

Sustaining Tourism Destination Competitiveness Using ICT in Developing Countries

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Abstract— Speaking of competitiveness has become frequent nowadays, because it is one of the central concerns of governments and industries of all countries. In a world increasingly global and competitive it is essential that companies develop a strategic management in order to follow the complexity of the environment, the trends and competitiveness of the market to gain competitive advantages. This paper reviewed destination competitiveness as it affect tourism and the enablement of technology as a vehicle of transformation. The importance of ICTs for enhancing the competitiveness of tourism enterprises in developing countries is tremendous. ICTs can help them organize their tourism offer, and the Internet provides new opportunities for tourism providers to actually target markets worldwide. This has impacted on the way in which regional tourism destinations are promoted. The method of promoting regions via the development of regional tourist destination websites or portals using Internet technologies is increasingly being adopted both in Australia and around the world. Many tourism enterprises in developing countries have not yet been able to adopt ICTs, even though their application could offer competitive advantages. It develops the proposition that use of such technologies can be a practical approach which destinations may use to mitigate some of tourism's negative impacts. Adopting a destination-focused perspective and through the undertaking of a worldwide study, this research examined how ICT can be used in the management of sustainable tourism.

Keywords- *Competitiveness; Destination; ICT; Sustainability; Tourism Introduction*

I. INTRODUCTION

Tourism is viewed over the years as being a sector that has been outstanding as one of the activities with rapidly growing and greatest potential for expansion on a global scale. For its growth potentials and most importantly for being a product that can only be consumed in loco, tourism accepts the prominence role of being a strategy for local and international development. In this context, the quest for competitiveness is one of the key concerns of companies around the world. As clusters being a major 2competent tool in companies' performance, in regional development *and in*

countries' competitiveness, it is important to analyze its potential in tourism. Since the inception of the industrial revolution and the formation of modern national economies, business managers, politicians, planners and scientists have all struggled with the same problem: reinvigorating rural and regional economies [1], how to sustain economic growth and competitiveness to secure future business opportunities and the well-being of citizens at local, state, regional and country levels.

The common and most visible challenges that most tourism destinations around the world face is increased rivalry and competition between already dominating destinations and promising destinations. Keeping the ecological status of tourism- affected region intact is another pressing issue. These two factors provide clear necessity for establishing competitive and sustainable tourism destination [2]. Consistent development of world economy in 1950s and the end of cold-war in 1989 brought changes in global economy structure, income increase, reduced and modified work time, change in travel pattern and expansion of international destinations, keeping international tourist arrivals growing at 6% annually. UNWTO (United Nations World Tourism Organizations) predicted that the number of international travelers will be increased to 1 billion by 2010 and 1.6 billion by 2020.

The collapse of communism was seen as an important turning point in economic history. As the two economic systems gradually converged, new ideas concerning the determinants of national prosperity and competitiveness saw the light of day in the in the developed nations and gradually becoming an issue all over the world. Central to this new economic paradigm was the empirical finding which shows that prosperous companies and industries are seldom isolated; rather, the opposite is true. Their success obviously is highly dependent on the larger economic entity—or cluster—to which they belong. Thus the key to understanding competitiveness is examining the linkages

and connectivity within these clusters. Another important feature of the cluster approach is its goal of clarifying the duties relevant and or appropriate to the business sector and to the government in an effort to create a more ideal system. Defined at the most general level, it is seen as an entity consisting of profit seeking actors with synergistic, reciprocal linkages and on the other hand may also be called an economic cluster. Prior to its introduction in economic literature and research “cluster” had related connotations in other branches of science. Although the term was established in economic research and studies during the last decade, industrial agglomerations and clusters have been the focus of scientific research and studies as long as modern national economies have existed. One of the earliest and most pronounced works on the topic is that of Alfred Marshall, who through his extensive studies developed a theory explaining specifically the formation of industrial districts at the end of the 19th century. Also central to the development of the theoretical basis of the cluster concept were Ronald Coase’s theories of the boundaries of firms, first published in the 1930s and also Joseph Schumpeter’s views of the dynamics of competition, presented at that time. They and other economists outside the mainstream paved the path for modern institutional economics, which over the years has become an established theoretical framework in economics and planning for explaining cluster and clustering.

