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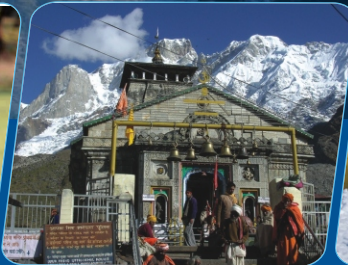
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Dear Readers and Contributors,

The Journal of Tourism family is immensely pleased to provide another issue of Journal of Tourism (JoT) for **June 2022.**The theme "Wellness Tourism" of this issue has been selected keeping in view of the significance of Health and wellness tourism as an important emerging and vital segment of tourism during and after COVID-19 pandemic. The journal has received an overwhelming response from researchers, academicians, industry personnel including wellness practitioners etc on different dimensions of Wellness Tourism along with some other contemporary issues related to Tourism and Hospitality Sector. The current issue of JoT fulfils its aim to come up with constructive contributions on these issues. After comprehensive, careful review and observations, the editorial team has found the following seven papers appropriate for publication.

The first paper titled "***An Econometric Analysis of 'Hotel-Hospital Tie Up' for Wellness Promotion and Related Tourism in Indian Health Cities with Reference to Kolkata***" authored by Dillip Kumar Das, Pratim Chatterjee, Somnath Chatterjee and Debasish Batabyal has investigated the promotion of wellness tourism through hotel -hospital strategic partnership during and after pandemic time. A paradigm shift is only possible with the complete initiation and contribution of the concerned people, associated with the service industries; but, the urge for the same is more significant for the professionals of the hospitality industries.

The second paper titled "***Promotional Factors of Ayurveda Health Tourism in Kerala***" by Liji George has analyzed the factors which contribute to the growth of Ayurveda health tourism in Kerala. The study delves in to the promotional factors of Ayurveda in the context of wellness and medical tourism in Kerala and tries to trace the principal factors contributing to it through principal component analysis. The study corroborated the positive association between the confirmed factor domains and the promotion of Kerala Ayurveda. The state level and institutional factors for the promotion and growth of Ayurveda and wellness tourism in Kerala are also discussed in this paper.

The third paper titled "***Assessing the Relationship between Adventure, Wellness, and Eco-Tourism through thematic Analysis***" authored by Cheryl Venan Dias, Bhakti Thakur and Yash Prabhugaonkar has used the Application of the thematic analysis. It has revealed ten emerging themes which are further clustered to adventure, wellness, and eco-tourism (AWE) dimensions. Among these themes, breakthrough, adrenalin rush, sensory indulgence, and savouring are associated with adventure; mindfulness, peer-bonding, social-wellness, and eudemonic well-being are linked with wellness and the construct eco-tourism is linked with nature-connect and aesthetic-experiences. The triangulation method is also used in this study which has helped to merge the base framework with the thematic analysis.

Fourth Paper titled "***Visitors' Experience on VR/AR Facilities in Theme Parks: Based on Technology Acceptance Model***" by Sirong Chen, Mu Zhang, Jiayu Han, Yifan Zuo and

Zihan Wang have used the concept of VR/AR technology. New high-tech generation, has been using technology in all walks of life including tourism in theme parks. This study has established that perceived usefulness and perceived ease of use of VR/AR projects in theme parks positively affect visitors' attitudes by using the improved technical acceptance model.

The fifth paper titled "*Taxonomy of E-Business Models for the Hospitality Industry*" authored by Kamakshya Prasad Nayak,Hardaman Singh Bhinder and Vineet Kumar has summarised and uncovered the inherent characteristics of existing e-business models in the hospitality industry. The taxonomy of online business models in the context of the hospitality industry has been found out with the adoption of a systematic literature review. A taxonomy framework of e-business models for the hotel industry is proposed to explain the business models with their characteristics.This paper provides a systematic framework for the managers which can guide them in building and carrying out business effectively.

The sixth paper titled "*Risk Perceived by Domestic and International Tourists in the State of Goa, India*" by Ranipanchsheela Bansode and Madhuri Sawant examines the risk perception of tourists in the state of Goa (India). Risk factors such as financial risk, health risk, Physical risk, crime risk, terrorism risk, psychological risk and natural disaster risk are analysed in this paper. Results show that domestic tourists perceive Crime, Financial and Physical Risk, while international tourists perceive Crime, Physical, Health and Financial risk. For domestic and international tourists, mass media, self-experience and feedback from Friends and relatives are identified as external risk factors.

The seventh paper titled "*Role of Wellness Tourism in Promoting Health of Corporate Employees*" authored by Anurag Mohanty has deliberated on different types health related issues including their causes, how to maintain the health and lifestyles in corporates in traditional ways and the role of wellness tourism for improving the health conditions of the employees. The author has tried to provide some measures in form of providing Fresh Oxygen, Organic Vegetables, Naturopathic Treatments and Yoga to the corporate clients to enhance their performance and maintain a healthy life.

We would like to sincerely acknowledge the contributors, reviewers, and editorial board members who have given their valuable time, support and co-operation during the entire process and inspired us to bring out this issue of the Journal of Tourism.

With best regards

S.K. Gupta, Ph.D. (Editor in Chief)
Dillip Kumar Das, Ph.D. (Guest Editor)

CONTENTS

An Econometric Analysis of 'Hotel-Hospital Tie Up' for Wellness Promotion and Related Tourism in Indian Health Cities with Reference to Kolkata

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KEYWORDS

Wellness promotion,
Hospitality Professional,
Strategic Alliance, PCA,
Ordered Probit Model

ABSTRACT

The scope for wellness promotion and related tourism has increased manifold amidst this global crisis exhibited through COVID 19 pandemic that results in formation and popularity of medical hotels, patient hotels and such other new types through partnerships and alliances in many cities in Asia. Severely affected hospitality industry and their professionals are in search for new avenues and scopes now. This present study is an understanding of perceptions and attitudes of hospitality professionals in two diverse sectors with relatively new expertise and skills. This study includes the finding of determinants from the perspective of hospitality professionals by employing an ordered probit model and expressing its implications for future industry and academia.

INTRODUCTION

Health promotion enables people to increase control over their own health for overall quality of life through preventive and curative measures (WHO, 2021). Wellness promotion is enhancement of physical, mental, and social well-being and the prevention of disease and disability. This term is redefined now with the spread of coronavirus since 2019-20. Horn and Jennifer (2020) made recommendations to shift the locus of preventive care from face-to-face annual exams to a strategy that focuses on population health, clinical registries that readily identify all preventive services for which a patient is due. Nolte et al (2021) explained how the possibility of bringing pathogens to home is high for orthopedic surgery residents and as such recommended a mass policy issue helpful for all concerned with medical treatment.

Since inception, hotels have always promoted wellness and quality of tourist life along with generic facilities and services at non-residence. With the changing world, the hospitality sector has incorporated new ways and means of quality of tourists' lives. This COVID 19 pandemic has redevised the world with immense managerial, economic, and cultural complexities (Kukreti, et al,

2021). These complexities have predominated both the healthcare and hospitality sectors with an inverse relation. While the healthcare sector was dealing with an unprecedented influx of patients, the hospitality sector was almost non-functional. Guest-less hotel rooms, huge financial losses, new investment on sanitization, social distance specific guest handling, closure of many properties, loss of jobs etc. result in a severe crisis as never before. From front office, housekeeping, kitchen operation to services, everywhere new orientations are prevalent. But almost all employees in those hotels don't know whether these orientations are temporary or permanent, whether they would be working as pseudo health workers or get back to their previous working environment. It is also not very clear as to whether to treat guests as patients or vice versa. Therefore, the present study is examining the perception of and attitudes towards extended wellness promotion and related tourism practices which most of the properties are interested in. Until recently, the world has lost around 40 lakh people and about 4 lakhs are from India. Access to healthcare service is crucial in India (Chatterjee et al, 2019).Gateway city Kolkata is densely populated with 14.8 million people living and magnifying the sheer chance of infection unlike other regions. Until recently, Kolkata was considered to be easily accessible medical tourism destinations for domestic and inbound tourism from almost all neighboring countries (Rai, 2019). The first patient of the coronavirus found on 15th March, 2020 in Kolkata and more than 10 percent of the total city dwellers are affected now, excluding its role as epicenter of infecting all border districts, mostly densely populated (Singh, 2020). Consequently, hotels were empty, and hospitals overwhelmed. AMRI hospital is tied up with Hotel Monotel and ILS hospital with a four-star property Sonnet.

"We are in talks with a few other top hotels……there is a scarcity of beds across all hospitals, the satellite facilities are helping us keep beds free for those who really need hospital support…..Rupak Barua, Group CEO, AMRI Hospitals, President of Hospitals, Eastern India."

SIMS hospitals with Pride Hotel in Chennai, ITC's Welcome hotel with Manipal Hospitals in Delhi and G Kuppuswamy Naidu Memorial hospitals in Coimbatore, Ramada Plaza with SIMS hospitals in Guindy, AMRI with Sojourn, Southern Plaza and Casa Broadway are some evidences of hospital-hotel tie up that sheerly unmatched with medical hotels or patient hotels in India. The same trend was not only confined to standard and renowned properties but also among medium and lower medium also in the study area. Two COVID designated hospitals in Salt Lake City tied up with a local hotel for support.

REVIEW OF LITERATURE

COVID-19 pandemic has severely affected the travel and tourism and hospitality at an unprecedented scale, though various crises such as wars, natural disasters, pandemics, terrorist attacks threatening the security of tourists are not new (Batabyal, D., 2022; Adongo et al., 2021). Chhabra, D. (2020) suggested a transformational wellness tourism system model and incorporated healing and therapeutic potential of non-medical wellness programs in the pandemic era keeping in view the future tourism and hospitality business. Many authors and scholars of tourism and hospitality highlighted and critically analyzed how practices and orientations of wellness tourism, wellness promotion can contribute to tourism and hospitality business (Batabyal et al., 2020; Silva, et al., 2021; Sivananda Moorthy, S., 2021). The Global Wellness Institute (GWI) defines wellness tourism as travel associated with the pursuit of maintaining or enhancing one's personal wellbeing by resisting negative qualities in travel and turning it into a scope for maintaining our holistic health. GWI estimated an amount of $639 billion global market in 2017 and had grown more than twice as fast as general tourism. The spa market in India estimated a total of 5,990 facilities that generated revenue of US$2.1 billion in 2017. The indigenous healing practices are of different forms and types, may be exhibited from ancient/spiritual traditions; native plants and forests; special mud, minerals, and waters; vernacular architecture; street vibes; local ingredients and culinary traditions; history and culture; etc. Hotels' initiatives are not limited to having a wellness center, mostly with indigenous practices. Being one step ahead, hospital hotels are established by many renowned hotel chains. Many major hotel chains in Asia established hospital hotels much earlier (Cornell, 2006). Hospital hotel which is comparatively a modern concept provides an opportunity to the families and relatives of the patients to stay with them. This accelerates the recovery process of the patient considerably and is found to work as a very positive factor for the treatment process (Arefi et al, 2018). Sometimes an adjacent and privately run hotel can provide good quality food, accommodation, and other facilities to specifically those patients who can take care of

themselves and their medication (Harvey et al, 1993). The advent of hospital hotels can be observed as a combination of hotel and healthcare that provides treatment with relaxation. Healthcare hotels, which is basically a blend of tourism and medical services, certainly enjoys the large potential for development and competitive edge over others (Dryglas, 2012). Although the word hospitality and hospital have the same root, hardly there are traces of hospitality found in hospitals. Implementing hotel-like amenities in hospitals including proper room, restaurant facility, laundry, concierge etc. results positive patient outcome (Kunwar, 2019). The quality of healthcare service is extremely important for the satisfaction of the customers (Chatterjee et al, 2019). To make the customer experience more memorable, the medical industry needs to learn the guest care philosophy adopted and measured by the hospitality industry from time to time with certain changes (Pegu, et al, 2019). By applying those, it easily can exceed the expectation of the customer to make them repeat and lifetime customers (Zygourakis et al, 2014). It also proves the organization's social centric motive (Dutta et al, 2010).

HOTEL-HOSPITAL PARADOX AMIDST COVID 19 PANDEMIC

The act of placing a hotel under quarantine in case of any epidemic or pandemic is logically and practically very challenging even in great need unless it is properly equipped. Normal working procedures of the hotels can be modified based on need and so sanitization, treatment, healthcare, cleanliness, and care of the patients becomes priority (Mackinzie et al, 2020). Medical hotels can be proved very helpful as an isolation center for these patients where the rooms can be easily converted to hospital beds (Bannister et al, 2009). Innovative and effective strategy like developing the hotel as an isolation center for quarantine guests, combining with a nearby hospital to accommodate the patient and their family members or marketing the hotel as medical hotel can be considered as an effective marketing strategy to survive and eventually grow in the difficult times (Lo et al, 2006).

During the COVID-19 pandemic in many countries like the UK, Italy, Finland, Lithuania, and China, it has been observed that hotels and hostels are used as isolation centers especially for those who cannot arrange self-isolation facilities in their home. A moderate medical care with other standard hotel facilities would be very effective in this situation (Haroon et al, 2020). Hospital and hotel have some common features such as individual room with washroom, central kitchen room service which make them not only an effective solution for the containment of Covid-19 but also taking care of the patients with a moderate medical support (Cervantes et al, 2020)

Wellness tourism is a type of healthcare tourism where a combination of hotel and wellness center is desired by the wellness tourists. Hot spring industry, another offspring of wellness tourism, has established many hot spring hotels in different parts of the world catering to tourists. As in the hot spring hotels tourists generally come along with their family members so proper accommodation, food, hygienic condition, safety and security are valued by the tourists (Hsieh et al, 2008). Unlike a hospital room where the patient shares the room with other patients, the privacy and relaxation of the hotel room would help the guest to take proper rest and recover quickly (Hume et al, 2008). Wellness hotels have combined therapies with spa and to implement that efficiently the hotel hires licensed medical staff who can stay in the hotel and provide therapies to the resident guest. They offer holistic, aesthetic, alternative healthcare therapies or treatment as well as multidimensional services such as acupuncture, acupressure, body shaping etc. These wellness hotels also serve healthy and functional food by using local herbs and spices in a hygienic and natural way to enhance bodily function (Chen et al, 2013). Medical tourism develops local travels at the treatment place so along with tourism hospitality and leisure services like proper accommodation, Food and other hotel facilities has also developed (Teh & Chu, 2005; Lee et al, 2009). Improving the well-being of the body and the mind can be defined as wellness tourism. India has a rich culture of wellness treatments and therapies like yoga, ayurveda, unani and homeopathy to make it a resourceful wellness tourism destination. Besides giving proper wellness program quality food & accommodation facility, safety & security, complaint handling attitude, staff behavior and maintaining proper comfort level is essential for the development of wellness tourism in India (Global Wellness Institute, 2017; Mishra & Panda, 2021).

