

Role of roadside amenities in integrating the supply chain infrastructure in tourism business ecosystem: A case oriented approach

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ABSTRACT

Enabled by emerging technology, process innovation and new management approaches, partners in tourism supply chain networks engage in new ways to achieve their commercial and non-commercial objectives. Several authors find evidence that the business network view is being extended and they introduce concepts such as the Tourism Value Ecology or Tourism Business Ecosystem (TBE). In a TBE the competition is complemented by an increased cooperation in order to boost agility, flexibility and efficiency, often leading to an environment of co-opetition. A business ecosystem is a networked system which comprises the buyers, suppliers and makers of certain products or services, the socio-economic environment, including the institutional and regulatory framework. It can be complemented by a process and technological infrastructure (platform) aimed at creating a business ecosystem environment for the networked organizations that supports the cooperation, the knowledge sharing, the development of open and adaptive technologies and evolutionary business models. The study adopts the view that tourism involves networked orderings of people, materials, mobilities and cultures; production as well as consumption of those different elements. The study is conducted among randomly selected 100 Vazhiyoram restaurants and hotels in Kerala by collecting primary data from the concerned entrepreneurs. The study throws light on how infrastructural alignments promote efficiency in supply chain networks.

Key words: Tourism business ecosystem, Infrastructural alignment and coordination, Tourism value chain and Co-opetition.

1. Introduction

This paper is an attempt to study the tourism supply chain infrastructure alignment in the tourism business value system. A network of value chain elements play a vital role in determining the degree of cooperation in the eco system leading to customer cocreation. Today the co-creation experience has been argued as a basis for value and as the future of innovation (Pralhad and Ramaswamy, 2004).

2. Objectives

The specific objectives of the study are:

- To study the tourism supply ecosystem concept
- To study the nature of infrastructure alignment in the study area
- To study the concept of co-opetition and co-creation and
- The type of inter organisational cooperation

3. Methodology

The present study is a case oriented empirical study to understand the concepts of co-opetition and co-creation in tourism value networks acting within the tourism business ecosystem. For the purpose of study randomly selected 100 Vazhiyoram centres were selected and primary data collection was conducted among the entrepreneurs. A semi structured interview schedule was used for data collection.

4. Literature Review

4.1 Concept of a Tourism Value Network

A tourism supply chain (TSC) is defined as a web of tourism-related organisations engaged in different activities cumulating in the end services offered to a visitor for consumption (Zhang et al., 2009). In earlier studies on tourism supply chains (TSCs), Sinclair and Stabler (1997) emphasise the importance of the supply side of the tourism industry. Since 2006, attention has shifted towards the value proposition offered by TSCs, within a sustainability context. Schwarz et al. (2008) postulated that sustainability was a key consideration within any TSC because of the intrinsic link of tourism to the ebbs and flows of the global economy. Kaukal et al. (2000) and Weiermair (2006) noted that a typical TVC comprised four components - the tourism supplier, tour operator, travel

agent, and customer, all of which are in a single linked chain. In addition, Alford (2005) depicted a TSC to identify pressure points to reduce costs. Yilmaz and Bititci (2006) developed a TVC model to manage the tourism product as an end-to-end seamless entity. Guzman et al. (2009) analysed the configuration of a global tourism value chain (GTVC) in Andalusian SMEs. Building on the highly fragmented nature of extant studies, Zhang et al. (2009) produced a framework to represent a typical TSC within a destination, and asserted that tourism is a coordination-intensive industry in which different products/services, such as transportation, accommodation are bundled together to form a final tourism product. As no pre-testing occurs prior to tourism purchases, the sale of tourism products very much depends upon the presentation and interpretation of the products, making the TSC very information-intensive (Ujma, 2001).

The destination acts as a stage where the TSC and its actors operate. This in turn gave rise to recent research on the use of the multiplier effect to provide a different angle to understand and conceptualize TSCs. Tourism multipliers focus on where visitor consumption can derive economic value from the TSC (Zhang et al., 2009). When tourism expenditure diffuses into the local economy, the industry can create jobs and other ancillary services, such as public roads (Deale et al., 2008; Rusko et al., 2009). Yet, the value creation potential of a TSC within a tourism destination extends beyond just economic sustainability. Budeanu (2009) emphasised that large tour operators are equipped to facilitate environmental sustainability through their business processes, where the outcomes have led to strong brand positioning and customer loyalty. Likewise, Smith and Xiao (2008) argued that socio-cultural sustainability could result from TSCs in a culinary tourism context by cultivating a sense of belonging within stakeholders. Recently, van der Borgh et al. (2012) concurred that organisations are shifting their strategy, focus, and capabilities from firm centricity to ecosystems in order to exploit open innovation opportunities.