II. REVIEW OF LITERATURE

The concepts of comparative and competitive advantage provide a theoretical sound basis for the development of a model of destination competitiveness [3]. As a result, destination competitiveness theory has developed to the point that empirical study is now possible and desirable. In more recent years the conceptual models have been applied to analyze specific destinations or tourism markets. But one of the most pressing research needs is to better understand the relative importance of the attributes of competitiveness. Strategies for improving destination competitiveness must make decisions about where and how limited resources should be directed. Therefore, information which helps to identify which attributes are likely to influence competitiveness most effectively, are of considerable value.

2.2 What is a Cluster? According to [4], there is a great controversy surrounding the clusters concept. For these authors, it is simple to identify the clusters in space; however, the same does not happen with respect to its definition, which is very ambiguous. This ambiguity is mainly because the definition of cluster fluctuates between its industrial and geographical definitions [5]. Porter [6], [7] states that clusters (groups, groupings or agglomerations), are geographic concentrations of companies and institutions

in a particular activity sector, whose inter-relationships reinforce the competitive advantage.

Swanw and Prevezer [8] defined it in a simple way, that clusters were groups of companies within an industry in a given geographical area. Feser [9] reinforce this concept defining clusters as a group of companies, business organizations or not, for whom membership within the group is an important element of each member of the company’s competitiveness. According to [4], the definition of cluster is obscure and not accepted unanimously, which leads to an identification of clusters in an anecdotal way and less accurate. Clusters are used to represent concentrations of companies, so that they can produce synergy, through their geographical proximity and their interdependence [10]. Feser [11] points out those economic clusters don’t refer only to industries and institutions, but to the highly competitive industries and institutions. This competitiveness is due to the relations between them. According to Porter [7], the solid competitive advantages in a global economy increasingly depend on local factors - knowledge, relationships, motivation, etc. – with which the geographically distant competitors cannot compete. Porter [12], [13] reinforces his description, defining a cluster as a geographically close group of interconnected companies, suppliers, service providers and associated institutions, in a particular field, linked by analogy and complementarities. Porter [7] argues that clusters foment both competition and cooperation. Competitors compete intensely to win and retain their customers, and without that no cluster could be successful.

III. TOURISM COMPETITIVENESS

Speaking of competitiveness has become frequent nowadays, because it is one of the central concerns of governments and industries of all countries. In a world increasingly global and competitive it is essential that companies develop a strategic management in order to follow the complexity of the environment, the trends and competitiveness of the market to gain competitive advantages [14]. The concept of competitiveness may seem easy to understand, however the complexity of the concept is clear when we want to define and analyze, from various sources of literature. Porter [6] argues that its ambiguity arises from the huge variety of definitions and perspectives on competitiveness, which makes it difficult to give an exhaustive and indisputable definition. Porter [6] considers that are the companies and not the countries that compete in the international market, however the success of companies can be explained by the economic environment, institutions and by government policies. This means that the nation or region competitiveness is build up on the success that companies reach on the international market. According to Porter [6] the analysis should focus on specific industries or on industry segments and not on the economy as a whole, since it is inconceivable that all companies in all sectors have a competitive advantage.

The main indicator of competitiveness is the productivity [6] since productivity is, in long term, the main determinant of the living standard of a country, because it is the fundamental cause of gross national income per capita. According to Porter [6] the competitive performance of a country in a given industry results from the articulated action of four determinants that shape the environment in which companies compete, encouraging or preventing the creation of competitive advantages. These determinants are:

- (i) The factor conditions: allocation of a country in production of factors such as expertise or infrastructure, required for the competitive activity of a given industry;
- (ii) The strategy, business structure and rivalry: conditions that in the country, regulate the creation, organization and management of business and the nature of domestic rivalry;
- (iii) The demand conditions: characteristics of domestic demand for a particular good or service, namely the presence of sophisticated and demanding customers;
- (iv) The existence of related and supporting industries: the existence or not of supplying industries and/or related that are competitive in international markets. This determinant includes the issue of agglomeration economies and its effect on competitiveness. To these attributes, Porter [6] added the government action and the change (events beyond the companies' control) and thus he set the competitiveness diamond.