Combination of the hospitality and healthcare industry began a new chapter of sustainable development of medical tourism and medical hotels will be the main pillar of medical tourism in near future. Medical hotels provide a series of hotel services to the patients and their family members including online medical appointment, consultation, visa, flight ticket, interpreter, travel agent along with

general hospitality services. The main purpose of establishing a medical hotel is to create a new innovative strategy in the hospitality industry combining medical treatment and vacation (Jin et al, 2016). Health resorts are establishments that provide proper accommodation and food & beverage items to the patients and tourists besides offering wellness programs or medical treatment. Different factors like proper food, accommodation, location, cost, treatment, safety and hygiene encourages tourists to choose a medical hotel (Stein et al, 1990; Bennet et al, 2004; Connel, 2006). Either adopting or adapting the practices of hotel, combining with a nearby hotel or building a medical hotel will significantly improve the reputation of the property (Zygourakis et al, 2014)

It has been found out that high quality, low price and low risk pave to superior perceived value and willingness to buy services of a spa hotel. This finding will give insights about the attitude of the customers in leisure service consumption to select the spa hotels (Lu et al, 2009). The service delivery in terms of labor efficiency is increased when related and support services are combined with the treatment. To talk about hospitality centric philosophy in hospitals, the onsite pavilion of a hospital basically acts as home away from home (Severt et al, 2007). Hotel style room service in hospitals benefits the patients in several ways, mostly providing more choice, enhancing food quality and finally prone to less complaints, it also helps the hospital decrease food cost and improve the hospital's reputation. Use of multi-disciplinary teams with specialized hotel training proves to be essential for the successful implementation of hotel style room service (Sheehan – Smith, 2006).

Hotel based ambulatory care unit model allows the patient to receive daycare treatment from the adjacent hospital or clinic while staying in the hotel. Patients are also encouraged to stay with one of their family members in the hotel. The main drive behind this is to improve the patient experience at the time of taking treatment (Sive et al, 2012). Hotels which are adjacent to the hospital have all the necessary facilities like wheelchair, ambulance and other essential services for the patients and their family members (Holte,2011; Harboe & Visit, 2011; Suess et al, 2020). In this extremely competitive market healthcare service providers need to adopt a service marketing strategy that considers patient and customer and focus on the patient's overall experience. Medical hotels with the attributes of hotel and hospital can enjoy the competitive edge by more satisfied patient experience as well as a more productive way of revenue generation (Hollis & Verma, 2015; Wu et al, 2013; Suess & Mody, 2017).

OBJECTIVE

Present study deals with newly found collaboration, partnership and strategic linkages keeping in view the circumstances resulting from COVID 19 outbreak. Hotels providing satellite facilities or acting as designated collaborating organizations (DCOs) and certified community behavioral health clinics (CCBHCs) have been considered as extended measures for wellness promotion among residents and tourists. The major objective of the study is to find out whether the hospitality professionals agree or not with this new concept of hotel-hospital strategic partnership which may receive more importance during this COVID 19 outbreak for health and wellness promotion. This study also insights the determinants of such agreement or disagreement of the hospitality professionals.

METHODOLOGY

It is believed that the perspective on "hotel-hospital strategic partnership is a new concept that receives more importance during this COVID 19 outbreak for health and wellness promotion" is a simultaneous decision made by the hospitality professionals. Ordered probit qualitative response model is applied in this study to analyze the factors responsible for such perspective, obtained through structured questionnaire, on this issue of "Hotel-hospital strategic partnership is a new concept that receives more importance during this COVID 19 outbreak for health and wellness promotion". In the ordered probit model, the perspective (*PERSPECTIVE*) on aforesaid subject matter is considered as ordered variable, which is defined as follows:

$PERSPECTIVE = 2$, if the hospitality professional show agreement with the subject

$= 1$, if the hospitality professional show neutral with the subject

$= 0$, if the hospitality professional show disagreement with the subject

To examine the perspective for each hospitality professional, it is considered that an underlying receptive variable *PERSPECTIVE** which is formulated with the 'latent regression specification', as-

$PERSPECTIVE^* = b\,x + u$ where, u (error term) follows a normal distribution, having zero mean and unit variance; x is considered as the explanatory

variable list. The unobservable latent variable i.e., *PERSPECTIVE** is established with the observed value of the hospitality professional's perspective, *PERSPECTIVE* such that

PERSPECTIVE = 0 if *PERSPECTIVE** ≤ 0
= 1 if $0 < PERSPECTIVE^* \leq \mu$
= 2 if *PERSPECTIVE** $> \mu$

μ is the parameter which is not known and to be estimated with β. It is considered that μ follows a normal distribution throughout the observations; the following probability on perspective of the hospitality professionals having variety of agreements with the subject matter i.e., "hotel-hospital strategic partnership is a new concept that receives more importance during this COVID 19 outbreak for health and wellness promotion", as

Prob(PERSPECTIVE=0/x,β,μ)=F(-βx)
Prob(PERSPECTIVE=1/x,β,μ) = F(μ-βx)-F(-βx)
Prob(PERSPECTIVE=2/x,β,μ) = 1 – F(μ-βx)

The cumulative distribution function of m is considered as *F*. The threshold value m assessed with b coefficients by maximizing the log likelihood function:

$$L(\beta,\mu) = \sum_{Perspective=0} In\{F(-\beta x)\}$$

$$+ \sum_{Perspective=1} In\{F(\mu - \beta x) - F(-\beta x)\}$$

$$+ \sum_{Perspective=2} In\{1 - F(\mu - \beta x)\}$$

The perspective of the hospitality professionals on wellness promotion through hotel-hospital strategic partnership during this Covid-19 out-break, is a discrete decision, constant with qualitative affinity. This study has prioritized the dependency on agreement, neutral and disagreement upon the perspective of "hotel-hospital strategic partnership is a new concept that receives more importance during this COVID 19 outbreak for health and wellness promotion". A variety of factors persuades this perspective, and these factors can be listed with two categories of variables – demographic variables and opinion variables.

It is observed that there is a chance of inter-linkage among those independent variables, considered as opinion variables, which may lead towards the multi-collinearity error. Existence of linear relation among opinion variables the principal component analysis

Table 1: Details of independent variables ordered probit qualitative response model

Variable	Coding	Explanation
Demographic Variable	GNDR	Gender of the hospitality professionals
	AGE	Age of the hospitality professionals
	EXP	Experience of the hospitality professionals
	EDU	Total year of schooling of the hospitality professionals
	INCM	Monthly income of the hospitality professionals
Opinion Variable	WELL	Hotel-hospital alliance promotes the concept of wellness
	SIN	Present covid situation
	DMD	The demand for the healthcare service
	SPL	The supply side constraint of the healthcare service
	ACMD	Accommodation for the relatives of the patients
	BRND	Opportunity of branding for both hotels and hospitals
	HSPF	Hospital will gain financially, amidst pandemic
	HTPF	Hotel will get financial stability, amidst pandemic
	CCA	City Centric Approach
	HPSP	Urge of the hospitals to obtain readily available space
	HTSP	Urge of the hotels to utilize their unutilized space
	HPBR	Hospitals urge to create brand
	HTBT	Hotels urge to create brand

Table 2. Hypotheses of Explanatory Variables.

IndependentVariables		Coding	Explanation
DEMOGRAPHIC VARIABLE	Gender	GNDR	Male=0; Female=1 (Dummy variable)
	Age	AGE	Age of the hospitality professionals (in year)
	Experience	EXP	Total Experience of the hospitality professionals (in year)
	Education	EDN	Total year of schooling of the hospitality professionals
	Income	INCM	Average monthly income of the hospitality professionals
Opinion		OPINION	Opinion score value

is deployed to estimate the multi-collinearity error and reduce the perspective variable's numbers of dimensions. The principal component analysis is pursued with all thirteen perspective variables, which are consolidated with their corresponding loading value to obtain a single variable; the demographic variables are considered along with the single opinion variable, as the demographic variables are having their distinct dimensions.

The component matrix of opinion variables derives six components among all the opinion variables. Based on the estimated highest variance, eight opinion variables together comprise the first component. Accordingly, a new 'opinion' variable (OPINION) is considered with the help of following formula:

OPINION = $SLiXi/SLi$

$i = 1, 2….8$, L_i is the loading of the ith opinion variable and X_i is the value of the ith opinion variable

Including the newly constructed opinion variable (OPINION) and other five demographic variables i.e., a total of six variables are considered for the further analysis for obtaining the determinants of the hospitality professionals' perspective. The list of variables is presented below:

DATA ANALYSIS AND INTERPRETATION

The demographic and opinion variables are considered for this section of analysis to obtain the right set of variables that has some significant effect on the opinion of the hospitality professionals. To examine the coefficient of the explanatory variables, ordered probit analysis is performed. The positive sign of the coefficient in the table explains the better probability of hospitality professionals' preference on the positive perspective of the subject matter i.e., "hotel-hospital strategic partnership is a new concept that receives more importance during this COVID 19 outbreak for health and wellness promotion".

The significant factors or the determinants of the perspective of the hospitality professionals on hotel-hospital strategic partnership during this COVID 19 outbreak for health and wellness promotion are experience, education, income and the opinion of the hospitality professionals. Two variables, namely

Table 3. Result of preference on perspective.

Perspective	= 2 for agreed perspective
	= 1 for neutral perspective
	= 0 for disagreed perspective

Variables	Coefficient	Std. Error	z-Statistic	Prob.
GNDR	-0.30337	0.24177	-1.31548	0.197
EXP	1.66490	0.42921	3.90160	0.001
AGE	0.00801	0.00618	1.39985	0.156
EDU	0.06698	0.02219	3.34071	0.000
INCM	1.03E-06	5.19E-07	1.98901	0.046
OPINION	1.26162	0.15712	7.88625	0.000

gender and age are not significant. The first significant variable i.e., experience, can be described as it has a direct linkage with market understanding and thus the experienced hospitality professionals have a positive perspective towards the subject matter. Similarly, the positive perspective in this study is also determined by the education factor. The present crisis time has been analyzed by the hospitality professionals and they have considered that subject matter positively. Income is a financial issue which is in critical state during this pandemic period, especially for hospitality professionals. Salary reduction has become a common issue of the hour and thus high income professionals are experiencing a large quantity loss. The analysis has shown this fact in its own way by determining the income variable as a significant one.

CONCLUSION AND FUTURE SCOPE

The perspective of the hospitality professionals towards the hypothesis reflects on the opinion. The significant coefficient and the positive sign of opinion factor considers that the probability of opinion on the subject matter inclines toward significant positive agreement. During this pandemic time, to promote wellness tourism through hotel-hospital strategic partnership, a paradigm shift is only possible with the complete initiation and contribution of the concerned people, associated with both the service industries; but, the urge for the same is more significant for the professionals of the hospitality industries. At this quandary atmosphere, the hospitality professionals are in a volatile state to opine and judge the happenings. It was critical to review whether the decision and action of such a strategic alliance is worthy or not. The experience, education, earning level and the opinion of the hour become extremely significant to stress out this dilemma. The experienced and/ or highly educated healthcare professionals have welcomed this strategic alliance to promote wellness tourism and sustain their brand through engaging themselves in social causes. This outbreak also has a great impact that makes a positive opinion towards the hotel-hospital strategic partnership. Moreover, the crisis manages people and forces them to think critically out of the box, which boosts up and explores several avenues of wellness tourism. But this study does not incorporate roles and responsibilities of medical hotels or patient hotels in which employee perceptions are assumed to be different.

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Promotional Factors of Ayurveda Health Tourism in Kerala

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KEYWORDS

Ayurveda Tourism, Promotional factors, Tourism Potentialities, Pull factors, Trust Factors, Economic factors, Reference factors, Unique medicinal programmes

ABSTRACT

Kerala is known to the world with its own peculiarities in demographic, cultural and geographic dimensions. Achievements of the state in the social overhead spheres gained the attention of policy makers and have been even praised by the advanced western countries. Kerala is also known to the world for its Ayurveda system of medicine and glorified as a synonym for Ayurveda. Though this traditional system of Indian medicine has its roots in many parts of the country Kerala Ayurveda is acknowledged for its uniqueness and authenticity. The study aims to analyze the factors which contribute to the growth of Ayurveda health tourism in Kerala. The health tourist's decision to choose Kerala as a health care destination for Ayurveda medical care and the factors which are gluing to the selection of health care institution are tries to uncover. The state level and institutional factors leading to the promotion and growth of Ayurveda tourism in Kerala are studied by eliciting information from 282 Ayurveda health tourists who took their Ayurveda health care from Kerala during the period of 2019-20.

