

TRANSPERANCY AND AUTHENTICITY OF TAILOR MADE ECOTOURIST SITES AND BLOCK CHAIN INNOVATION TO UPGRADE THE VALUE CHAIN

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ABSTRACT - Sri Lanka, The island is renowned for its rich diversity of natural resources, cultures, traditions and especially the great hospitality of the people. Eco-tourism, one of the promising sub sector of the tourism industry which claims for significant returns to the domestic economy essentially need governance mechanism to cater the demands of diverse global customers while preserving the nature and cultural heritage. This article focused to find out the transparency in tailor made eco tourism value chain, find out the problems and issues encounter by the travelers and propose block chain as smart innovative tool to upgrade transparency authenticity and traceability of eco tourism value chain. Primary data, both qualitative and quantitative, collected through online data collection tools and in-depth interviews via telephone. First, registered eco tourism destinations were considered for the study and the sample composed of 35 wild life, 17 adventure, and 21 agro tourism locations. Mode of reservation, mode of payment, mode of prior experience, facility available, ratings and customer views were researched. Service providers facilitate a variety of nature, eco and adventure based activities across the island with experience guides and facilitators. About 12-20 tailor made packages offered by the service providers and accommodation, food, transport and other logistics vary widely. Individual service providing agencies operate separately, poor fragile networks among value chain members, information asymmetry, logistic issues in remote destinations, and gap between standard and customize site arrangements were recorded as common problems. Service providers are expecting convenient, economical and trust worthy network which will bridge the existing operational barriers of the sector. Smooth chain connection and decentralize chain management of block chain will help to improve the chain transparency and authenticity while enhancing tourism experience, rewarding sustainable behavior, ensuring benefits for local communities, and minimizing privacy concerns.

Keywords: Block chain, eco tourist site, Sri Lanka, tailor made, value chain

1. INTRODUCTION

Custom made eco-tourism, design facilities for the customers from geographically distinct destination becoming a popular sub sector in tourism industry. In general, local agency in destination expert who know their destination inside and out to craft a trip exactly traveler dreamed out without any heals. Tourism is one of the main industries in Sri Lanka and is n important source of income and employment. Tourists arrivals were recorded as 1, 913,702 and foreign exchange earnings were 646, 362.3 million in 2019 [1]. India, United Kingdom, China, Germany and France were the top 5 tourist source markets to Sri Lanka.

An eco tourism experience can be environmentally sustainable and it is very progressive trend in tourism industry. Responsible travel to natural areas that conserves the environment and improves the well- being of local people is known eco tourism [2, 3]. Sri Lanka has some of the best eco destinations and probably the greatest diversity anywhere in the world. Each destination brings variety of experiences to a traveler with its own unique features for a convenient rate. Tailor made eco-tourism; one of the important niche gives you the opportunity of enjoying multifaceted attractions. Sustainability of the sector depends on accountability of the visitors, services providers and

community participation. On the other hand sustainable management of eco-tourism always linked with upgrading the sector through innovations and manages through smart technologies [4]. Logistics of ecotourism services is one of the promising areas which essentially need the research attention [5] that is an information-intensive activity and is ideally suitable for introducing innovative digital technologies [6, 7]. Upstream, service providers and downstream visitors/consumers of the ecotourism value chain connected through fragile networks. Therefore, identification of value chain actors or service providers; travel companies, tour operators, local transport providers, service providers ((hotels, food and beverage, communication, etc.) essential to assess the situation. Further, this helps to explore the gaps pertaining to knowledge, attitudes, values, infrastructure, policy, legal status and culture. Bridge the gaps and smooth functioning within the ecotourism value chain through digitalization is promising tool. The block chain technology is a well-structured database with specific rules for building chains of transactions and access to information that exclude data theft, fraud, violation of property rights, etc [7,8]. This article focused to find out the transparency in tailor made eco tourism value chain, find out the problems and issues encounter by the travels and propose block chain as smart innovative tool to upgrade the eco tourism value chain.

2. MATERIALS AND METHODS

Eco tourism has become a significant sub sector in tourism industry of Sri Lanka. Managing eco tourist logistics is vital strategic innovation to facilitate and promote nature base tourist sites located in diver’s agro ecological zones of Sri Lanka. Study heavily based on qualitative data and online data collection tools were mainly used. First, registered eco tourism destination were identify on visit the relevant web site to develop the data base on nature of eco tourist destination. Sample composed of 35 wild life, 17 adventure and 21 agro tourism destinations. Mode of reservation, mode of payment, mode of prior experience, facility available, ratings and customer views were researched. Figure 1 explain the structure of the value chain of tailor made eco tourism sub sector where A, B, and C denotes position of the value chain, actors and logistics flow respectively. The value chain approach to tourism covers all stakeholders involved in delivering a tourism experience in the accommodation service (dining, recreation, leisure, shopping, etc.). The analysis covers all goods and services in the respective value chains created by the international and in country manufacture, storage, distribution, consumption and disposal of these goods and services [2]. Transparency and authenticity of the value chain measured along two dimensions: supply chain scope (the depth of interaction in the supply chain) and milestones on the path to complete transparency.