4.2 Aligning the Network Infrastructural Elements

The infrastructure for tourism includes basic infrastructure components like airports, railways, roads, waterways, electricity, water supply, drainage, sewerage, solid waste disposal systems and services. Moreover, facilities like accommodation, restaurants, recreational facilities and shopping facilities also comes under the ambit of Tourism Infrastructure. What requires is the integrated development of basic infrastructure and amenities along with all the tourism facilities in a balanced manner.

4.3 Coopetition in the Network

Resource exchange is one of the primary incentives behind establishing an inter-firm relation. Through such relationships, firms gain access to both supplementary and complementary resources and capabilities in the attempt to create and realize product offers that increase the net delivered customer value. Tourism is a coordination-intensive industry in which different service products (transportation, accommodation, excursions, and so on) are bundled together to form a final tourism product. Coordination is a pattern of decision making and communication among a set of interrelated players who perform tasks to achieve goals such as maximizing their utilities or the overall profit of the supply chain (Malone, 1987). A tourism destination may be considered as a cluster of interrelated stakeholders (both public and private) embedded in a social network (Baggio et al., 2010) behavior of other companies and vice versa^{17,18}. The performance of a tourism destination as a whole depends on the web of connections between the various players and not only on the intrinsic characteristics of the destination¹⁹. Drawing the precise boundaries of an ecosystem is an impossible task. Rather, in a business ecosystem organizations whose futures are closely intertwined must determine the dependencies that are most critical. For example, a healthy TBE is shown by the network's ability to consistently align all required resources (technologies, accommodation, restaurants, entertainment, and nature) to transform them into a tourism experience and into innovation and lower costs and new products/services. Such alignment across multiple stakeholders is vital for the TBE's success.

4.4 Customer Co-creation

Society's system of social ruling is partly being replaced by one driven on communicative self-steering (Cornelis 1988). An increase can be observed in dialogues between equal partners instead of the top down approach of companies or decision making parties telling employees, customers or citizens what to do. As customers gradually prefer to go their own way, the relationship between customers and companies is changing in favour of customers who are increasingly gaining power and control (Florida 2002, Prahalad and Ramaswamy 2004). The popular defence against competition, e.g. product and company centric led innovations to increase product variety, is increasingly being taken over by the co-creation experience as a basis for value and as the future of innovation (Prahalad and Ramaswamy 2004). As tourism is the greatest and ever growing source of experiences with which people construct their own unique narratives, consequently, this line of thought deserves our attention. Prahalad and Ramaswamy (2003) already see glimpses of the co-creation and expansion of such experience environments in a variety of realms. Strangely enough, the biggest experience generator, e.g., tourism, is not yet one of them. It falls behind both in applications as well as in fundamental research. In their challenge to create experiences that correspond with the latent needs that people have, experience creators or

designers still very much depend on their intuition, on copying best practices and on contextual time and space related conditions. Tourists are not often included yet as partners in the process of experience design.

5. Case Analysis

5.1 An Overview of the Vazhiyoram Project

Vazhiyoram venues are primarily rest stops, but they come packaged with much more. They are a combination of restaurants, mini shopping centres, rest rooms, paid toilets and a host of other activities. They are accredited service providers by the Department of Tourism, Government of Kerala.

Types of units and facilities

Based on the facilities provided, Vazhiyoram centres are divided into three levels and rated as Class I, Class II and Class III categories. The government specifications for infrastructure:

Class 1:

- Land required - 20 cents
- Restaurant of minimum 30 pax and a total area of 600 sq.ft
- Souvenir shop
- Public telephone/internet
- 4 paid toilets & 2 bathrooms
- Urinals for gents
- Parking space for at least 8 cars
- Total investment - Rs. 25 lakhs

Class 2:

- Land required - 20 cents
- Restaurant of minimum 30 pax and a total area of 600 sq.ft
- Souvenir shop
- 2 paid toilets
- Parking space for at least 4 cars
- Total investment - Rs. 17.5 lakhs

Class 3:

- Land required - 10 cents
- Coffee shop of minimum 300 sq.ft
- Souvenir shop
- 2 paid toilets
- Parking space for at least 2 cars
- Total investment - Rs. 12.5 lakhs

Government Supports and Incentives

- 25% of construction cost subject to a maximum of Rs. 5 lakhs for approved projects
- Additional incentive of Rs. 2 lakhs for adopting pollution control facilities, rain water harvesting, captive power generation and purchase of waste management equipments
- Easy access to low interest loans. Finance institutions sanctioning the loans will remit the incentives as fixed deposits in the name of the entrepreneur for a period of two years
- Guidance and publicity support from the State Government

The Investor Support Cell (ISC)

Functioning under the Department of Tourism, a core group of professionals who will streamline management functions and formulate strategies for enhancing performance will form the Investor Support Cell. The first year after implementation of the

project, entrepreneurs will be provided with marketing guidance as well as overall support by the ISC. Besides, the ISC will also assist investors in the sourcing of products and development of tourism-related market linkages. Department of Tourism will give training to the staff through institutions like Kerala Institute of Tourism and Travel Studies (KITTS) and Food Crafts Institute (FCI).