INTRODUCTION

 "While man's mind yearns for knowledge, his heart seeks for rest", so goes a famous dictum of antiquity. The desire to escape from the routine and to experience a world with new things could be considered as the driving force behind the flourishing and fast growing industry of tourism. As a significant economic phenomenon, health tourism is to be considered as a new form of tourism. However the primitive forms of this phenomenon has profound in our contemplation of the health care travels of ancient and medieval periods. For centuries people had crossed the borders of countries with an intention of health care. Initially travelling was considered as good for mental and physical health. Only wealthy people could travel long distances for health care as it was not affordable for all. With the recent development of transport and communication the cost of travel has decreased phenomenally. This made possible the popularization of the industry. The air travel became so common and no longer beyond the financial capabilities of common man. Together with this, changes in the socio- economic structures of nations with the advent of globalization gave impetus to the growth of health tourism. In early periods there was health care travel from developing to developed countries in search of advanced medical care. But a reverse trend emerged with the advancement of medical facilities in the developing world. 'Advanced medical care at third world prices' is the trade slogan of many developing countries. But the diversification and standardization of it with a broad spectrum of products and market players can only be treated as a recent phenomenon. With increased income and standard of living there is an increase in the demand for quality health care which doesn't have any precedence in the past. People are more conscious about their health and the international travel for health care is now becoming a way of life among the upper middle class. The new

trend among patients is travelling to remote destinations for getting immediate medical care. Health tourism is gaining momentum as more and more Americans, Europeans and even people from the developing countries parting their time for getting speedy medical attention at affordable prices.

Promoting tourism for individuals with special needs constitute an integral part of responsible and sustainable tourism policy of each and every country. There is a need to provide high quality and low cost provision of tourism services for people looking for wellness, recuperation and rejuvenation which is done by Ayurveda health tourism. The treatment under Ayurveda helps to rejuvenate body and mind with no side effects which makes it very popular among health care travelers. The present paper tries to uncover promotional factors of Ayurveda health tourism in Kerala.

This paper tries to analyze the elements which lead to the growth of Ayurveda health tourism in Kerala. The health tourist's decision to choose Kerala as a health care destination for Ayurveda medical care and the factors which are gluing to the selection of health care institution are tries to uncover. The state level and institutional factors leading to the promotion and growth of Ayurveda tourism in Kerala are studied by eliciting information from 282 Ayurveda health tourists who took their Ayurveda health care from Kerala during the period of 2019-20.

THEORETICAL RATIONALE AND RELATED LITERATURE

Bookman and Bookman (2007) opined that medical tourism is on the increase causing to multiple factors ranging from demand to supply ends. On the demand side it can relate to demographic reasons like longevity of life. Medical factors like higher demand for elective treatments for non-communicable illnesses. Higher disposable incomes and portable insurance schemes are the economic reasons from the demand side. Desires of the people to travel and explore new areas are the prime social reasons. On the supply side developing countries compete for the goodness of medical tourism since it contribute much to the growth process. Since the industry had higher linkages with allied sectors the role of multiplier is greater in medical tourism. Sipra Mukhopadhyay (2007) noted that people with surplus of money and very little time to spend on leisure turn to health and wellness packages for rest and relaxation. The opportunity provided by health tourism packages to blend health care with entertainment is an attraction for many to choose this option. Wellness tourism packages provide with rejuvenative therapies in relaxed surroundings.Melanie Smith and Laszlo Puczko (2009) wrote on the growth of wellness tourism across nations. Search for Complementary and Alternative Medical care gains momentum in addition to use of conventional form of medical care. Though conventional medical practitioners are skeptical on the result of alternative medicine and perceive them as untested and unproven therapeutics, a significant number of Americans have had an experience of some form of alternative medical care. Ramya M. Vijaya (2010) opined that a notable trend in the global health care is the travelling of patients from developed to developing countries in search of low cost medical care. It raises a serious problem of demand- supply mismatch of Medicare services since foreign patients and healthcare industry are compete with domestic industry. Actually, heath tourism in one way or other, transfer the health care problems of the source countries to the insufficient health care market of the host countries. Connel John (2011) stated that economic factors are central to the growth of medical tourism. Destination countries benefit substantially from the health care spending. It is evident from the fact that all the market drivers account greater enthusiasm in the promotional activities of medical tourism.Aaron A. Abuosi and Roger A. Atinga (2012) examined the patients' perceptions and expectations in hospital service quality in Ghana by applying SERVQUAL model. To them a rational customer want dignified treatment and respect from all service providers. This supposition is likely to be more in the industry of health care. Findings of the study identified a gap between the expected and received service quality. Chung Ping A. Loh (2014) study the global trends in health tourism based on the health related travel expenditure using the data source of IMF statistics. The data from 2003 to 2009 shows that health tourism is on the rise with a higher volume of import and export of health related goods and services. The study found that health related travel has a positive association with income. Countries belonging to the higher income strata secure a larger share in the health tourism activities.

The theoretical frame was the result of review of the related literature in the light of the theories relating to tourism.

1. The Sun lust and Wander lust Theory

According toMcIntosh &Goeldner 1990;quoted by Tsephe & Eyono Obono, 2013, the concept of Sun

lust is used to explain the traveler's desire to explore the specialties and attractions of a tourist place different from that of their own. The wander lust theory highlights the nomadic nature of tourists who are in search of new places and wants to go from a known place to unknown. The Sun lust and Wander lust theory is fitted to the tourist motive of Ayurveda health tourism. Ayurveda in Kerala attracts overseas patients with its recuperative and rejuvenative holistic health care. This ancient alternative health care is practiced and served here with all sorts of its authenticity and is unique in its healing powers. Kerala is considered as the synonym for Ayurveda and the health tourists can get its benefits together with all the tourism attractions of the state. Wander lust theory is also fitted as a stimuli to health travel. There are cases of healing experiences of diseases through Ayurvedic treatments and when patients are seeking for and availed Kerala Ayurveda as a new option it took the features of a wander lust tourist.

2. The Push and Pull Theory

The theory pin points the Push and Pull factors contributing to the desire for travel. The travel needs and wants should function as push factors and the specific attributes of the destination should function as pull factors behind travel (G.Dann 1977 & quoted by sephe & Eyono Obono, 2013). The specific health care needs of the patients are the push factors of health tourism. Presence of high quality health care, competitive medical expenditure, unique healing practices, alternate health care programmes, advanced technology and infrastructures etc. are the pull factors behind medical travel. The emerging manifestation of cross border health care are highly motivated by lower cost in destination countries, non availability of service in home country and long waiting lists of patients for availing medical treatments(Hopkins et al., 2020). Labour cost accounts a major share of expenditure and has the decisive role in price determination. Labour abundant countries like India can offer its health services at competitive prices. Age is one of the push factor which leads to Ayurveda health care travels since this holistic health care offer recuperative care.

PROMOTIONAL FACTORS OF KERALA AYURVEDA

The Planning Commission of India recognized the potentials of tourism and declared it as an industry in 1982.It was only after that the state government interferes for promoting tourism by conceding its growth potentials. Government has made significant efforts to expose the tourism potentialities of the state in the international market. Though initially tourism sector was driven by public sector initiatives, private sector participation has taken hold and flourished with Kerala brand promotion in various tourism areas. As a tourist destination, the attractions of the state vary significantly from other Indian states and this distinguished feature of the state is notable in the realm of health tourism especially of its Ayurvedic form. Ayurveda, the age old system of medicine has been practiced here with its all sorts of genuineness. But the formative turn of Kerala ayurveda was the result of commercialization of Ayurveda products and Ayurveda health care with a brand of health tourism. Now the state has enriched its profile with a good number of Ayurvedic Health tourism practitioners with Green leaf and Olive leaf Certification. It has been noted that health tourists from America, Europe, Gulf Countries and neighboring Asian countries form an extensive market for Kerala Ayurveda.

OBJECTIVES OF THE STUDY

1. To search on the factors contributing to the promotion of Kerala Ayurveda.
2. To identify the binding factors between health tourism provider and health tourists.

To sort out the factors contributing to the growth of Ayurveda health tourism in Kerala a two level factor analysis has made. At first, a Principal Component Analysis of variables which have a decisive role in the selection of Ayurveda health care institution by the health tourists is made. For this purpose the study makes use of fourteen variables having institutional specificity to identify the binding factors between the health tourism provider and health tourist. The adequacy of factors is tested with Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy and Bartlett's Test of Sphericity. Here the measured value of Sampling Adequacy is 0.745 that means the sampling is adequate.

FACTORS INFLUENCING THE CHOICE OF HEALTH CARE INSTITUTION

The present study about the factors that profoundly influence the health tourist's choice of service provider is performed with fourteen variables reduced in to five domains. Taking the total variance explained by the five components in the model it accounts for 61.191 percent variance, and hence the variables forming the five domains could be recommended as the factors that decides the preferences of health tourists.

Table 1. Total variance explained by the gluing factors.

Component	Initial Eigen values		
	Total	% of Variance	Cumulative %
1	3.066	21.897	21.897
2	1.794	12.814	34.711
3	1.384	9.888	44.598
4	1.224	8.745	53.343
5	1.099	7.848	61.191
6	0.919	6.566	67.757
7	0.833	5.951	73.707
8	0.711	5.082	78.789
9	0.637	4.549	83.338
10	0.595	4.250	87.589
11	0.523	3.737	91.326
12	0.456	3.256	94.581
13	0.402	2.870	97.451
14	0.357	2.549	100.000

Extraction Method: Principal Component Analysis. Estimated from the sample survey data

The above analysis is made simpler and comprehensive enough with the following Scree Plot analysis, Rotated Component Matrix and Structural Equation Modelling.

Scree Plot in figure 1 visualizes that the first 5 components have Eigen values greater than 1. We consider these as the "strong factors" having a greater influence on the decision to choose the health tourism
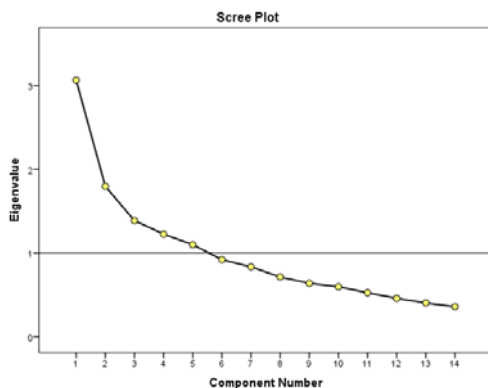
Figure 1.

provider. That is the first five principal components give the most part of the total variability in the data.

ROTATED COMPONENT MATRIX

Rotated component matrix is used to identify the association between each component (domain) and the variables under investigation. The variables with a high coefficient of correlation is said to have high factor loadings with each component. Accordingly, the first domain is formed with the factors health care with attractive tour packages (0.828), Near to my favorite tourist place (0.827), medical Visa arrangements (0.817) and near to international airport(0.787) are labeled as the tourism promotion factors(TPF) as these factors have high correlation with the first principal component.

Similarly the second domain namely pull factors (PF) is constructed with variables that have high correlation with the second component such as High quality (0.793) ,Good infrastructure(0.714) and Immediate medical attention(0.698).

Third domain is constructed with variables such as good faith in Ayurveda (0.735), High competency of service provider (0.594) and unavailability of the service in the home town (0.589), is named as trust factors (TF).

The variables Low waiting time (0.722) and low cost (0.693) forms the economic factors (EF) domain for the study.

The fifth domain named as reference factors (RF) constituted by the factors like healing experiences of friends and relatives (0.791) and suggested by others (0.722).

FACTORS CONTRIBUTES TO THE CHOICE OF KERALA AS PREFERRED HEALTH CARE DESTINY

The present study also examined the factors that significantly influence the health tourist's choice of health care destination and is performed with seven variables reduced in to three domains. Taking the total variance explained by the three components in the model it accounts for 65.74 percent variance, and hence the variables forming the three domains could be recommended as the factors that decides the preferences of health tourists.Here Kaiser-Meyer-Olkin Measure of Sampling Adequacy is 0.573 that means indicate the sampling is adequate. Here we have 7 explanatory variables (table 4), so PCA initially draw out 7 factors (or "components"). Each component has a **quality score** called an **Eigen value.** The above analysis is made simpler and

Table 2. Rotated component matrix.

	Component				
	1	2	3	4	5
Health care with attracting tour packages	0.828				
Near to my favorite tourist place	0.827				
Medical Visa arrangements	0.817				
Near to International Airport	0.787				
High Quality		0.793			
Good infrastructure		0.714			
Immediate medical attention		0.698			
Good faith in Ayurveda			0.735		
High competency of service provider			0.594		
Unavailability of this service in the home town			0.589		
Low waiting time				0.722	
Low Cost				0.693	
Healing experiences of friends / relatives					0.791
Suggested by others					0.722

Source: Estimated from Primary data
Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 5 iterations.

Table 3. Total variance explained by the gluing factors

Component	Initial Eigen values		
	Total	% of Variance	Cumulative %
1	2.354	33.635	33.635
2	1.225	17.500	51.135
3	1.023	14.612	65.747
4	0.912	13.035	78.782
5	0.670	9.574	88.356
6	0.469	6.699	95.055
7	0.346	4.945	100.000

Source: Estimated from Primary data.
Extraction Method: Principal Component Analysis.
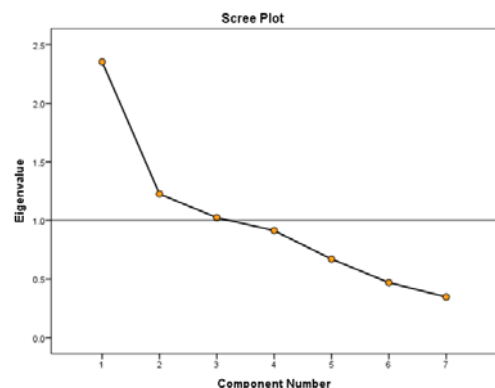
Figure 2.

Table 4. Rotated component matrix.

	Component		
	1	2	3
The unique medicinal programs of Kerala Ayurveda	0.856		
Ayurveda is cost effective	0.709		
There is minimum waiting period for treatment	0.638		
There are diseases which are curable only through Ayurveda		0.850	
Lack of trust in modern medicine		0.798	
Kerala is considered as one of the best tourist destination			0.824
Attractive Health tourism packages			0.822

Source: Estimated from Primary data.
Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 4 iterations.

comprehensive enough with the following Scree Plot analysis and Rotated Component Matrix.

