Digital Transformation Trends and Challenges in Hospitality and Tourism

Dr.Geevarathna [1] **Dr.Reena Shyam** [2]

Abstract

"Growth for the sake of growth is the ideology of the cancer cell"
-Edward Abbey, American Essayist

Tourism and Hospitality today presents a huge headroom for growth. Indian travel market is projected to grow at 11 to 11.5 percent to $48billion by 2020, according to a BCG-Google report released in 2017. Approximately 587.3 million consumers are expected to book travel plans online in 2018. Technology has emerged as a game changer by offering enormous opportunities for Tourism, Travel, Hospitality and their related industries. With just a touch of a finger, the world is accessible from one's palm. Internet with higher computing capabilities of Conversational Artificial Intelligence [AI] systems are playing major role in supporting decision-making aspects of humans and machines. Artificial Intelligence through Automatic commute predictions, Social Media Sites, voice based interactions, Natural Language Processing[NLP], Big Data, meta search engines, Machine Language [ML], image recognition, are used extensively in travel, tourism and hospitality sectors. Tourism sector today is greatly influenced by Online travel aggregators as they connect and provide details on destinations, attractions, accommodations and so on. There may be ill effects due to technological transformation leading to a staggering 1.8 million job losses. Underestimating the size of technological phenomenon and being unprepared for the digital transformation could leave organisations at great risk. This paper will explore the impact of technology leading to Digital Transformation Trends in Hospitality and Tourism focusing. Various challenges Hospitality and Tourism sectors would face in coming days due to digital transformation will also be studied.

Keywords: Digital transformation, Artificial Intelligence, Machine Learning, Travel and Tourism, Online Travel Aggregators.

[1] *Associate Professor, Acharya Bangalore B School, Bangalore.*
[2] *Associate Professor, Indian Academy School of Management Studies, Bangalore.*

Introduction

Information Technology once was only for the techies, but today IT is for all. Digital Transformations in Information Technology is changing every aspect of our lives. Be it in classroom, kitchen, roads, spacecrafts, industries etc., Artificial Intelligence and Machine Learning are commonly used words by most of the individuals. Mobile apps are available to serve any need of information and connections an individual want. Although technology has led to great advancements worldwide, there are both benefits and downfalls. In recent years there has been high usage of Internet on cross devices which is leading to larger data consumptions as well as transmission. Ease of usage, affordability, accessibility with 24x7 at finger tips are the reasons why people are using technology. Tourism and Hospitality industry is no exception for this. Digital Leadership is most important to stay ahead in business by connecting and sharing information at the need of various customers in Tourism and Hospitality Sector.

Definitions

Tourism is the commercial organization and operation of holidays and visits to places of interest for business or pleasure. William Theobald suggests that the word tour comes from Greek and Latin words for circle and turn, and that tourism and tourist represent the activities of circling away from home, and then returning (Theobald, 1998).

The *World Tourism Organization* defines tourism more generally, in terms which go "beyond the common perception of tourism as being limited to holiday activity only", as people "traveling to and staying in places outside their usual environment for not more than one consecutive year for leisure and not less than 24 hours, business and other purposes".

Hospitality industry is a broad category of fields within the service industry that includes lodging, event planning, theme parks, transportation, cruise line, travelling and additional fields within the tourism industry.

Tourism and Hospitality are mutually embedded in each other. When people travel, there is always a need for staying in the place of visit, they prefer to relish the local food, depend on transportation in the destinations. Hence the whole of tour experience is integrated with hospitality services also.

Digital transformation is the integration of digital technology into all areas of a business.

According to Microsoft CEO Satya Nadella, "There isn't a single industry that isn't being transformed." Every business process is being digitized, from relationship sales, talent and people processes, operations, customer service, field service and more. For this evolution to be successful, we must move from monolithic suites and disconnected data silos to modern, modular apps with a common data model. You need a platform approach. These innovations can be applied to any business and across industries when data, software and mixed reality come together to drive digital transformation."

The *United Nations World Tourism Organization* (UNWTO) embarked on a project from 2005 to 2007 to create a common glossary of terms for tourism. It defines tourism as follows:
"Tourism is a social, cultural and economic phenomenon which entails the movement of people to countries or places outside their usual environment for personal or business/professional purposes. These people are called visitors (which may be either tourists or excursionists; residents or non-residents) and tourism has to do with their activities, some of which imply tourism expenditure (United Nations World Tourism Organization, 2008).

