towards with the changes in transportation behavior, the bigger transportation has suffered the trans-media in supply chain, and the techniques, considered in commercialization, with improvement in technology, to the practices in tourism is practically non-existent in the tourism supply chain.

Supply chain tourism offers significant opportunities for development, given that the sustainability, size contribution, to internationalize trade, rapid growth, and the privilege to improve for other sectors through the tourism value chain.

In order to remain sustainable in tourism, it is the trend to use the policies of proper purchase; it is the practice to purchase the requirement so as to have sustainable development at the tourist destination. Tourism on research on environmental has concluded that the activity of manufacturing, similar to tourism development, is compared to other activities is sustainable, the challenges for service sector are largely ignored, but sustainable, since supply chain has given utmost important to tour operators, as the product depends upon the activities of suppliers, such as providing accommodation, transportation, and relevant activities that form an important part of the contribution to a sustainable tourism, which will be more effective, efficient, through responsibility for which the impact of the supplier is important in tourism supply chain.

Supply chain comprises of the different suppliers of all the goods and services that go into the delivery for development of tourism, as the products are required by the consumer, but they are required also to maintain the harmony among the different aspects, which affects largely the satisfaction of the tourist in the tourism industry. If the tourists become satisfied and contented, they will come again, and it is able to be liable to increase the revenue, which can be distributed, so the prime concern of the tourism, and supply chain is necessarily

satisfied with guests being given importance, and thus earn revenue, profit in the tourism supply chain.

Main parties involved in tourism supply chain are the providers of accommodation, transporters, and the activity tourist handlers in their day to day functions in tourism, which involves also the handling of food supply, and the operations of tourism supply which operates in B2B relationship, and that the tourism supply chain is able to deliver a sustainable performances, along with the financial planning, performances by working on improved business, so that each supplier benefits from the life cycle of tourism supply chain..

The main difference between tourism supply chain, and other sectors is that tourist travels are to the requirement of product, and the product they buy have a particular high performance and service, as it involves the higher proportion of people involvement, in the production for which a holiday experience at a sustainable supply chain is envisaged. Tourism management is a sustainable management and cannot be diminished in the tourism supply chain.

In supply chain a system performance RevPar (revenue as per available room) was arrived at by dividing hotel guest room revenue by the room count, and the number of days in the period. ADR (average daily rate) was calculated by taking the average revenue earned from room and dividing it by the number of room's sold during the seasons during the year.

## **Future Work/ Conclusion**

The tourism industry in the supply chain must become more rigorous in its effort to monitor, reduce, resource consumption, emission in the supply chain. An integrated approach is required regarding the strategies, for decoupling, tourists in growth for environmental degradation and excessive growth.

To spread the efficient use of natural resources there is the need to be strict, bring in good impact on planning, with an effective control on natural resources, energy management, improve building up relationship, replacing the use of renewable energy, which should be supported and replicated contextually in a very sensitive manner in supply chain.

Tourism and hospitality industry are mainly developed, influenced by the size of information technology, the digital technology used as per the requirement of the environment. The growth of information and communication technology has become an integral part of the hospitality industry. The use and spread of information and communication technology has brought in a great potential to accelerate growth in tourism and hospitality, in the process that human resources can be developed, by reducing the regulatory network in the development of tourism and hospitality industry, thus increasing the knowledge.

Information and communication technology offers good innovative ideas to cities embedded around with good potential buildings; good water management systems, excellent roads, good transportation (metro rail) developed in big cities, efficiency in energy systems which

includes solar, wind, thermal power, and thus a reduction in waste management.

Information and communication technology innovation application offers for good transport system, manufacturing, agriculture, urban development, which help to bring in the climate change, and it optimizes value chain, in supply chain, by reduction in cost, resource usage, and emissions, thus providing resilience to climate adaption, with launching of space programs, bringing in real timely climate and weather information.

Information and communication technology, manages crisis management, disruption, and has the means of implementing a consumption pattern by the use of data, which increases transparency, and which empowers tourism economic development in the supply chain.

Information and communication technology implements good partnership in most global manufacturing industries promoting technology, building capacity in production, improving hospitality, by enabling good data to build up and having accountability to the cost in the tourism industry in the supply chain.

Sustainable development is so much in focus on global warming, climate change, also the continuous depletion of natural resources. Implementation of sustainable consumption and production pattern is going on to achieve a sustainable development in tourism and hospitality industries. The growth of industrialization is making

developing countries more susceptible to unsustainable patterns of production and consumption.

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