The rotation helps to reduce the number factors on which the variables under investigation have high loadings makes the interpretation of the analysis easier. The variables, the unique medicinal programs of Kerala Ayurveda (0.856), there is minimum waiting period for treatment (0.638), Ayurveda is cost effective (0.709) and have high correlation with the first principal component and these variables are the first factor called Uniqueness of Kerala Ayurveda(UKA). The variables there are diseases which are curable only through Ayurveda(0.850) and Lack of trust in modern medicine(0.798) constitute the second factor called Trust factors(TF). Third factor called tourism attractions (TA), constitute by the variables Kerala is considered as one of the best tourist destination (0.824) and Attractive Health tourism packages (0.822).

STRUCTURAL EQUATION MODEL (SEM)

Structural Equation Modeling is a general statistical modeling technique for cross-section data. It is a multivariate statistical technique which applies a combination of factor analysis and multiple regression analysis to assess the multiple and interrelated dependence in a single analysis. As the structural Equation Modeling is the appropriate method for finding the structural relationship between measured variables and latent constructs, an effort is made here to study whether there is an association between the different variables in each domain and the domain constituted by those variables.

HYPOTHESIS

H0: The variables under study are not forming any association

H1: The variables under study contributes to the promotion of Ayurveda health tourism in Kerala

Decision Rule: Rejecting the null hypothesis when the p-value < 0.05

STRUCTURAL EQUATION MODELING (SEM) ANALYSIS

A maximum likelihood estimation method with AMOS 26.0 was used to test the predicted relationship among the constructs in the proposed model. The overall model achieves a good fit with chi square = 298.830, degrees of freedom = 204 and p value = 0.000.The GFI (goodness of fit index), AGFI (adjusted goodness of fit index), Comparative

fit index (CFI), Incremental fit index (IFI) and Tucker-Lewis coefficient (TLI) obtained for the present study is close to 0.90 which indicates the goodness of fit of Structural Equation Modeling.

The table shows the regression weights between the variables and these estimates tell about the relationship between the main factor and the dependent factors. The contributing factors of Promotion of Ayurveda Health Truism (PAHT) are Tourism Promotion Factor (TPF), Pull Factor (PF), Trust Factor (TF), Economic Factor (EF), Reference Factor (RF), Uniqueness of Kerala Ayurveda(UKA),Trust in Ayurveda Health Care(TAHC) and Tourist Attractions(TA). Here TPF is the highly influencing factor to PAHT and the regression coefficient is 0.433 with significance p value < 0.05. The factors TPF, PF, TF, UKA and RF are positively affecting PAHT. The variables Like to visit Kerala Again, Recommend Kerala to others as a health care Destination and Recommend Kerala to others as a Tourist Destination are directly contributing to Promotion of Ayurveda Health Truism (PAHT). Here we fixed the regression coefficient of Recommend Kerala to others as a health care Destination to 1, So the effect of Like to visit Kerala Again to PAHT is 0.729 and the effect of Recommend Kerala to others as a Tourist Destination to PAHT is 0.677. Both regression coefficients are significant at 0.001 levels (two-tailed). The four variables constituting the TPF domain contribute substantially for the factor TPF, with regression coefficient 1 for the variable Attracting Health Care Tour Packages, 0.797 for medical VISA arrangements, 0.926 for near to my favorite tourist place, 0.936 for Near to international airport. Also Immediate Medical Attention has an effect on TPF and the regression coefficient is 0.225. In the PF factor domain, three variables contribute significantly, with regression coefficient 1 for the effect of Immediate Medical Attention, 1.476 for the effect of High Quality and0.817 for Good Infrastructure. In TF factor there are three variables contributing, if the effect of Competency of Service Providers to TF is 1 then the effect of Good Faith in Ayurveda and Unavailability of the service in Home Town are 1.479 and 2.520 respectively. So both the variables Good Faith in Ayurveda and Unavailability of service in Home Town have higher effect on Trust Factor. For the factor EF, the coefficient of Low Waiting Time is 1.The regression coefficient of Low Cost is 0.158 and insignificant with p value > 0.05. For the factor RF, the coefficient of Suggested by Others is 1 and the regression coefficient of Healing Experience is

Table 5. Estimation Table.

Path			Estimate	S.E.	P value
PAHT	<—	TPF	0.433	0.136	0.001
PAHT	<—	PF	0.175	0.076	0.021
PAHT	<—	TF	0.411	0.419	0.327
PAHT	<—	EF	-2.741	0.929	0.003
PAHT	<—	TA	-0.077	0.180	0.671
PAHT	<—	UKA	0.383	0.099	0.000
PAHT	<—	RF	0.003	0.231	0.991
PAHT	<—	TAHC	-0.241	0.072	***
Health Care Destination	<—	PAHT	1.000		
Like to Visit Again	<—	PAHT	0.729	0.057	***
Tourist Destination	<—	PAHT	0.677	0.058	***
Attracting Health Care Tour Packages	<—	TPF	1.000		
Medical Visa Arrangements	<—	TPF	0.797	0.068	***
Near to Tourist Place	<—	TPF	0.926	0.075	***
Near to Airport	<—	TPF	0.936	0.082	***
Immediate Medical Attention	<—	TPF	0.225	0.055	***
Immediate Medical Attention	<—	PF	1.000		
High Quality	<—	PF	1.476	0.257	***
Good Infrastructure	<—	PF	0.817	0.150	***
Competency of Service Providers	<—	TF	1.000		
Good Faith in Ayurveda	<—	TF	1.479	0.637	0.02
Unavailability In Home Town	<—	TF	2.520	1.082	0.02
Low Waiting Time	<—	EF	1.000		
Low Cost	<—	EF	0.158	0.339	0.641
Suggested By Others	<—	RF	1.000		
Healing Experience	<—	RF	3.473	1.610	0.031
Cost Effective	<—	UKA	1.000		
Minimum Waiting Period	<—	UKA	0.454	0.074	***
Unique Medical Programs in Ayurveda	<—	UKA	1.112	0.185	***
Lack of Trust in Modern Medicine	<—	TAHC	1.000		
Curable only through Ayurveda	<—	TAHC	0.659	0.151	***
Health Tourism Package	<—	TA	1.000		
Best Tourist Destination	<—	TA	0.784	0.144	***

Source: Estimated from Primary Data

*** Implies high level of significance with p-value less than 0.001

3.473 with p value < 0.05. The factor UKA consists of Cost Effectiveness and Unique Medicinal Programs in Ayurveda and Minimum Waiting Period. The regression coefficients of the variables are 1.000, 1.112 and 0.454 respectively. In the factor TAHC, Lack of Trust in Modern Medicine has an effect 1 then Curable only through Ayurveda has 0.659 effects on TAHC. In the factor TA, Health Tourism Package has an effect 1 then Best Tourist Destination has 0.784 effects on TA.

PATH DIAGRAM

To interpret the findings of the study in a more comprehensive way, path diagram seems to be the most suitable statistical tool. It is a graphical presentation of associations between the dependent and independent variables with boxes and diagrams. In path diagram the association between factors and variables are given with regression weights indicated with an arrow mark from each factor domain to the respective variable. In order to identify the most relevant variable that forms each factor domain, a
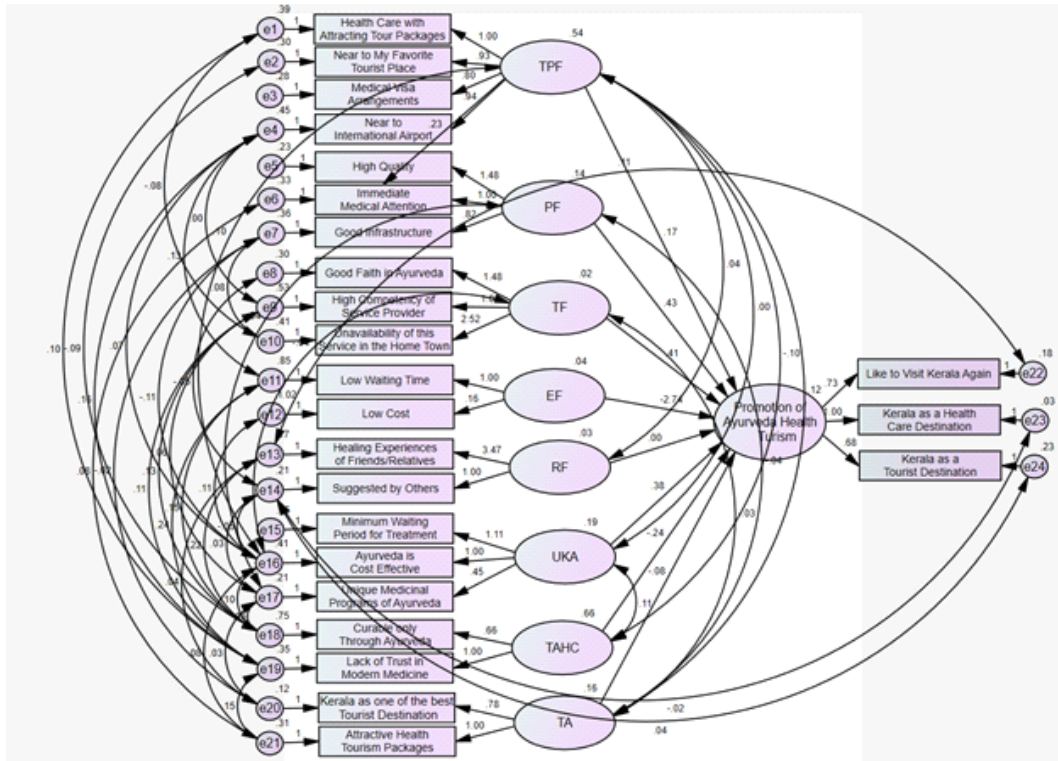
Figure 3. Path Diagram

variable with regression weight 1 is considered as a reference category or numeraire.

The path diagram depicts the factors contributes to the Promotion of Ayurveda Health Tourism in Kerala. The measurements of the SEM model define the relations between the observed and unobserved variables and provide the link between the observed indicator variables and the underlying constructs they are designed to measure. Here we have 9 Confirmatory Factor Analysis (CFA) models. The first CFA model TPF measured by four observed variables. Health Care with attractive Tour Packages is the reference category for the TPF domain with regression weight one. Near to International Airport with regression value 0.936, Near to the favorite Tourist Place with the value of regression 0.926 and Medical Visa Arrangements with regression weight 0.797 indicate a positive association between these variables and the TPF domain.

Similarly, Immediate medical attention is considered as the reference category for the PF domain with regression weight one. From the Path diagram, it can be inferred that, High quality has 1.476 times impact on the PF domain. Good infrastructure with

regression value 0.817 also contributes to the PF domain. For the Trust Factor (TF) domain, high competency of service provider forms the reference category with a value of regression one. It is clear from the diagram that unavailability of Ayurveda service in the home town has 2.50 times more impact and good faith in Ayurveda has 1.479 times impact on the TF domain. For the EF domain low waiting time is the reference category with regression weight one and low cost with regression value 0.16 exerts relatively lower influence. The Reference Factor (RF) domain takes the variable 'suggested by others' as the reference variable since its regression value is equal to 1 and 'the healing experiences of friends and relatives' 3.473 times impact on the RF domain.

Likewise, in the UKA domain, cost effectiveness of Kerala Ayurveda forms the reference category with regression weight one. Uniqueness of Kerala Ayurveda has 1.112 times more effect than that of the reference category. The Minimum waiting period shows a positive association with a regression value of 0.5. In TAHC factor, lack of trust in modern medicine is the reference category with regression weight 1. The tourist belief of 'there are diseases

curable only through Ayurveda' has a regression value of 0.659 and exhibit the positive association with the domain. In the TA factor, tourism packages forms the reference category with regression weight one. The tourist evaluation of Kerala as a best tourist destination forms a positive association with a regression value of 0.784. The variables 'like to visit Kerala again (0.729), recommend Kerala as a best health care destination to others (1.000) and recommend Kerala as a tourist destination to others (0.677) conformed a positive association with the promotion of Kerala Ayurveda.

CONCLUSION

According to the report of World Travel and Tourism Council (2018) the travel and tourism industry is the second fast growing industry in the world. The report has also mentioned that 10.4 percent of economic activity is generated in this sector. Considering the relative significance of the sector, almost all the economies irrespective of their development position give key attention to growth of tourism. Regarding Indian economy, the tourism sector shows a remarkable increase in its growth potential both at the national and at the regional levels. The case of Kerala economy is not different. It also experiences a credible increase in the flow of domestic and foreign tourists to its various tourism niches.

It is a matter of great concern for the stakeholders of tourism to know the pulse of tourists and make a tourist retention strategy for a sustainable growth of tourism. The present study delves in to the promotional factors of ayurveda health tourism in Kerala and tries to trace the principal factors contributing to it through a principal component analysis. The study corroborated the positive association between the confirmed factor domains and the promotion of Kerala Ayurveda.

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Assessing the Relationship between Adventure, Welness, and Eco-Tourism through Thematic Analysis

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KEYWORDS

Adventure, wellness, well-being, ecotourism, AWE construct, cohort, pandemic breaks, ADO, TCM, Thematic Analysis

ABSTRACT

The motivators of adventure tourism are associated with risk-taking behaviour, very little attention is given to other motivators that can promote wellness among its consumers. The study focuses on primary data which thematically analyses the recorded transcripts of adventure tourism experiences. This included a cohort of 21 stakeholders who visited two resorts which provided hard and soft adventure tourism opportunities; the activity was carried out in March 2021 during the pandemic. The locations were Bison River Resort and River Edge Resort located on the banks of river Kali in the adventure tourism destination of Dandeli, Karnataka. A process of elimination was followed for the literature review, followed by a network analysis of key constructs using VOSViewer, the systematic elimination helped us to select 40 papers, which were further analysed using the ADO-TCM/5W1H process to derive the theoretical framework for this paper. Application of the thematic analysis revealed ten emerging themes which were further clustered to adventure, wellness, and eco-tourism (AWE) dimensions; wherein breakthrough, adrenalin rush, sensory indulgence, and savouring were associated with adventure; mindfulness, peer-bonding, social-wellness, and eudaimonic well-being were linked with wellness, the construct eco-tourism was linked with nature-connect, and esthetic-experiences. The triangulation method used also helped us to merge the base framework with the thematic analysis associated with this paper.