Problem Statement

Technology today is giving multiple opportunities for Tourism and Hospitality to grow. People can get information when they make travel plans, their financial risks are reduced since they are companies who give EMI's (equated monthly installment), refer the details due to connectivity and network establishments. Government is also extending support in boosting tourism and hospitality. This paper attempts to look at the efforts put in by tour operators who today could also include in category called online tour aggregators, hospitality sectors in incorporating the digital technologies and the state of digital transformation. Further it focuses attention on the challenges tourism and hospitality sector is facing.

Objectives

This study was conducted to understand and explore how digital transformation is occurring in tourism and hospitality sector. To explore recent developments and use of various digital platforms and role of Digital transformation in tourism and hospitality sectors.

Methodology

This research has used both primary and secondary data sources. Interviews with experts formed the initial basis for the discussions and collection of primary data. The methods used were questionnaires, interviews, simple observations and literature study.

Limitation

Sufficient data pertaining to use of technology, investments made were not available due to unwillingness of authorities.

Scope for Tourism and Hospitality

Some of the economies in the world are prospering because of tourism and hospitality sectors in their nations. Tourism and Hospitality can be a major revenue generator in coming days as people love to travel for various reasons like business, education, leisure, meeting people staying in other countries, medical reasons like treatment, interests in exploring beyond boundaries which are attractive and unique.

Origin and Growth

Touring was an option for dynasties to explore their neighbor kingdoms in the ancient period. It was mostly reserved to royals as they needed permission to enter the other place, limited modes of travel like animals or carts. It was only the business people or pilgrims who were allowed to enter and exit places with few restrictions when a place belonged to a ruler. The word hospitality predates the use of the word tourism, and first appeared in the 14th century. It is derived from the Latin *hospes*, which encompasses the words guest, host, and foreigner (Latdict, 2014). The word tourist appeared in print

much later, in 1772 (Griffiths and Griffiths, 1772). From ancient Roman times through to the 17th century, young men of high standing were encouraged to travel through Europe on a "grand tour" (Chaney, 2000). Through the Middle Ages, many societies encouraged the practice of religious pilgrimage, as reflected in Chaucer's Canterbury Tales and other literature.

Tourism evolved and became a prosperous business with many established travel agencies during 1758 when Richard Cox became official travel agent of the British Royal Armed Forces (Cox & Kings, 2014) to establish Cox & Kings, the first known travel agency. Later in June 1841, Thomas Cook opened the first leisure travel agency, designed to help Britons improve their lives by seeing the world and participating in the temperance movement. In 1845, he ran his first commercial packaged tour, complete with cost-effective railway tickets and a printed guide (Thomas Cook, 2014).

Later developments in 18th century with rails, roads mode of transportation increased the travel options. With Flights connecting to destinations in reduced travel time compared to rail and road boosted mass tourism and holidaying concept when people just wanted to travel to use their leisure time. Today Tourism has an impact on its national economy, Tourism around the world is now worth over $1 trillion annually, and it's a growing industry almost everywhere. Regions with the highest growth in terms of tourism dollars earned are the Americas, Europe, Asia and the Pacific, and Africa.

According to the latest data available from the UNWTO, countries most visited are France, with 82.6 million overseas visitors. Second is the US, on 77.5m, third is Spain on 75.6m, while the UK comes seventh with 35.8m. India's is the world's 7th largest tourism economy in terms of GDP, according to data, the travel and tourism sector generated Rs 14.1 trillion (USD208.9 billion) in 2016, which is world's 7th largest in terms of absolute size; the sum is equivalent to 9.6% of India's GDP[1]. Tourism accounts for 9.3% of the country's total jobs. India received only 9 million international arrivals in 2016, placing it at 40th place in the world; a tenth of those received by top-ranking France[2].