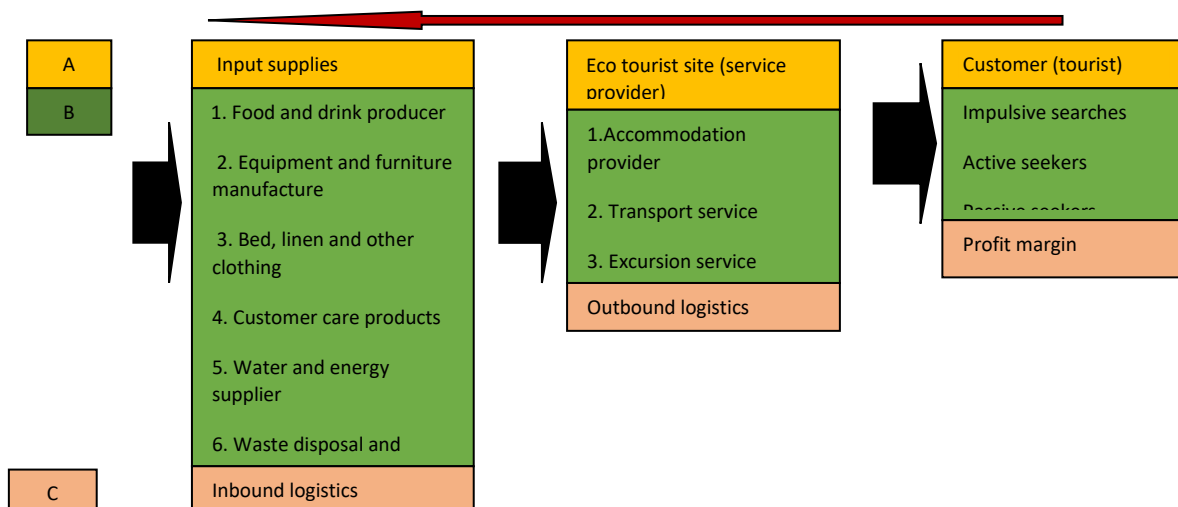


Figure 1. Structure of the value chain of tailor made eco tourism sub sector

3. RESULTS AND DISCUSSION

Tailor made ecotourism which has huge growth potential with significant returns. It gives the opportunity of experience nature, culture, traditions and people. Design and develop tailor made ecotourism site for a unknown traveler is challenging and possibilities are there for mismatches. Four main customers segments identified (Figure 1), places demand for variety of sites, facilities, entrainment, food and beverages, logistics and comfort levels. Design and build tailor made eco tourist site for a foreign traveler who has never been to the destination before or unfamiliar to traditions, customs, food, nature, etc is a tedious task. In general, most of the service providers maintain artificial intelligence throughout the process and countable number of service providers allocate destination expert for individual booking and the person is responsible for arranging memorable holiday. Service providers, network of hotels, restaurants, and logistics providers are creating various destinations around the island, mode of transport and type of accommodation varied upon request. Registered eco tourism destinations were considered for the study and the sample composed of 35 wild life, 17 adventure, and 21 agro tourism locations. Mode of reservation, mode of payment, mode of prior experience, facility available, ratings and customer views were researched. Service providers facilitate a variety of nature, eco and adventure based activities across the island with experience guides and facilitators.

3.1. Transparency and authenticity of the tailor made eco-tourism value chain in Sri Lanka

Tailor made eco-tourist value chain is novel and innovative subsector of the tourism industry of Sri Lanka. Upstream of the value chain, input suppliers were starting point of the value chain and wide range of supplies enter into the value chain as direct and indirect supplies. Downstream of the value chain, the service provider was the key actor who created the site upon the demands of customers from available supplies. Internal operations, information flow and feedback loop connects the value chain actors and facilitate the design and development of the demanded facility. Transparency and authenticity of the direct and indirect input supplies and internal operations were measured against code of conduct, standards and certification, traceability, and full disclosure of information. Internal operations and direct supplies were transparent to service provider but information asymmetry negatively affect on system transparency to downstream. Indirect supplies were less transparent to all actors including hoteliers. Poor transparent mechanism and authenticity of supplies significantly affected on value chain performance, mainly customer satisfaction and business sustainability. Especially, the quality of raw materials; food beverage, logistics, transport, entertainment, etc. and services hinder the expected satisfaction of travelers.