INTRODUCTION

Global wellness summit (GWS) has called the year 2021 'the year of travel reset' as the pandemic nearly put the brake on public travel till early 2021. This halt in travel has also offered solutions to some problems such as overtourism and made tourism destinations more sustainable (McGroarty, 2021). The pause between the years 2019 to early 2021 created a mass deferred demand for tourism. The behaviour of people seeking to break the monotony of a lock-down resulted in 'revenge tourism'. The fear of contracting the Coronavirus creates fatigue in the mind of people that makes them escape to hill stations or exotic destinations (Free Press Journal [FPJ], 2021). It is predicted that travel will become more inclusive, accessible, and affordable. Pandemic has made wellness radically important for people as

it has triggered an economic meltdown globally, injustice due to racism, politics that is getting polarised and the crisis of mental wellness (McGroarty, 2021, World Bank 2020, Addo 2020, Kerr, Panagopoulos, & Van Der Linden, 2021, and Dawel et.al. 2020). To understand wellness in its true sense it is important to identify its dimensions. National Wellness Institute, (2009) further clarified the six dimensions of wellness and asserted its relation to emotional, physical, social, intellectual, occupational and spiritual wellbeing.

Many papers focus on wellness in isolation, but very few studies have focused on adventure tourism and its association with wellness. Adventure tourism is a niche product that allows the tourist to indulge in physically challenging activities, and experience the adrenaline rush. The motivation aspect involves a spectrum of risk-taking behaviours, awareness of risk and perception of risk. Apart from this the tourist also moves out of the creature-comfort zone to explore the unknown. The tourist through physical activity experiences exertion, thus stamina and skill are required before setting out on such expeditions. The mobility aspect of this form of tourism involves a movement towards unexplored and exotic destinations that can give sensory pleasure to the tourists who behold the place for the first time. This paper attempts to explain the phenomenon of how tourists prefer nature-based adventure activities with wellness as a motivator, including a sense of wellness that is an outcome of such activities.

In comparison with the heritage that has a built and natural component to it, adventure tourism too can be delivered in both formats either man-made or naturally occurring. The design of a man-made adventure tourism activity is its predictability and safety. While a nature-based adventure tourism spot can occur in an eco-sensitive zone, the designer is nature which has the element of risk and unknown attached to it. Some of the pertinent examples that can pose risk to the tourist are the depth of the river, river current, slippery rocks, terrain, and weather conditions.

Adventure tourism research now focuses on health and well-being (Gross and Sand, 2019). Omar, Zain, Mahshar, Nasir, Hashim, Fatt, Mothar and Awng (2020) affirmed that activities undertaken under adventure tourism are also considered unharmful to the environment and bring about economic benefit. Iqbal and Mansell (2021) confirm that there are multiple networks between activities engaging nature and well-being, while they also associate such activities with the theory of stress reduction by Ulrich. Zainudin and Tasnim (2020) affirm that managing risk is paramount in the business of adventure tourism, the high frequency of accidental occurrence by media can create a negative impact on the adventure tourism business itself. Researchers have indicated that the study of motivation, satisfaction and expectation in Adventure tourism is not given prime importance. Oliver's expectation disconfirmation theory acknowledges that this is an emerging sector, consumers engage in travel adventures to seek unexpected experiences (McNeely, Burton, and Pennington, 2020). Spiritual well-being and perceived safety is also an outcome sought by most tourists (Choe and Regan, 2020). Geocaching is another outdoor activity that tourists indulge in, it has contributed to a new format in adventure tourism (Ihamäki, 2012). Another aspect that is useful to the study of health and well-being is the aspect of disconnection with nature and 'nature relatedness' (Nisbet and Zelenski 2013). A similar study conducted to identify the effect of outdoor activity on wellness revealed that there is a more positive emotion and well-being among those who indulge in such activities than those who confine themselves to indoor exercises (Loureiro and Veloso, 2014).

World Health Organization 1948, was quite articulate about the framework and foundation of wellness with regards to human beings. They laid the foundation for wellness by defining health as not merely the absence of disease or infirmity but a state of complete physical, mental, and social well-being. The International Ecotourism Society (TIES) went one step ahead to define responsible tourism in connection with well-being as travel to natural areas with responsibility, the process should conserve nature and sustain the local people's wellbeing. We can see the underpinnings of both Adventure and Eco-Tourism in these definitions and their positive relationship to well-being or wellness.

The unit under study

A group of 21 Cohorts set out on tempo traveller from Goa following the Sanquelim-Dandeli route via the Mollem sanctuary, this was the first getaway after the COVID-19 ushered the entire world into a lockdown in the year 2020. Dandeli is located at the coordinates 15.247719N, 74.629678W (Google Maps, 2022). When inter-state travel resumed operations, the group decided to take up adventure tourism activities in Dandeli, the adventure tourism hub in neighbouring Karnataka.

Bison river resort was an enroute activity area inclusive of four adventure activities in an overnight camping package. It is advisable to reach this spot well ahead of time, especially in the morning, to enjoy all the inclusive activities on the river Kaali. The outdoor activities such as kayaking, zip liner, zorbing, natural jacuzzi, coracle ride, and river rafting which takes around four hours of light to strenuous activities are delivered in this area. Wearing a life-jacket is a must in the Bison river resort area, trained adventure tourism guides are always around the

Image 1. Route map to Dandeli via Sanquelim in Goa, shows two routes and the shortest route is via Mollem from Sanquelim in Goa (Source: Google Maps 2022).

group, the guide spends some time training the group on the safety aspects while undertaking activities on the river. They line up for the white water rafting activity and wait for the plunge takes around 40-45 minutes per group. The terrain traps air inside the water to create unstable currents and gives an opaque or white colour to the water. The river converges into a class-3 rapid, this type of rapid has small waves and a 3-5 ft. drop, the level of danger is significantly low but it requires high skill levels to guide adventure tourists as well as maneuver the raft. The water quality is quite better in this area as it is supplied

directly from the Supa Reservoir and is at an altitude compared to the lower river area.

This resort covers softer outdoor activities such as cycling, angling, archery, trekking, bonfire and rain dance. The resort offers budget accommodation on a Modified American Plan basis in a cabin with an attached bath, commando tents and outdoor tents, which can easily accommodate two persons. The tent areas have common shower and bath areas, however, separate designated areas for male and female tourists are available. The resort management claim that the wastewater generated is further treated before

Image 2. Bison River Resort (Source: Google Maps 2022).
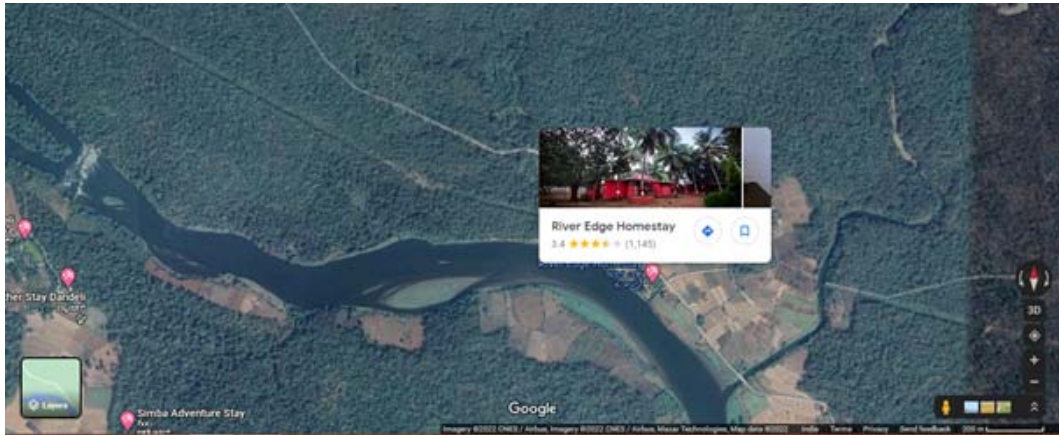
Image 3. Rivers Edge Resort (Source: Google Maps 2022).

sending it into the river. The river Kali has now passed the Dandeli downtown area and is quite contaminated by effluents from nearby factories so it was not advisable to take a dip in the river.

REVIEW OF LITERATURE - METHODOLOGY

The authors would like to highlight the contemporary approach adopted to conduct the systematic review of literature for this paper. The review of the literature was conducted using the elimination process where 40 papers were selected through the elimination process.

For this research VOSViewer software has been used. This software was developed at the University of Liden by Van Eck and Waltman in 2007. The purpose of this software is to create visual clusters of similar themes that are discussed in research

Figure 1. Systematic review method of elimination. (source: Authors, 2022).

articles and research notes. It is also helpful in constructing and visualising bibliometric networks, so it makes this software particularly helpful in screening research papers that have similar themes. It is also very effective in text mining and screening of bulk research papers that can be downloaded through Lens and Dimensions two online open-source software that helps consolidate research papers into excel formats. Based on the eligibility criteria, 150 papers displayed the following visual clusters through the VOSViewer software that was developed by (Van Eck and Waltman, 2007) from Leiden University to identify co-occurrences of networks that also help in text mining, constructing

and visualising bibliometric networks. After feeding the relevant data, VOSViewer created a network of six dimensions associated with how humans perceive wellness. One of the six dimensions also covered health care programmes, this dimension was eliminated in this study.

From the above visualisation of the 150 papers, the quantitative similarities and networks between papers helped us to identify six dimensions which are further colour coded and helps with the additional elimination process.

This process helped to identify the 40 papers which are associated with AWE Constructs, 15 papers were utilised for the direct deductive study of dimensions,

Table 1. Selection of AWE papers

Colour Code	Indicator	Decision
Dark Green	Adventure Tourism Activities	Partially Retained
Red	Tourist behaviour	Partially Retained
Purple	Eco-tourism spectrum	Retained
Dark Blue	Association of adventure with out-door activities	Retained
Light Green	Wellness attitudes and outcomes	Partially Retained
Light Blue	Indoor activities and programmes	Eliminated

Source: Authors, 2022

Figure 2. Human perception of wellness. (source: Authors, 2022).

Figure 3. An integrated ADO-TCM framework for framework-based systematic review, adapted from Paul and Benito (2018) and Paul et. al. (2017).

theme and concepts while 25 papers were utilised for the review and which was further analysed using the most suitable method of literature review for this research, which would be framework based review as suggested under Domain-based review. The study adopted the ADO and TCM protocol to conduct a complete review of the concept. ADO stands for Antecedents, Decisions, and Outcomes and was proposed by Paul and Benito (2018), while TCM stands for Theories, Contexts and Methods postulated by Paul et. al. (2017).

Justification of why this paper relies on the established framework(s), firstly this process guides the process of review on a certain domain. The most suitable frameworks include the antecedents, decisions and outcome (ADO) by Paul and Benito (2018), the complementing method called the theories, contexts, and methods (TCM) framework by Paul et. al (2017), which ultimately gave use the integrated ADO-TCM framework by Lim, Yap, et al. (2021) it also follows an interrogative method of what, why, where, when, who, and how (5W1H) by Lim (2020), the combination of ADO-TCM/5W1H

is the most effective method to conduct a systematic review of literature, among the category of domain-based reviews. A graphical representation is made in figure 3.

REVIEW OF LITERATURE AND RESEARCH GAPS

This study was done in the times when the tourism industry was slowly recovering from the impacts of the pandemic. Tourism can recover from a crisis through behavioural intention, awareness, emotional experience, and wellbeing (Nukhu, 2021). Pandemic has created a crisis in the management of Adventure Tourism operations so big brands have started exploring religious tourism, eco-tourism, and cultural tourism (Khaled & Kumar, 2021). Rural tourism through innovation has an impact on the triple bottom line, thus having a positive impact on the environment and ecotourism activities (González-Guerrero et al., 2020). In the light of the above three which include Adventure, Wellness and Eco-tourism (AWE) and by following the systematic review of literature forty papers were selected for

Table 2. Reviewed paper for Dimensions, Drivers and Scope of Wellness Tourism.