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[1] World Travel and Tourism Council
[2] United Nations World Tourism Organization
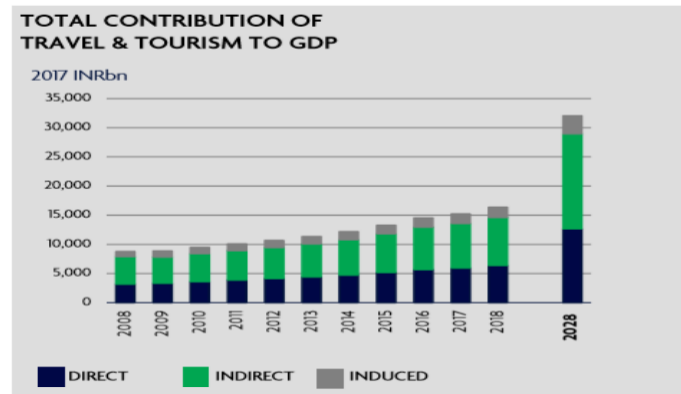
Source: Travel and Tourism Impact 2018 Report
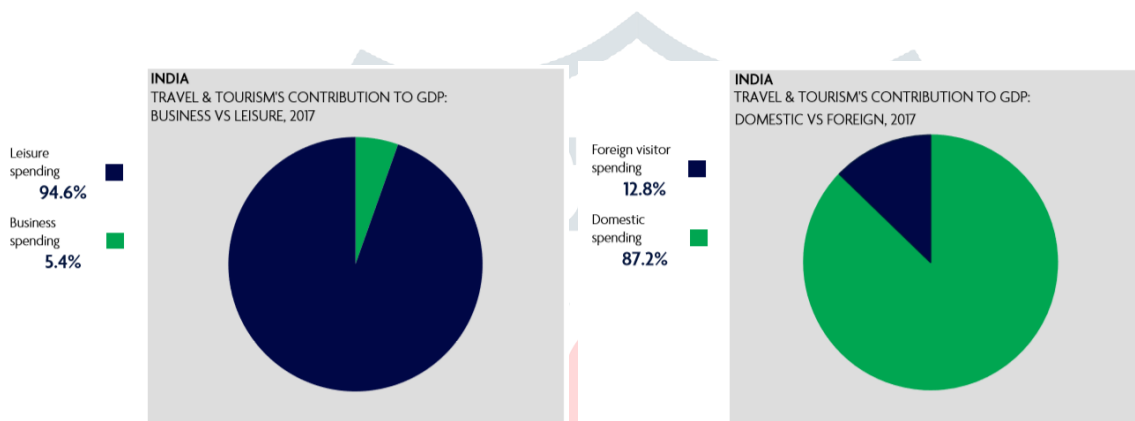
Source: Travel and Tourism Impact 2018 Report

The Ministry of Tourism, Government of India formulates and regulates rules, regulations and laws relating to the development and promotion of tourism in India. The department is supporting by creating websites, developing infra structure, mobile applications as complete solutions for booking, payment, information delivery, feedback, emergency help. Apart from this, facilities like e-visa and visa on arrival are extended in collaboration with partner countries. September 27th is celebrated as World Tourism Day to promote tourism activities.

Digital Transformation Trends in Hospitality and Tourism

Industry 4.0

Digital technologies are offering powerful tools for managing tourism related activities in ever increasing demand to offer personalized customer demand. Technologies are emerging and disrupting with Fourth industrial revolution with digitalization. Tourism and hospitality sector is one of early adopters embracing technological platforms for growth and to meet competition.