Ferreira and Alberto [5] assume that the location is a source of business competitiveness meaning that the company cannot be dissociate of the region where it belongs. Thus, it should be understood what are the attractiveness factors that a region can offer so that businesses can be located there, and how these factors can (or not) be pronounced by the joint activity of all regional actors. The competitiveness concept and assessment of a touristic destination has received an increasing attention in the literature about the tourism economy. The reason for this interest arises from the increase of the economic importance of the tourism sector, as well as from the increasingly competition in tourism market, as a consequence of the transition process from mass tourism to a new era of tourism, which calls for a tailor-made approach to the attitudes and needs of tourists [15]. For Crouch and Ritchie [16] the competitiveness of a given industry is a crucial determinant for its performance in the world market. Develop the touristic potential of any country or region depends substantially on its ability to maintain a competitive advantage in supplying goods and services to visitors. Competitiveness in tourism sector is defined as the capacity of tourism businesses to attract visitors - foreign and domestic - who spend on touristic destination serving to offset the costs of business development, and reward the capital invested, in an equal or above manner of the opportunity cost .

Ritchie and Crouch [3] concludes that the tourism competitiveness is - more than any other sector - a framework of strategic partnerships, involving all who

directly or indirectly contribute to the construction of the global product. This author also adds that this partnership represents, ultimately, a culture, an attitude, focusing on tourism; an attitude of businesses serving the tourism, of the state, and citizens. Without this attitude there is no competitive tourism. For Dwyer and Kim [17], tourism competitiveness is a very complex concept that combines several elements that may be observable or not, and that in many cases are not easy to measure. Furthermore, it is a relative concept whose extent may vary depending on the time period and the country that is taken as reference. To compete in the tourism field, a destination not only must have comparative advantages but also competitive advantages, in other words, is required not only to have a more or less broad variety of products and tourism resources, but also they must be managed efficiently to medium and long term. According to Carvalho and Vaz [18], touristic destinations, taken as a product, face increasingly competitive and differentiation situations that matters to know how to valorize and promote. According to Silva [19] the touristic competitiveness is achieved on the local destination scope, through a renewed capacity for innovation and constant improvement, rising, growing and maintaining within the touristic set, considered as the basic units of competitiveness, which are directly involved in the scenario of national or international competition, competing with other touristic sets. In other words, also in tourism, according to the theoretical model of Porter, competition doesn't occur between countries but between clusters and touristic businesses. In this context, the author also states that the public and private sectors shall be integrated and mutually cooperate to bring an institutional and business environment favorable for companies carrying out competitive activities effectively and with a high level of productivity in the use of resources.

IV. DESTINATION

Destinations are places that attract visitors for a temporary stay, and range from continents to countries to states and provinces to cities to villages to purpose built resort areas [20]. At the foundation level destinations are essentially communities based on local government boundaries. The WTO offered the following working definition of a "local tourism destination": A local tourism destination is a physical space in which a visitor spends at least one overnight. It includes tourism products such as support services and attractions, and tourism resources within one day's return travel time. It has physical and administrative boundaries defining its management, and images and perceptions defining its market competitiveness. Local destinations incorporate various stakeholders often including a host community and can nest and network to form larger destinations. Tourists travel to destinations. Destinations are places with some form of actual or perceived boundary, such as the physical boundary of an island, political boundaries, or

even market-created boundaries [21]. Destinations may not welcome tourists uniformly. Due to location, climate, limited resources, size, and cultural heritage, some places have few economic choices other than to participate in tourism. The desire to become a recognized destination presents a difficult marketing challenge.

V. DETERMINANT ATTRIBUTES OF DESTINATION COMPETITIVENESS

Six of these ten attributes formed the group of attributes known as Core Resources and Attractors. Physiographic and Climate was found to be both the most important attribute as well as the attribute with the most significant determinacy measure. The physical characteristics and climate of a destination have long been regarded as particularly important to the touristic attractiveness of a destination and so this is not surprising. Culture and History was found to be the second most determinant attribute. Whereas Physiographic and Climate represents the ‘natural’ qualities of a destination, Culture and History, represents the primary touristic attractiveness of a destination that is the product of ‘human’ rather than ‘natural’ processes. The third most determinant attribute was found to be Tourism Superstructure. The quality and quantity of tourism’s built environment provides with ease for tourist-specific needs such as accommodation facilities, transportation facilities, restaurants, recreation facilities, attractions such as museums, and art galleries, theme parks, exhibition and convention centers, resorts, airports, etc.