Maintenance and license

Appointment of employees will be entirely at the discretion of the entrepreneur. Periodic spot checks by the department officials will ensure quality of service and facilities offered by each of the Vazhiyoram centre. And if any serious discrepancies are found, the license to function as 'Approved Vazhiyoram Unit' will be cancelled immediately and any financial assistance provided to the unit will be withdrawn.

6. Data Analysis

Based on the primary data collected from the owners of the study units a percentage method of data analysis follows.

The Infrastructure Components within the Study Area.

The unit owners were asked about the various facilities offered to the customers. The responses are given in the following **table 1**.

Facility	Availability of Facility/No. of respondents(Total 100)	
	Yes	No
Accommodation	77	23
Restaurants	100	0
shopping	55	45
recreational	47	53

Source: Survey feedback

The Scope Of Inter Organizational Resource Sharing.

The responses to areas of inter organizational resource sharing are given in the following **table 2**

Area of Resource Sharing	Availability of Govt Initiative (Total 100)	
	Yes	No
Recruitment	0	100
Training	100	0
Financing	100	0
Waste Management	100	0
Branding	100	0

Source: Survey feedback

The Extent of Utilization of Government Initiatives in Resource Sharing by the Units.

The responses to the extent of utilization of Government initiatives are given in the following **table 3**

Area of Resource Sharing	Extent of utilization

	Always	Sometimes	Never
Recruitment	0	0	100
Training	68	16	16
Financing	100	0	0
Waste Management	58	32	10
Branding	100	0	0

Source: Survey feedback

The Presence Of Inter Organizational Co-Operation.

The responses to the Presence of Inter Organizational Co-Operation are given in the following **table 4**.

Inter Organizational Co-Operation

Present	Absent
67	33

Source: Survey feedback

The Effects Of Customer Co-Creation Are Reflected In The Business Enhancement.

Opinion regarding Whether the Effects of Customer Co-Creation Are Reflected in the Business Enhancement are given in the following **table 5**.

Customer Co-Creation Reflected In The Business		
Yes	To Some Extent	No
56	39	5
Total 100		

Source: Survey feedback

7. Discussion

The study shows that the units are offering various facilities to the customers apart from food and accommodation. The data shows that there are shopping facilities but it is observed that customers get only mini shopping experience. Even the recreational facilities are an area of infrastructure development. The study shows that there is 100% government initiative in the areas of inter organizational resource sharing except in recruitment. From the data it is inferred that the unit owners doesn't find any commendable inter organizational co-operation in business operations. Only 67% respondents are of the opinion that there exists inter organizational co-operation. More than 50% of the respondents shared the view that government initiatives in creating a brand image is enhancing the business of the units and customer feedback measures are helping them to customize their services to enhance customer satisfaction.

8. Conclusion

Tourism value chain networks when driven by infrastructural developments and facility integrations are sure to attract more service receivers towards the tourism business ecosystem. Customer co-creation through value additions will definitely add to The Gods Own Country experience to both the inbound and outbound tourists.

9. References

- Accinelli, E., Brida, J. G., & Carrera, E. (2006). A good policy of sustainable tourism.

<http://ssrn.com/abstract/4901205>.

- Ketchen, D. J., Crook, T. R., & Craighead, C. W. (2014). From Supply Chains to Supply Ecosystems: Implications for Strategic Sourcing Research and Practice. *Journal of Business Logistics*, 35(3), 165-171, ISSN 21581592.
- Beritelli, P. (2011). Cooperation among prominent actors in a tourist destination. *Annals of Tourism Research*, 38, 607-629, ISSN: 0160-7383.
- Del Chiappa, G., & Baggio, R. (2015). Research Paper: Knowledge transfer in smart tourism destinations: Analyzing the effects of a network structure. *Journal of Destination Marketing & Management*, ISSN: 2212-571X.
- Accinelli, E., Brida, J. G., & Carrera, E. (2006). A good policy of sustainable tourism. <http://ssrn.com/abstract/4901205>.
- Tejada, P., Santos, F. J., & Guzmán, J. (2011). Applicability of global value chains analysis to tourism: issues of governance and upgrading. *Service Industries Journal*, 31(10), 1627-1643, ISSN: 0264-2069.
- Prahalad, C. K., & Ramaswamy, V. (2004). Co-creation experiences: The next practice in value creation. *Journal of Interactive Marketing*, 18, 5-14, ISSN: 1094-9968.