**Digital Transformation and Industry 4.0**
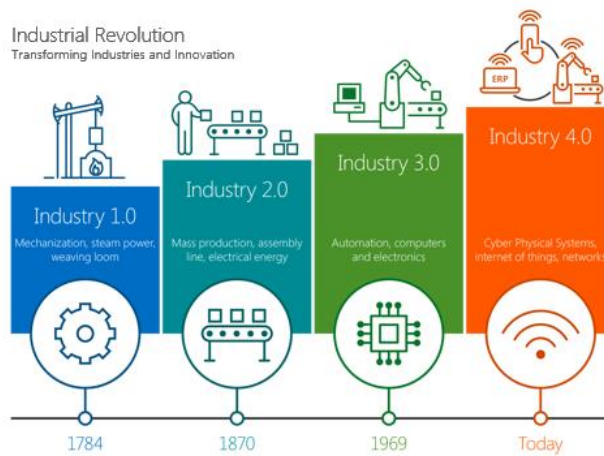
Big Data

Dr. Yang Yang worked with Dr. Bing Pan (Associate Professor from College of Charleston), developed a conceptual framework that connects the types of big data with stages of travel during their study on big data analytical application in tourism and hospitality management. Digital transformation is the result of successive advances in telecommunications, computers, databases, networks, Internet, mobile and wireless technology, global positioning systems and smartphones, amongst other things. Big Data, Artificial Intelligence,
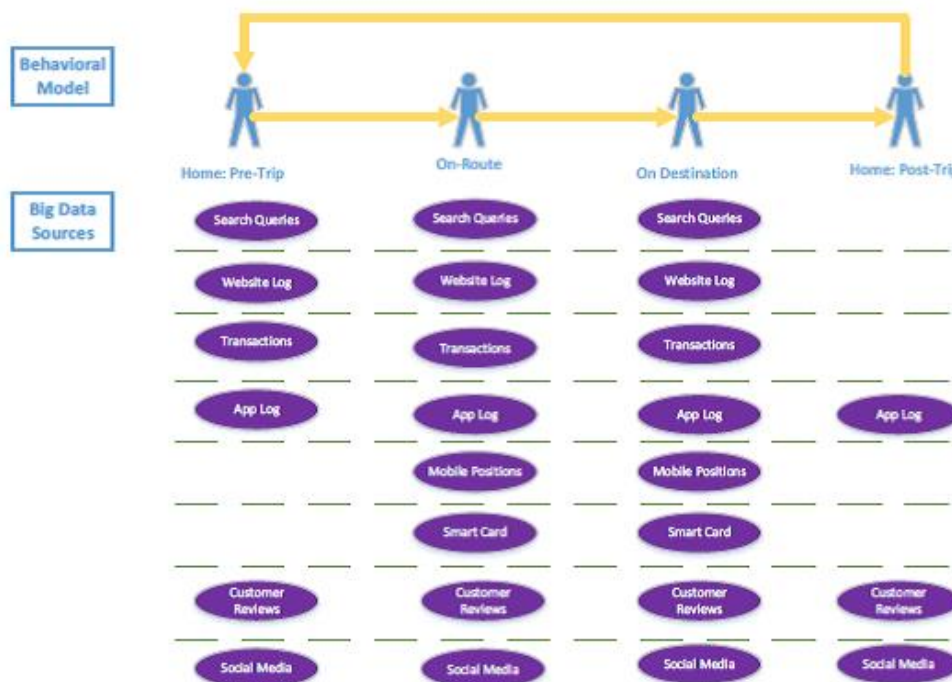
A Behavioral Model of Forecasting Tourist Behavior with Big Data

Mobile Applications

Mobile apps are the 7th most downloaded category apps. 60% of smart phone users regularly use apps while planning trips. Various mobile applications are used for Navigation, Explore Nearby, Outsmart Traffic, Transit Apps. They connect people and offer instant information at their fingertips with customized services. Open survey Platform reveals 56.79% use to book their tain or flights, 51% to find directions, 47.4% to review tourism places.
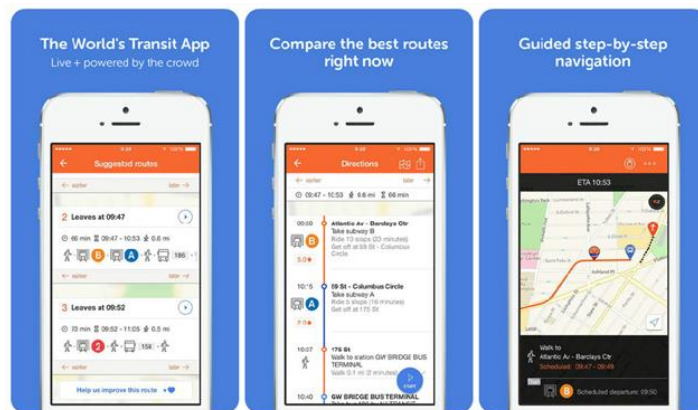
Because of mobile apps travel agents business have suffered. Since travelers know actual price and can book at their convenience without commission or extra charges and the trip becomes easy as the traveler is not dependent only on agent to access information about destination, accommodation details, charges. Most of these are taken care by Online Network aggregators.