VI. DESTINATION COMPETITIVENESS INDICATORS

- | | |
|---|---------------------------|
| a. Physiographic and Climate conditions | b. Market Ties |
| c. Culture and History | d. Tourism Superstructure |
| e. Safety and Security | f. Cost/Value |
| g. Accessibility | h. Awareness/Image |
| i. Location | j. Infrastructure |

Indicator points to the nature of conditions at one time: this is something that is calculated or observed and is applied to portray the presence or state of a condition or trends. It is also seen as a measuring instrument that assesses something and registers the status. Generally, indicator is defined as parameter, or better still a value derived from parameters, it provides information about the state of a phenomenon, environment or an area. In the tourism sector, defining indicators are very vital since it helps in assessing destination performance.

VII. DESTINATION COMPETITIVENESS THEORY

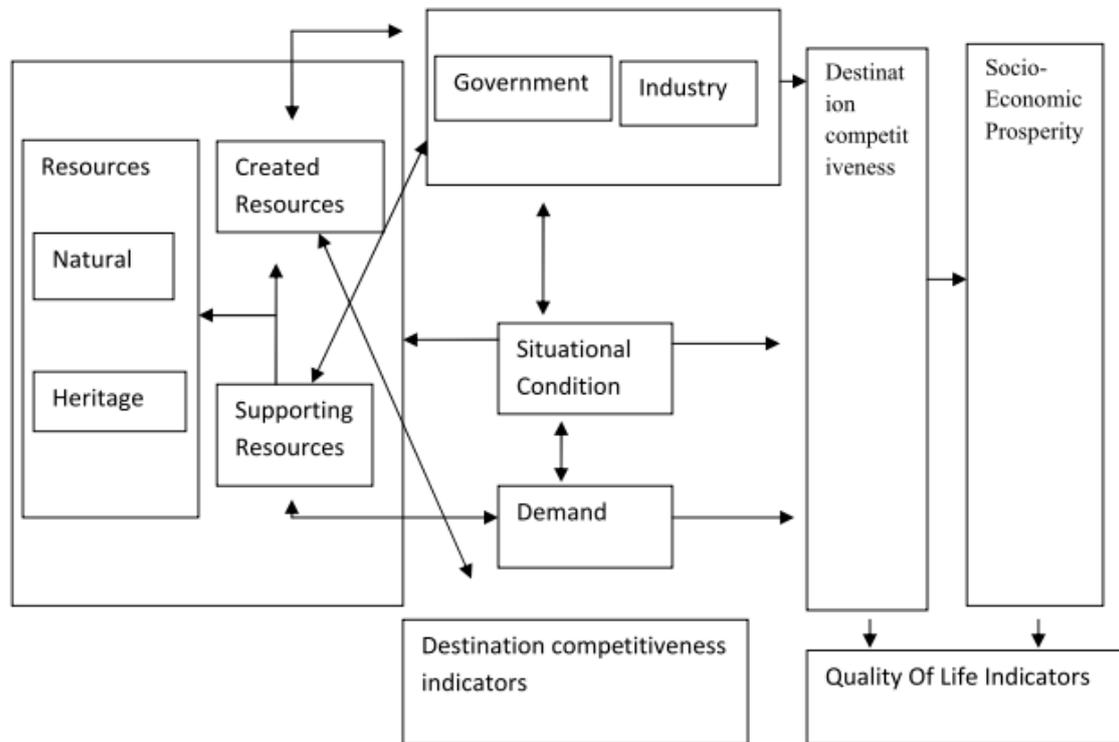
To understand the competitiveness of tourist destinations, we should consider both the basic elements of comparative advantage as well as the more advanced elements that