Manage value chain through decentralized smart contracts would minimize the problems and issues while providing expected services to the customers. Smart contracts, visible to all in network, all in network can edit, safe and efficient [5,6]. Block chain business model canvas was developed with the participation of industry experts (figure 2). Block chain approach for tailor made eco-tourist value chain propose few design steps. First step would be identifying the impending risks from regulation, past disruptions, and supplier-related issues through plotting internal and external stakeholder interests called a materiality assessment. Secondly, visualize the target supply chain for a deeper understanding of goods flows, map suppliers and processes, and expose existing information gaps. Third, collect information on practices and performance that provides insights about potential risks, opportunities for improvement, and information gaps. Fourth step is engagement where actionable information along with key performance indicators is essential to address specific issues such as quality of food, energy supplies, weather related unexpected situations, environmental impacts, or unclear sources of origin. The engagement includes supplier contact and collaboration, monitoring, and support. Final step is disclosure. This involves deciding how they will meet relevant regulatory requirements and stakeholder demands, and how they will verify the information disclosed.

BLOCK CHAIN BUSINESS MODEL CANVAS: TAILOR MADE ECO-TOURIST SITE

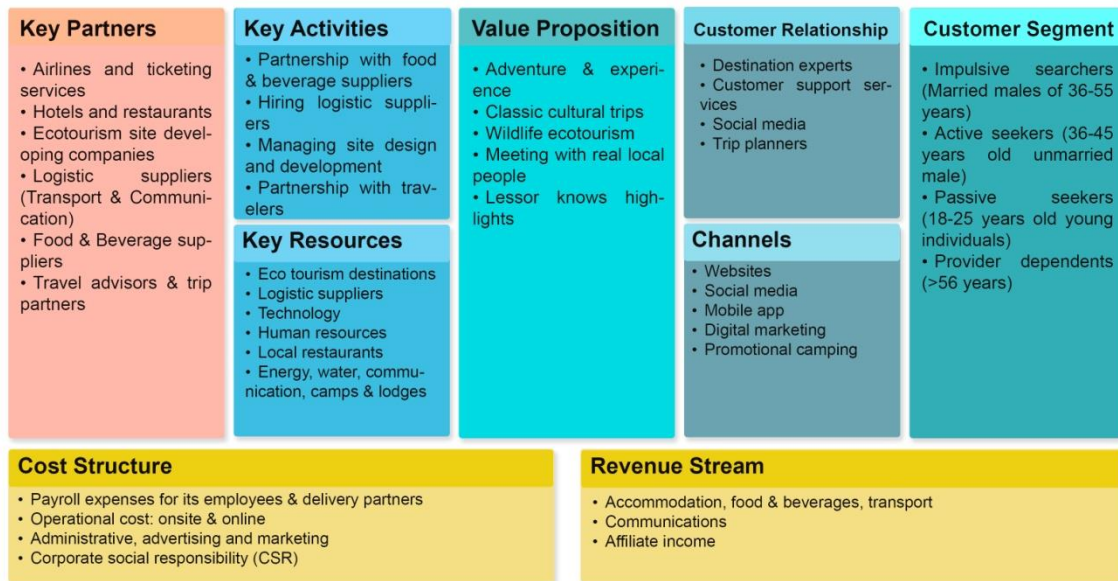


Figure 2. Detailed business model canvas for the tailor made ecotourism

4. CONCLUSION

Tailor made eco tourist sites, is one of the emerging niche segment of the Sri Lankan tourism sector highlighting positive future prospects. Country’s naturally endowed resources, rich traditions, and capability of building sustainable tailor made tourist sector essentially need to understand the problems and issues through value chain analysis and develop sustainable value chain through transparent system. The unique tourism experience, purely based on customer needs and wants. Therefore, system transparency and authenticity is essential to maintain sustainable business. Both direct supplies and internal operations were transparent only to service provider but there no proper mechanism to share the information with end-user. Indirect supplies were non transparent and most of the issues related to tailor made eco tourist sites were derived due to lack of transparency of supplies. Present study proposes smart contract mechanism for both direct and indirect suppliers and internal operators through decentralized information sharing mechanism. Block chain business model canvas demonstrate system landscape and information blocks.

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