SAMR Model

SAMR is acronym of Substitution, Augmentation, Modification, and Redefinition . This model helps in understanding how Technology transformation and enhancement are leading to benefits in business.
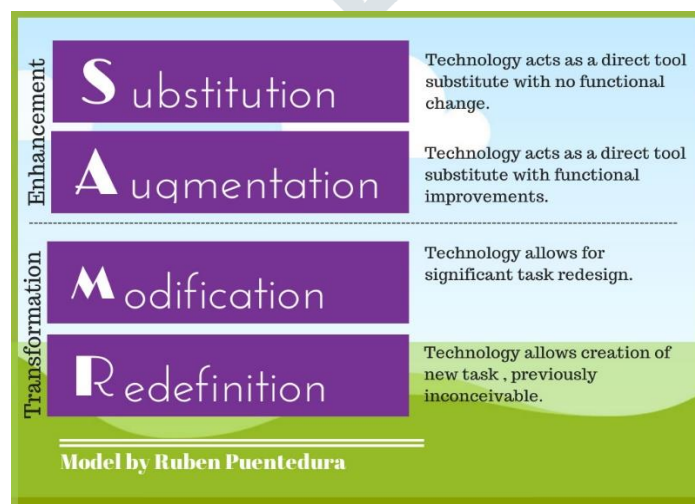
The above model clearly explains how technology is having an impact in business and this can be applied to Travel and Hospitality Sector. Digital Transformation with enhancement of travel services create more customer satisfaction since traveler is offered customized service. For example: Brochures are replaced by videos and reviews which give real time experience to the person in terms of Travel and also can check places, accommodation, charges. The traveler can schedule or modify their plans or look for alternative payment options or compare instantly what other service provider is offering, find location history, get voice based interactive service which is very effective and kind of replacement for agent/guide, get reviews or keep booking in pending for some time.

Findings

From the study conducted in this research, below findings are listed.

- Apps are useful as they deliver lots of information about travel – time, place, movements, Discounts, Loyalty rewards, Connecting to other people, Finding a place is easy and Referrals on stay/ food
- Reasons for travelling with Pleasure being highest, which was followed by use of leisure time and last was business.
- 14% wanted to travel within state or local, 28% within country and 57% wanted to travel to different countries.
- Reasons for travelling was to explore nature, relaxing, to explore cultures, health reasons, visiting friends. It was interesting to observe that people interesting mentioned night life experience and sports in other reasons.
- Internet was dominating and replaced information from travel agent or tour operator.
- Majority agreed that technology has helped in better travel experience in terms of information delivery, booking, Making Payments and Tracking movements.
- Mobile apps were preferred over websites and search engines for accessing information and making payments.
- 20% are present on Facebook travel communities.
- Respondents also use Explore Nearby options or Maps whenever they visit a destination.

- Visual aids are useful as they deliver information in terms of arrival/departure times, connecting times, alternative modes of transport, Places, time of business hours (especially in shopping destinations in different countries), currency value verification in exchange process,

- Respondents used 2 to 3 mobile apps to check information and comparing.

- 57% said digital technology is very useful to make their travel plans and while travelling also.

- 71% were aware about Online Travel Aggregators and feel they give great benefits to travelers.

- MakeMyTrip, TripAdvisor, Clear Trip, IRCTC, Airbnb in order were used apps by respondents.

Conclusion

Underestimating the size of technological phenomenon and being unprepared for the digital transformation could leave organisations at great risk. Tourism and Hospitality sectors are at cross roads and witnessing the speed of transformation in terms of technology with digital enhancement. Country with technological adaptation are able to catch with the speed of growth and Organizations in tourism related need to compete by adopting digital transformation trends. Digitalization has given more visibility to users and business owners to view data. Business organization can watch what customers are checking and offer best deals at the same time customers are benefited with more options.

References

- Dawson, Michael. (2004). Selling British Columbia: Tourism and consumer culture, 1890-1970. Vancouver, BC: UBC Press.
- International tourism, number of arrivals, World Tourism Organization, Yearbook of Tourism Statistics, Compendium of Tourism Statistics and data files: https://data.worldbank.org/indicator/st.int.arvl?view=map
- Journal of Tourism & Hospitality, ISSN: 2167-0269
- Smith, O. (2017, May 05). The 51 destinations where tourists outnumber locals. Retrieved from https://www.telegraph.co.uk/travel/maps-and-graphics/countries-where-tourists-outnumber-locals/
- Anumeha Chaturvedi, India's is the world's 7th largest tourism economy in terms of GDP, says WTTC
- ET Bureau, Apr 04, 2017, 06.30 PM IST
- Bing Pan and Yang Yang, Monitoring and Forecasting Tourist Activities with Big Data, Book Chapter for: Management Science in Hospitality and Tourism: Theory, Practice and Applications, January 26, 2015
- World Tourism Day. (n.d.). Retrieved from http://wtd.unwto.org/content/wtd-2018-fourth-industrial-revolution
- Westcott, M. (n.d.). Introduction to Tourism and Hospitality in BC. Retrieved from https://opentextbc.ca/introtourism/chapter/chapter-1-history-and-overview/