constitute competitive advantage. Where comparative advantages constitute the resources available to a destination, competitive advantages mean a destination’s ability to use these resources effectively over the long-term. Destination with a wealth of resources may sometimes not be as competitive as a destination with a lack of resources. A destination that has a tourism vision, shares the vision among all the stakeholders, has management which develops an appropriate marketing strategy and a government which supports tourism industry with an efficient tourism policy, may be more competitive than one that has never asked what role tourism is to play in its economy [16]. The most important is the ability of the tourism sector to add value to its products. The primary attractiveness can be a source for higher value added, but the value is only created through performing activities. It can happen that the comparative advantage is lost due to the un-competitive secondary tourism supply. The support of tourism stakeholders is essential for successful development and sustainability of tourism and could help to improve destination competitiveness. As a result, the tourism destination will receive many benefits from enhanced tourism destination competitiveness.

Destination competitiveness appears to be linked to the destination’s ability to deliver goods and services that perform better than other destinations. A large number of variables are linked to the notion of destination competitiveness. They can be quantitative such as visitor numbers, market share, tourist expenditure, employment, value added by the tourism industry, or qualitative measured variables, such as richness of culture and heritage, quality of tourism services, etc. Poon [22] suggested four key principles which destinations must follow if they are to be competitive: put the environment and make tourism a leading sector, strengthen the distribution channels in the market place and build a dynamic private sector. Go and Govers [23], in a study of conference site selection, measured a destination’s competitive position relative to other destinations along seven attributes – facilities, accessibility, quality of service, overall affordability, location image, climate and environment, and attractiveness. In any case, these attributes are based specifically on the conventions sector of tourism.

VIII. MODEL OF DESTINATION COMPETITIVENESS

The model seeks to capture the main elements of competitiveness high-lighted in the general literature, while appreciating the special issues involved in exploring the notion of destination competitiveness as emphasized by several authors.



Source: Dwyer et al 2004

Model of Destination Competitiveness

IX. USING ICT IN TOURISM

The importance of ICTs for enhancing the competitiveness of tourism enterprises in developing countries is tremendous. ICTs can help them organize their tourism offer, and the Internet provides new opportunities for tourism providers to actually target markets worldwide. This session will discuss the key elements of national and regional e-tourism strategies in developing countries that have to be analyzed in the broader framework of ICT strategies for development. Representatives from developing countries will showcase best practices of their e-tourism strategy. It will focus on the challenges and solutions developed to overcome the barriers to ICT adoption in the tourism sector at the business-to-business

and business-to-consumer levels, including the role of destination management organizations in support of e-tourism initiatives.

Information and communication technologies are crucial drivers for tourism providers to conduct business transactions, distribute their products and services, network with trading partners and provide information to consumers worldwide. An increasing number of consumers are using the Internet to obtain information, plan and buy their travel. This session will provide an introduction on the role of technology innovation in the tourism sector, in particular in the context of digital divide and the urgency of actions to address its economic, social and cultural dimensions.

Many tourism enterprises in developing countries have not yet been able to adopt ICTs, even though their application could offer competitive advantages. However, the adoption of e-business will facilitate the evolution of traditional tourism systems and the integration of tourism enterprises into the digital economy. This session will discuss the challenges and opportunities for the adoption and usage of e-business practices by tourism enterprises in developing countries. It will focus on capacity building issues and identify areas where technical assistance and training is needed to assist tourism enterprises in creating an enabling environment and seizing the advantage of ICTs for developing tourism. Tourism is among the information-intensive services on which the Internet has the greatest impact as far as marketing and sales are concerned. Information and communication technologies also play a critical role in reducing transaction costs in tourism, thereby reducing the financial leakages out of the destination country.

X. THE INTERNET AND TOURISM

The Internet is especially relevant to tourism since it enables knowledge about the consumer or tourist to be gathered, as well as vice versa. This gives 'rise both to global visibility of destinations and a global merging of market segments' [24]. The use of web-based tourist information systems has grown significantly. In 1996, 3.1 million consumers used these systems and this jumped to 33.8 million consumers in 1998. It was predicted that by 2008, 30% of the whole tourism business will be Internet based [25]. Travel revenues on the Internet have consistently ranked highly in comparison with other goods and services [26]. The reasons cited for this prominence relate to the richness and currency of information provided online and the breadth of the audience as well as the intensity of competition and the emergence of new players with countless web sites supported by efficient transaction support. Online technologies within the tourism industry have significantly impacted on communications, transactions and relationships between the various industry operators and with the customer, as well as between regulators and operators [27],[28],[29],[24],[30].