Paper Type	Author/s Citation and Context
ARTICLE	Pan, X., Yang, Z., Han, F., Lu, Y., and Liu, Q. (2019) Health preservation, sports, recovery and medical healing.
ARTICLE	Sharafuddin, M. A., and Madhavan, M. (2020), Physical, emotional, spiritual, social, mental, and environmental wellness.
CONCEPTUAL	Pujiastuti, S. (2019), The drivers and motivators of wellness are escape and/or relaxation, it's an approach based on a natural setting and local community at the helm.
ARTICLE	Mackenzie, S. H., Hodge, K., and Filep, S. (2021), Inclusive tourism is a method for rehabilitation and restoration of human well-being.
ARTICLE	Aydin, D., and Ömüri?, E. (2020), Memorable tourism experience and subjective wellbeing.
ARTICLE	Wu, G.; Zheng, X. (2017), The suggested pairing of wellness concepts wellness and ecotourism, sports concerning fitness, leisure as a facet of vacation, health care, and culture tourism programmes.
ARTICLE	Basudungan,A., Ardianto,E., and Widarsyah,R. (2021), Spiritual attunement, inspirational mindfulness, bio-psychosocial aspect, social-connectedness, cultural identity, environmental altruism, and entrepreneurship well-being.
ARTICLE	Wendri, I. G. M., Bakta, I. M., Suprapti, N. W. S., and Ardika, I. W. (2019), Identified the eight belief factors as the tourists' intent of enjoying wellness tourism. The belief systems are the benefit of spa, its price, regression, responsibility towards own health, awareness of nature, personal value, programmes for socialising, and maintenance of health.
CONCEPTUAL	Pujiastuti, S. (2019), Contrasting attractions such as natural springs and paragliding can be practiced together for wellness.
ARTICLE	Hasudungan et. al. (2021), Proposed seven wellbeing dimensions for destination orchestrators, which also include biophysical, environmental well-being and mindfulness.
ARTICLE	Kenett, Y.N., Ungar, L. and Chatterjee, A. (2021), Wellness was consistently related to eight immersive physical activities.
ARTICLE	Carter A. Hunt, Lucy C. Harbor. (2019), AWE motivates people to uptake a healthy outlook, changes in lifestyle, and pledge to protect the environment: immersive experiences, reinforcement of identity, and reflection that derive meaning during and after the trip.
ARTICLE	Fossgard, K., and Fredman, P. (2019), In the context of nature-based tourism, tourists seek access to creature comfort, socialising opportunities, stimulation of the senses, naturalness, and mastering the activities.
ARTICLE	Jackson, J. S. (2019), A guide is both the producer and protector of/from risk. Trust serves as a proof of an adventure tourism guide, this emerges as a powerful mechanism enabling safety performance.
ARTICLE	Qiu, M., Sha, J., and Scott, N. (2021), It is possible to restore health and maintain human life by visiting natural environments.
ARTICLE	Nathaniel, S. P., Barua, S., and Ahmed, Z. (2021), The dwindling bio-capacity has led to an increased ecological footprint.
ARTICLE	Luo, Lanlung Kim, Tang, and Song, (2018), Wellness tourism includes trips that incorporate five immersive physical activities, some of the prominent are fitness, beauty, nutrition, relaxation, and education.
ARTICLE	Andreu, Font-Barnet, and Roca, (2021),Wellness is about actively seeking such prospects and a suitable lifestyle, ideally, all the aspects that can promote a holistic state of health.
ARTICLE	Smith, M. K., and Diekmann, A. (2017), Wellness is related to holistic health by six dimensions working together in harmony.

ARTICLE	Andreu, M. G. N., Font-Barnet, A., and Roca, M. E. (2021), Tourism studies have approached wellness through theory and methodological perspectives.
ARTICLE	Luo, Lanlung Kim, Tang, and Song, (2018), Wellness tourism is a global phenomenon, tourist regard it as a means to counter negative influences of modern lifestyle and a means to enrich well-being holistically.
ARTICLE	Hunt, C. A., and Harbor, L. C. (2019), AWE travel experience reinforces preferred identities, and the extent of immersion AWE offers among individual and group travellers. AWE tourism has an impact on attitudes, knowledge, and subsequent behaviour of travellers as they feel a sense of achievement, master a challenge and have emotional experiences.
ARTICLE	Ustymenko. (2020), The transformation of the recreational system has given rise to a wellness culture.
ARTICLE	Yen, T.F. (2021), Tourists travel to engage in activities that interact or integrate with humanities and natural environments.
ARTICLE	Higgins-Desbioles. (2020), Indicated that neo-liberal governments have embraced social policies that focus more on the development of health, social and educational procedures, this empowers and improves the wellbeing of communities.

(Source: Authors, 2022. 25 AWE Construct papers reserved after systematic elimination for literature review)

this study. Post the review the gaps in the literature are highlighted further thematic analysis is done.

Research Gap

The review of the literature indicates that well-being is strongly associated with physical immersive experiences. The reason would be the terrain restriction of such activities which can be inaccessible to tourists with a disability. So the design of such experiences should consider access to all people regardless of their degree of disability or temporary disabilities. All the papers have refrained from the concept of accessible inclusion which allows only for a certain group of people to enjoy AWE Experiences.

OBJECTIVES AND RESEARCH QUESTIONS

To identify if wellness is a consequence of adventure and eco-tourism and if the factors affect the decision-making process of the tourist who uptake such activities through thematic analysis. The review of the literature also led us to formulate the research questions.

RQ1: What are emerging the adventure-based wellness tourism theories, contexts and methods?

RQ2: Which adventure tourism activities promote wellness among participants?

RQ3: How do the adventure tour guides ensure a sense of safety among the participants?

METHODOLOGY

The paper is qualitative and the research follows a bounded context (time and activity revolving around the phenomenon of wellness due to adventure tourism) and thus justifies the lower sample size of 21 cohorts for this study. As per the California State University (2022), qualitative research follows multiple approaches. For this paper, the case study method is adopted based on a grounded theory that was identified using the TCM-ADO frame-work based approach during the literature review process. The grounded theories associated with this study are Keller's ARCS Motivational Model it is a motivational design model which revolves around attention, relevance, confidence and satisfaction (Keller, 2012). Rational Action Theory which is based on individual action in response to social phenomenon (Goldthorpe, 1998), Social Exchange Theory (SET) wherein behaviours are the result of cost-benefit analysis among humans (Cook, 2015), and Gravity Model of Mobility which affirms that people move from one place to another for well-being, epidemics and quality of environment (Simini et.al., 2021). The content analysed was descriptive which highlights the cultural flavours, and linguistic ambiguity that is faced by many qualitative research papers is overcome through the next stage of thematic analysis. The 5 W and 1 H are explained as What-wellness as an outcome of adventure in a natural setting, When- during the pandemic break, a period between two waves that relax the border restrictions
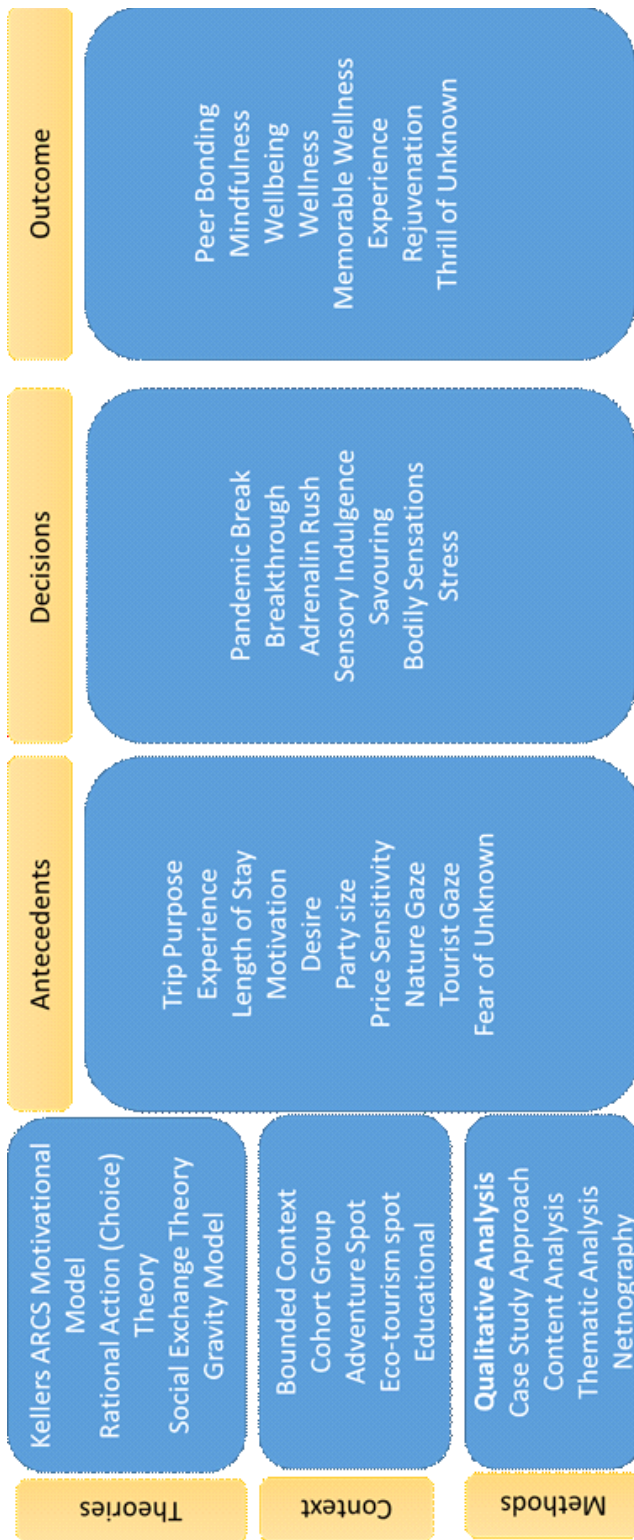
Fig. 4. TCM/ADO framework applied to this study. Source: An integrated ADO-TCM framework for framework-based systematic review (Adapted from Paul and Benito (2018) and Paul et. al. (2017), Modified by Authors 2022. Fig 4 explains in detail each step of the TCM/ADO Model followed by the 5W and 1 H concepts and justifies its relation to fig 3.

between two states. Who- An educational group, Why-To study the memorable experiences and to identify the sense of well-being through adventure activities, Where-ideally an eco-tourism hotspot that is specialised in adventure tourism, and finally How-An overnight camping experience which is combined with all the adventure sports including outdoor, indoor and soft adventure.

The triangulation method of using multiple methods and sources of data, help us deduce the phenomenon that we are trying to explain through this paper. A qualitative research strategy that is used in validity testing, is due to the convergence of various viewpoints and information from more than two sources (Carter et.al. 2014). This justifies the use of the TCM-ADO framework and uniting it with the thematic analysis approach to study our phenomenon; the adventure tourism activities that are organised in a natural setting can bring about a sense of wellbeing or wellness to the consumers of this form of tourism.

The next stage was to use the method of thematic analysis, which is a qualitative data analysis method, it is used to analyse interviews and transcripts. The online website used to tag the context from research articles and transcripts is Taguette. The method helps to identify patterns associated with meaning, topics and ideas. Caulfield (2019), associates thematic analysis with six stages namely, familiarisation of the concept, coding of the language, theme generation,

Table 3. Data Structure.

Third Order (Aggregated Dimensions) Broad Associated Dimension–Selective Coding	Second-Order (Themes) Transcript based Axial Codes	First Order (Concepts) Literature-based	First Order (Concepts) (Data-Driven – Transcript Based on Experience at 99.8%)
Adventure	• Breakthrough • Adrenalin Rush • Sensory Indulgence • Savouring	• Slow adventure for an engaging, deeper and meaningful experience (Farki and Taylor, 2019) • Water-based activity is a part of experiential tourism (Campón-Cerro et.al. 2020) • Physical activity might be a marker for well-being (Schlemmer et.al 2019).	• Water massage that removed stiffness and calmed the senses. • Water Jacuzzi was relaxing. • Overcame the fear of water. • Learned a new skill of paddling and kayaking • Releases stress and rejuvenate. • Thrill to the journey. • The water was chill and refreshing. • Workout for the arms. • Provided an escape from reality. • Enjoyment of water activities. • Felt the immense water pressure on my body. • Kayaking was a slow adventure activity.
Wellness	• Mindfulness • Peer bonding • Social wellness • Eudaimonic wellness	• Mindful enjoyment and consumption (Farki and Taylor, 2019). • Performance Expectancy and Pleasure (Pelegrín-Borondo et.al. 2020). • Personal self-care and life-management (Koskinen et.al. 2017). • Longevity (Huang and Xu, 2018). • Discovering self, a sense of connectedness, positive emotional recharge, and rewarding oneself through escapism (Choi et.al. 2016). • The transformative effect on the quality of life (Smith, 2013). • Wellbeing is beyond hedonic enjoyment of the moment (Knobloch, 2016)	• Beautiful and calming. • Relaxing • Transformation of boredom to excitement and happiness. • Peace of mind watching a bonfire and a starlit sky. • Deeper bonding with friends. • Dining with friends and tasty village food. • The break was required for positive mental health. • Loved the rain dance with friends, danced till we dropped.
Eco-tourism	• Nature Connect	• Therapeutic landscapes (Majeed &	• Unwind in a natural setting.

Esthetic Experience	Ramkissoon, 2020). • The natural environment, social interaction & symbolic landscape (Huang and Xu, 2018). • Environmental resources can contribute to a green destination (Mihali, 2013). • Recreational lands have a positive impact on natural healing (Batyhina et.al. 2020). • Forest therapy allows people to spend time in a green and healthy environment(Zhang et.al.2020). • Camping is representative of nature-based tourism. (Ma et.al. 2021)	• The visual treat of flowing water, and chirping birds is pleasant to the senses, these are the most memorable experience. • Watching the pure water of the river relaxes the mind. • Sweetwater flowing through the jungle. • Sleeping out in a tent was a memorable experience. • The campsite was peaceful, still and quiet, with lots of fresh air. • Dipping feet in the flowing river water was the best way to end the trip.

Source: Authors 2022.

themes review, defining, naming, and reporting. Thematic analysis was applied to the recorded transcripts of the participants who had been part of the guided AWE tourism activity. The process identified ten associated themes which were clustered into aggregate dimensions as per the proximity of the activities conducted. Finally, the theoretical framework was linked to the clusters through the systemic literature review process. It will follow a deductive approach as we will try to examine the existing knowledge of how adventure and eco-tourism influences wellness

In this paper, the Thematic Analysis has used an additional stage, which is normally not used in other papers. The introduction of the associated literature review (as indicated in the first-order concept column) was used to identify the connection between the expressions of the Cohorts concerning the associated literature review. This new approach gives a very strong backup to the already reviewed experiences mentioned in the backdrop of existing literature that also defines the concepts very well. It suggests the second level of triangulation that helps to arrive at the themes of this paper. The second-order themes are transcript-based and give a label or tag to the experiences from the first-order concepts. Which further is related to the associated dimension. From table 3 it is evident that the AWE constructs are interrelated and cannot exist in isolation. Experiences can be well-curated by considering the basic safety features including the second-order theme in the design element of adventure and wellness-based tours.

FINDINGS AND DISCUSSIONS

The cohorts gave a lot of importance to the esthetic surrounding where adventure tourism was offered, there is also a learning experience and a sense of thrill and breakthrough when an individual successfully tries out a risky activity. Eudaimonia wellness is also associated with happiness, however, Aristotle believed that it was associated with health and beauty too (Seven Pillars Institute, 2017). Adrenalin rush results in excitement, stimulation and enhanced physical ability in response to the body's production of adrenaline (Collins dictionary, 2022). The natural setting such as transparent, clear, free-flowing water and the presence of chirping birds can calm the minds, dining in with friends, dancing with friends, camping in the open, and bonfire all gave the participants a sense of mindfulness, along with peer bonding and social wellness. These are tourism opportunities that people look for when they are in

a lock-down situation and it gives a great means to escape from the harsh realities and cherish memorable experiences. It is also observed that an adventure sport that is practiced in an eco-tourism spot can bring about wellness among the participants. The area transforms into a therapeutic landscape, which brings about positivity and healing to the participant.

The feeling of being safe with peer groups as well as the presence of a trained guide also eases the fear of the unknown, following instructions is also important as the risk in such areas is also very high. It is important to have an alert mind before embarking on adventure-related tourism activities. This leads to the section where we gather responses to the research questions earlier identified during the literature review

RQ1: What are the emerging adventure-based wellness tourism theories, contexts and methods? The Grounded theories are linked with the experiences of the cohorts. Beginning with Keller's ARCS Motivation Model, which involved attention to the current situation of ease in travel, relevance to the need of breaking free from the confinement due to the pandemic, the confidence of trying out a perceived risky behaviour, and satisfaction of trying out the adventure tourism activity and feeling of wellbeing.

While the Rational Action Theory again confirms how the behaviour of individuals changes due to a social phenomenon, in this case, the COVID-19 situation. The cohorts were students and on a budget tour hence an overnight stay with benefits of all activities packaged together with proximity to friends played a part in confirming the social exchange theory. The pandemic situation also motivated the cohorts to travel to another destination seeking well-being and a better quality of the environment while indulging in adventure activities.

RQ2: Which adventure tourism activities promote wellness among participants? This research question was addressed in table 3 in which the axial codes explained the activities such as; Calming nature of the water, kayaking activities, adrenalin rush, high energy activities, presence of friends during the activity and dining experiences.

RQ3: How do the adventure tour guides ensure a sense of safety among the participants? Some of the transcripts shared also indicated the role of guides in instilling the feeling of safety. Nature of the guides, cooperative, ability to repeat guidelines time and again, over-communicating, providing information

about risks, safety instructions, presence of the guide during risky activities.

Managerial Implications

Destination managers (DM) must consider the AWE constructs while designing adventure tourism activities for the tourist. The pace of the tour also matters as the distance from origin should be considered for an overnight experience. It's ideal that the destination managers (DM) factor in not more than 150 km of travel per day to keep a young group active enough to experience the adventure tourism activities. DM's should steer away from contaminated water areas, as it can negatively impact all the positive experiences of the day. The role of the gravity model and the availability of cost-effective substitute destinations en route can also help to tackle the problem of over-tourism. The packaging of such a tour should also highlight the wellness aspects of the tour, which can become a unique selling proposition.

Industry and Policy Implications

Adventure sports and tourism are sought by a physically active group of individuals. The tourism industry has to build capacity for more adventure tourism guides. It is advisable to have basic foundation certification, and advanced certification followed by refresher programmes for the adventure tourism guides. If the Gravity model is thoroughly implemented, some of the activities can also be artificially created in Goa by creating substitute AWE offerings to reduce carrying capacity impacts in Dandeli, and to prevent cases of over-tourism in eco-sensitive zones, this will create ample opportunities in the transit zone. The reason is adventure destinations are vulnerable to degradation and to conserve such areas responsible tourism practices should be encouraged.

Adventure tourism zones should be set up in every state, with the classification of the level of difficulty of the adventure sports activities. The difficulty levels also should be complemented by the three-tier level-trained adventure tourism guides. Development of tree houses as done in Kerala is another outdoor adventure that can be experienced by tourists. The tourist also should be allowed to co-create the experiences by sharing their high and low points on an adventure tourism app and even better through the intervention of artificial intelligence and machine learning capabilities, the best way to learn is ideally from the locals or an experienced traveller.

The Dandeli adventure tourism trail has water sports but lacks other water-based experiences such as shallow water diving, snorkelling and scuba diving the development of these activities also mandates Professional Association of Diving Instructors (PADI) training certification at an international level. National Institute of Water Sports in Goa, under the aegis of the Ministry of Tourism, has three scuba diving certification programmes, has trained 28 members, and has 22 courses on snorkelling. In total 468 members were trained between 1990 to March 2021 (NIWS, 2022). The guides should also be trained in understanding the wellness outcomes of such activities.

Contribution to the body of knowledge

The triangulation method used here unites two methods i.e. the framework with thematic analysis, and a sub-method in thematic analysis and an additional stage of adding relevant literature review also can help to strengthen the second-order themes derived from the first-order transcript-based feedback.

CONCLUSION

Wellness is usually associated with indoor and soft approaches due to the consumers of the product. It is ideally enjoyed by the ageing population so this leaves us with a scope to find out what are the different life stages of the tourist that attract AWE-related activities. From this paper, it is evident that the cohorts belonged to an age group of around 20-35 who were able to experience all the adventure tourism-based activities at Dandeli. This brings us to a gap assessment through the review of the literature and thematic analysis that it is important to approach wellness holistically, as different age groups associate wellness with their physical ability or inability. Another study is mandated to identify the consumers of wellness through adventure tourism and nature-based activities. It is also important to know if the ageing population also can be enabled to enjoy such activities as there are elements of slow and fast adventure activities, so the design element has to be focused on. As a way forward it is also important to include the policy level implications practically so that it can further improve the economic wellbeing of the communities involved through additional skill-based training. A comparative analysis of different 'classes of rapids' also has to be assessed as the risk element changes with every nature-based location, and terrain. This calls for the capacity building of highly professional

and trained adventure tourism guides. Ultimately it is the memorable AWE -tourism experiences that the consumer will carry back home and the best method of promotion of a lifetime experience is through word of mouth. A quantitative method is also suggested as the second-order themes can be now framed into appropriate survey questions in consultation with the relevant supporting literature.

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Visitors' Experience on VR/AR Facilities in Theme Parks: Based on Technology Acceptance Model

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ABSTRACT

VR/AR technology, as a new generation of high-tech, has long been used in all walks of life including tourism industry theme parks. On the basis of sorting out the relevant academic research of VR and AR and its application in the industry, this study combined with the improved technical acceptance model of perceived risk and perceived interest, put forward the research model, and then carried out the empirical evidence by questionnaire analysis. The study found that the perceived usefulness and perceived ease of use of VR/AR projects in theme parks positively affected visitors' attitudes. The perceived ease of use and perceived interest of VR/AR projects in theme parks positively affected visitors' perception. The usefulness indirectly affects the attitude of users. The attitude of visitors affects their willingness to use, and their perception of risk is not significant.

INTRODUCTION

Because the concept of innovation breakthrough is deeply rooted, the development of new generation technology VR, AR and other high-tech in intelligent manufacturing industry is becoming more rapid and mature. Therefore, medicine, entertainment, military, design, culture, education, and other industries are beginning to apply these new technologies to the actual development and production. Moreover, the rational use of these new technologies achieves the modern, automated and intelligent products.

At the same time, as an important part of the global tourism industry, theme parks, facing with the increasing number of competitors, have to consider modernization, continuous technological innovation in order to survive and develop in the fierce competition. At present, VR, AR, and other technologies, as an important part of a new generation of information technology, are increasingly used in the tourism industry. It is also an indispensable technical element for theme park modernization. Whether these technologies can be applied in the park flexibly and reasonably will be one of the inevitable issues in the future theme parks. Visitors are the clients of the theme park. Therefore, how about their experience and perspective on new technologies such as VR and AR used in facilities and projects, whether these innovations are valuable, how to maximize such innovative investment, all these need to be considered by the theme park operators.

At present, there are numerous studies on VR and AR in the academia, but the research on VR and AR application in theme park is almost in the blank stage. This paper aims to study the tourists' perception of VR/AR application in the theme park and put forward effective and feasible optimization suggestions for its application in the theme park so as to promote the construction and development of theme parks and tourism industry.

LITERATURE REVIEW

Research on Theme Parks

The theme park concept originates with the National Recreation and Parks Historical Society, which defines the theme park as a park built into a group of themes of equipment, performances, buildings, and ornaments (Hao, 2011). With the development of theme parks, more and more scholars have redefined or supplemented the concept of theme park. Milman, Okumus, and Dickson (2010) define it as a hypothetical, entertaining environment that is particularly relevant and designed to create a specific time and place for people. Pearce and Moscardo (1985) considered the theme park to be a social work of art with a symbolic mind that evokes imagination and impressions of time and place. Heung, Tsang, and Cheng (2009) saw the theme parks as a contemporary tourist attraction that recreates symbolic landscapes such as stories, books, plays and film. Zhou (1988) proposed that the theme park was a kind of figuring environment shaping and rendering, which aimed at amusement with the characteristics of creating a play form around an established theme, which was characterized by the design of the park serving its theme. Zhang and Liang (2008) combined with the views of many experts and scholars, the theme park is defined as a special environment and atmosphere at the same time the theme of a distinctive theme for people to enjoy leisure and entertainment of man-made scenic spots. In addition, modern theme parks need to match the general trend of tourism intelligence, in order to stand out in the fierce market competition.

Based on the definition put forward by the above scholars, this study defines modern theme parks as tourist attractions with modern marketing management strategies and talents and hardware and software facilities to shape the established virtual theme to serve tourists' amusement objectives.

Research on the Application of New Technology

VR is virtual reality technology, divided into non-immersive virtual reality and immersive virtual reality technology (Freina, 2015). Non-immersive virtual reality technology, also known as desktop or window virtual reality, relies on computers and related devices. The window-style virtual environment is generated by using 3D mapping software or by photography. In addition to using computers to generate interactive simulation environments, immersive virtual reality also uses a large number of graphics systems and control interface devices for access to cave-like automatic virtual environments through first-class devices (Yuan and Tang, 2006). The development of virtual reality can be divided into four stages (Liu, Wu, He, Ye, and Zhang, 2019). The first stage (1933-1990) can be summarized as the formation of virtual reality concept. After Laurence Manning proposed the concept of virtual life in her novel, holographic photography technology and simulation simulator came into being in the 1850s. In the 1860s, the idea of "human-computer interaction" was first proposed, and Lincoln Lab's first head-on device was put forward. In the 1970s, NASA began to apply VR technology to the space. Beginning in the 1980s, with the development of computer technology, some companies began to bring VR equipment to market. The second phase (1990-2011) can be opened up to the commercial promotion trial stage, in which optical engineering, sensors, computers and network technology are developing rapidly. VR kits are increasingly used in the gaming industry, and Nintendo launched its first virtual reality home console in 1995. At the beginning of the 20th century, the United States applied immersive head-show equipment to the daily training of pilots. The third phase (2012-2016) can be summarized as a successful commercialization promotion phase. Oculus Rift was acquired by Zuckerberg for $2 billion shortly after it showed off its VR suite, in partnership with Samsung to launch a head-on device used with smartphones. HTC also partnered with Valve Games in the Us to launch the HTC Vive VR suite, followed by Sony, HTC, and Google, which launched a relatively inexpensive VR device, and VR officially entered mass life. The fourth phase (2016-present) saw the markets grew rapidly. Since VR entered the public view, virtual reality technology has been widely used in all walks of life, scientific research practice, teaching and auxiliary teaching, disease treatment, interior design, industrial simulation, restoration of monuments, tourism and other related markets are developing at a high speed. In the tourism industry, virtual reality technology is also widely used. For example, scenic spots use virtual reality and other technologies to build a 3D tourism platform (Tian, Xu, & Du,2018), or combine Web technology virtual reality technology, satellite navigation technology, and other related algorithms, the release of smart tourism service platform (Sun, 2016). The application of virtual reality technology in tourism not only improves the quality of tourism service, reduces the cost of managing services and improves the travel experience of tourists, but also

puts forward new ideas for the development of tourism technology application (Wu, 2018).

Augmented reality (AR), also known as augmented reality. Azuma (1997) points out that the augmented reality, including virtual objects and reality, the real time and the content of the three dimensional three aspects, and puts forward the concept of "reality and virtual reality" continuum, if compared real environment and virtual reality to the ends of the arrow, then the middle position is known as "mixed reality", known as "augmented reality", the partial reality of partial virtual part is the "expansion".

Scientific research institutions mainly focus on the core technology of augmented reality in the research of algorithms, man-machine interaction and hardware and software basic platform. For example, The scientists in lab of university of Washington developed mature 3D augmented reality engine, Lausanne's laboratory in Swiss federal Institute of Technology studied plane image with realistic 3D registration algorithm of object tracking, the national university of Singapore lab worked with human-computer interaction technology laboratory of German BMW on the research of the first perspective augmented reality scheme used for wearable devices, which was in the industry leading position (BMW, 2012; Lepetit & Fua, 2005; Weghorst, 2003; Zhou, Gilani, & Winkler, 2012). Meanwhile, many influential companies introduce the augmented reality technique for production. For instance, ARToolworks company in the United States has put its ARToolkit engine library copyright and software development as a commercial product. Singapore MXT company developed the teaching of augmented reality architectural design interactive display platform (BMW, 2012). A German company Metaio's augmented reality solution was applied to multiple areas (Metaio GmbH, 2012), which had made the total based company achieve a complete cross-platform augmented reality solution to support the application of relevant professional fields. In addition, many industries are also taking advantage of augmented reality. In the logistics industry, augmented reality technology is applied to the links of collection, storage, transportation, and delivery, so that the transportation network can realize intelligence and visualization in scheduling, training, equipment maintenance, security maintenance and other aspects (Wu, Lai, Zhou, Lv, & Li, 2019). In the medical industry, augmented reality technology is adopted in surgical operations. Through preoperative 3D modeling and evaluation, models are used to match target organs during surgery, which is convenient for guiding the operation (Shi et al., 2018). In the construction industry, virtual models are combined with real scenes through augmented reality technology, providing accurate and intuitive support for the design and demonstration of architectural schemes and guidance of the construction process (Shao, He, & Chu, 2017). In the tourism industry, augmented reality technology has been substantially researched and applied in the digital promotion of intangible cultural heritage, intelligent tourism system, venue and other hardware Settings and construction, etc. (Su, Li, & Xu, 2015; Guo, 2011). Some tourism-related apps have also combined tourism, APP and AR technologies. While providing tourism services in their apps, people have also combined AR interactive design with local intangible cultural heritage factors, so that users can have a deeper and more comprehensive understanding of regional history and culture through digitalization and virtualization (Zhu, Fang, & Meng, 2018; Jiang, 2017).