Clayton and Criscuolo [31] argue that technology behind the modern information society, particularly by way of the Internet, has brought about four key changes for the way in which business is conducted. These changes, which apply equally to the tourism sector, are:

1. the ability to turn ideas into marketable innovation for a wide range of customers, with reduced buyer search costs and costs of access to markets;
2. increased speed to market and access to new product offerings via the Internet;
3. Changed processes and the sharing of information within and between organisations; and

4. a shift in the balance of power between suppliers and customers due to the increased availability of information.

The issues raised above point to the benefits emanating from IT, especially the Internet.

XI. BENEFIT OF THE INTERNET

Benefits from IT, particularly the Internet for tourism, are substantial. These benefits are no longer dependent on proprietary information systems as has been the past experience, since the Internet is a commonly available technology. Dogac, et al, [32] considers the Internet provides many advantages to players in the tourism industry. Some of these benefits are:

- enhanced level of collaboration between tourism operators, for example, between travel agencies and service providers;
- pre-arrangements with respective suppliers no longer necessary;
- web service discovery will identify alternatives, enabling holiday packages to be constructed;
- greater negotiation of service to be purchased and customization of services/activities; and
- generally greater levels of interoperability with internal and external applications.

XII. IMPORTANT OF TOURISM TO A NATION (Speech of the Prime Minister of Canada)

“Around the world, and from across **Canada**, discover a treasure trove of natural and man-made wonders. They marvel at sights like Vancouver Island’s rainforests, the majestic snow-capped Rocky Mountains, the great plains of the Prairies, the brilliant Northern Lights, the polar bears in Churchill, the vast waters of the Great Lakes, the spectacular Niagara Falls, the scenic Saguenay fjord, the magnificent Cabot Trail, and thousands of kilometres of Spectacular Atlantic, Pacific and Arctic coastline. The industry that serves the people who visit our country is an important part of our economy. Indeed, the tourism industry supports businesses and workers in every region of our country, and many thousands of Canadians rely on tourism for their jobs and livelihoods. After consulting with the men and women who help to make Canada such a great place to visit, it became clear that a new federal tourism strategy was needed to better coordinate our efforts in support of the tourism sector.

The Strategy signals a fundamental shift in how the federal government considers the issues and opportunities surrounding tourism. It puts into action a whole-of-government approach that applies a tourism lens to policy and program development and focuses future tourism investments on priority areas.

The Strategy focuses on four priorities:

- i. Increasing awareness of Canada as a premier tourist destination.
- ii. Facilitating ease of access and movement for travelers while ensuring the safety and integrity of Canada's borders.
- iii. Encouraging product development and investments in Canadian tourism assets and products.
- iv. Fostering an adequate supply of skills and labor to enhance visitor experiences through quality service and hospitality."

XIII. CONCLUSION

The importance of ICTs for enhancing the competitiveness of tourism enterprises in developing countries is tremendous. The justification here is that with the increasing number of ICT users around the world and even in the remotest areas today served with one form of ICT infrastructure or another, there is the tendency that tourism destinations will be readily available for intending tourists. There are specific indicators that influence choice of tourism destination and they range from information on Visa requirements, hotel room prices and locations, car rentals availability, ATM/ VISA cards availability and usage, ticket prices, tourism sites, safety and security,

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attitude of host communities towards visitors, communication equipments, quality of the environment etc. All the influencing factors could be found through the use of ICT and the possibility of the destination becoming prominent is wide. One the other part, the tourism service providers have their products and services readily and sufficiently available to the consumers through the use of ICT mechanisms. Countries like Malaysia, Seychelles, Tanzania, Singapore and many others have had to enjoy the power of ICT to sell their destination to the wider world.

The authors hereby recommended that tourism industries should hook up to the current trends in information technology and subsequently endeavour to keep up with relevant developments in information and communication technology. At the same time, the policy maker should endeavour to make policies and laws that will enhance tourism development in their nation.

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