Technology Acceptance Model (TAM)

Davis (1989) revised the theory of planned behavior and proposed the technology acceptance model, which is widely used now and takes perceived usefulness and perceived ease of use as the decisive factors to study consumers' attitudes towards the use of information technology. Users' attitude towards new technology is composed of perceived usefulness and perceived ease of use. Perceived usefulness refers to the user's belief that new technology can improve work efficiency, while perceived ease of use refers to the user's belief that the use of new technology is easy, in which perceived ease of use will also affect perceived usefulness (Gretzel, 2011; Chung, Han, & Joun, 2015). There are also a series of modified, integrated and expanded models in the technology acceptance model including the influential factors of perceived risk, perceived interest, pleasure, activation, dominance, and other expanded factors. TTF, TPB and other models are integrated (Venkatesh, & Davis, 2000; Venkatesh, & Bala, 2008).

In recent years, a large number of experiments and proofs have verified the scientific nature of the technology acceptance model, and a large number of studies have applied it in tourism research. Guo, Nie, and Luo (2017) introduced variables such as perceived interest and perceived price to enrich the content of the technology acceptance model when studying the usage intention of online car-hailing users. Guo and Li (2018) combined the technology

acceptance model with the theoretical model of planned behavior, and found that consumers' willingness to use mobile payment to purchase travel products is affected by factors such as usage attitude, perceived ease of use, perceived usefulness, etc. Wu, Cai, Weng, and Xu (2018) based on the technology acceptance model, explored four factors that affect consumers' willingness to accept forest tourism by using O2O model: practicality, ease of use, risk and enjoyment. Hong (2018) used the extended, simplified technology acceptance model to conclude that tourists' perceived usefulness, ease of use, interactivity, personalization and aesthetics of design creativity had a positive impact on their purchase decisions when influencing their purchase decisions in the context of mobile tourism e-commerce.

Furthermore, many scholars have begun to use the technology acceptance model to study the impact of new technology on smart tourism. Zhou, Zhou, and Wu (2017) used the improved technology acceptance model to study the impact of augmented reality on tourists' travel intentions and concluded that in addition to the positive impact of perceived usefulness and perceived ease of use on tourists, three dimensions of technology innovation, discomfort and insecurity also had an important impact. Xu and Huang (2018) integrated the technology acceptance model and task-technology matching model in their research on the use intention of the smart tourism system in scenic spots, and found that perceived ease of use, perceived usefulness and use intention have a higher impact on the tourists'

use behavior of the smart system than task characteristics, technical characteristics, task-technology matching degree and other factors.

Zhang (2018) studied the adoption behavior of Internet of things technology in real estate development enterprises, and then adopted the TAM model proposed by Bauer and improved with the factor of perceived risk, and to predict the perception of uncertainty caused by the reality that the use of new technology brings unpredictable consequences. Fang, Zhou, and Shen (2017) et al., by integrating the technology acceptance model and PAD emotion theory, concluded that when using mobile augmented reality technology, scenic spots should give priority to the use of new products with strong sensibility and high interaction, and pay more attention to the stimulation and communication of tourists' emotion.

RESEARCH DESIGN AND MODEL CONSTRUCTION

Research Design

This paper combines qualitative and quantitative research methods. In qualitative research, this study mainly uses the in-depth interview method, field investigation method and literature analysis method to explore the application of high-tech in theme parks, and then summarizes the key factors (Liu, Zhang, & Li, 2018; Simoy, 2018). In quantitative research, a questionnaire is used to verify the correctness of the model and its variables and to further revise the results.
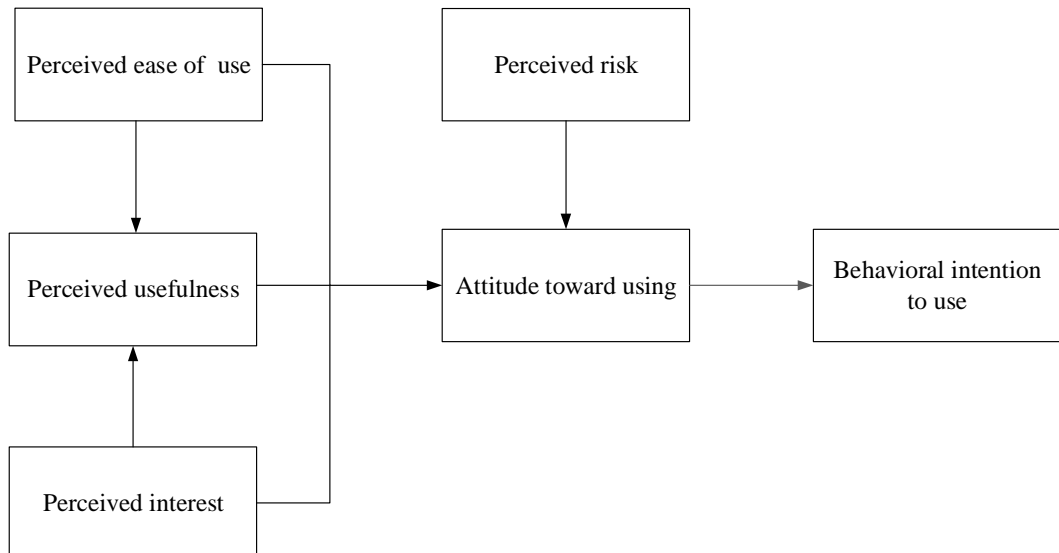

Figure 1. Research Model

First of all, the authors will work on literature review and theoretical analysis to clarify the relevant technology, research object and theoretical definition, development status and application. Then the appropriate research method is summarized, and the basic model of this study is determined. The results of the study are then obtained through questionnaire design, data research, data analysis and hypothesis testing. Finally, the results are summarized with putting forward relevant suggestions and countermeasures.

Model Construction

The Technology Acceptance Model (TAM) has been widely used in academia because of its reliability, convenience, and scientific nature. But the drawback is that the original model is relatively single, so in many studies, the problem needs to be verified by adding different variables. In the literature review part, this paper has combed the relevant theoretical basis and literature. Combining with the literature review, this paper holds that the theme parks belong to a part of the tourism industry. The fundamental purpose is to have a pleasant experience, so it is necessary to add the variable of perceived interest in the traditional technology acceptance model. Moreover, the safety of theme parks cannot be ignored, so many policies have been issued in many countries. In recent years, as the safety problems of theme parks also occur from time to time, combining the results of the early interviews with tourists with adding the variable of perceived risk, the final model of this article is formed (as shown in Figure 1).

Variable Selection and Research Hypothesis

Perceived usefulness is the belief that new technologies can improve the efficiency of work, which means that visitors believe that the application of VR/AR technology is generally effective for the operation and play of theme parks (Gretzel, 2011). Perceived ease of use is a simple and effortless one that users consider when using new technologies, which means that visitors believe that when using VR/AR technology-related devices, they are essentially indistinguishable from other projects without the need for too much additional operations or protection (Chung, Han, & Joun, 2015). Perceived interest means that users think that new technologies can be used to make people feel new and interesting, that is, when they experience VR/AR-related equipment, they think that the project is interesting, which can make people happy and bring freshness, can greatly enhance the experience and interactivity

of visitors in the park (Go, Nie, &Luo, 2017). Perceived risk is defined as the user's subjective dissatisfaction, uneasiness, and other feelings when using new technology, which means that when a visitor experiences a project, it is perceived as a risk, resulting in insecurity or a decline in expectations. Attitude toward using is the user's comprehensive feeling of the new technology, that is, the subjective feeling of the visitors to VR/AR-related equipment. It can be judged simply by good or bad. But this is a comprehensive judgment variable that may be influenced by many other factors. Behavioral intention to use refers to the user's desire and the desire to use new technology again. Specifically, whether visitors will continue to use VR/AR-related devices or will recommend friends and family around them to use related devices, which is also a combination of factors affected by many other factors.

Research Hypothesis

Perceived usefulness and perceived ease of use influence visitors' attitudes towards the use of technology (Davis, 1989). At the same time, the easier the technology is used, the more useful it is, that is, the perceived ease of use affects the usefulness of the perception, indirectly affecting the attitude of use. And the attitude of use directly affects the willingness to use, which is the conclusion generally accepted by the traditional technology acceptance model.

This paper introduces perceptive interest to measure the positive attitude of tourists. The higher the level, the higher the attitude of visitors to new technologies (Xu and Huang, 2018). In addition, when the tourist's positive mood is high, it will affect the judgment of the usefulness of the project, and directly affect its perceived usefulness. This paper introduces perceived risk to measure the negative attitude of tourists. The higher the level, the lower the attitude of visitors to the use of new technologies.

Based on this, this study proposes the following research hypotheses:

H1: Visitors' perceived usefulness of VR/AR projects is positively affecting their attitude towards use;

H2: Visitors' perceived ease of use of VR/AR projects positively affects their attitude towards use;

H3: Visitors' perceived ease of use of VR/AR projects has a positive impact on Perceived Usefulness;

H4: Visitors' perceived interest in VR/AR projects is positively affecting their attitude towards use;

H5: Visitors' perceived interest in VR/AR projects plays a positive impact on Perceived usefulness;

H6: Visitors' perceived risk of VR/AR projects has a negative impact on their attitude towards use;
H7: Visitors' attitude towards VR/AR projects is positively affecting their behavioral intention to use them.

Questionnaire Design and Data Collection

The questionnaire mainly investigates and analyzes the application of VR/AR technology in theme park, so after collecting a lot of indirect data, this paper obtains the data in the form of questionnaire, and finally provides data to support this study through comparison analysis. At the same time, the final optimization proposal of this study lays a solid foundation. According to the relevant literature, the following questionnaire is designed: the questionnaire is divided into two parts of the

measurement of basic information and variables of personal information.

The personal information section includes gender, age, education, income, and a question that verifies whether the respondent has carefully completed the questionnaire. The questions in this section are mainly based on the choice of questions for guest's observation. The variable measurement section is expected to include six dimensions: perceived usefulness, perceived ease of use, perceived interest, perceived risk, attitude toward using and behavioral intention to use, measured using the five-point Likert scale. The subjects were selected in 1-5 according to their supervisor's feelings, indicating "Strongly disagree," " disagree," " Neither agree nor disagree," " Agree," " Strongly agree." As shown in Table 1.

Table 1. Questionnaire Scale.

Dimensionality	Variable Measurement Item	Source
Perceived Usefulness	1. The application of VR/AR technology helps me to play better in the theme.	Xu & Huang (2018)
	2. The application of VR/AR can optimize the construction of theme parks.	Xu & Huang (2018)
	3. In general, I think VR/AR is very useful for theme parks.	Xu & Huang (2018)
Perceived Ease of Use	4. VR/AR projects do not require too much effort to play.	Xu & Huang (2018)
	5. I think VR/AR is very convenient to play.	Xu & Huang (2018)
	6. Generally speaking, I think VR/AR project is convenient to visit.	Xu & Huang (2018)
Perceived Interest	7. It was very interesting for me to play the VR/AR project.	Guo, Nie, & Luo(2017)
	8. It was very new to me when I played the VR/AR project.	Guo, Nie, & Luo(2017)
	9. Playing VR/AR added a lot of fun to me.	Guo, Nie, & Luo(2017)
Perceived Risk	10. I think it is dangerous to play VR/AR.	Guo, Nie, & Luo(2017)
	11. I was worried that the technology of VR/AR project was not mature.	Guo, Nie, & Luo(2017)
	12. I think VR/AR projects are more dangerous than traditional projects.	Guo, Nie, & Luo(2017)
Attitude Toward Using	13. I would like to visit the VR/AR project in the theme park.	Fang, Zhou, & Shen (2017)
	14. I hope more theme parks will launch VR/AR programs.	Fang, Zhou, & Shen (2017)
	15. I would recommend people to experience VR/AR projects while visiting the theme park.	Fang, Zhou, & Shen (2017)
Behavioral Intention to Use	16. I experienced VR/AR projects many times during my visit to the theme park.	Fang, Zhou, & Shen (2017)
	17. I have experienced more than one VR/AR project during my visit to the theme park.	Fang, Zhou, & Shen (2017)
	18. I will continue to experience VR/AR projects in theme parks in the future.	Fang, Zhou, & Shen (2017)

In order to ensure the scientific nature of research as much as possible, the questionnaire is designed in strict accordance with academic requirements. Based on field research, literature review and in-depth interviews, the initial questionnaire was designed, and the preliminary research was carried out. After the letter validity of the pre-research pass, this paper begins to formally collect valid data from the questionnaire. The questionnaire set up a total of 24 questions, 6 single-choice questions, 18 questions of the scale. A total of 373 questionnaires were collected by means of a convenient sampling method, 97 invalid questionnaires were excluded according to the filling time and the screening questions in the questions, and 282 valid questionnaires were collected.

DATA ANALYSIS AND HYPOTHESIS TESTING

Reliability and Validity Analysis

We first test the reliability of the scale by using a reliability factor (Cronbach's á). In general, the scale design is optimal when Cronbach's áÿ0.8. The test by SPSS24.0 statistical software shows that the comprehensive Cronbach's alpha value of the questionnaire is 0.929, indicating that the questionnaire is reliable (as shown in Table 2). In addition, the results of data analysis show that questions 7 and 13 cannot pass the test, culled. The remaining questions pass the confidence test.

The determination of questionnaire validity is usually based on KMO value test and Bartlett sphere test. Kaiser (1967) believes that KMO value sits at least 0.7 or more, it is appropriate for factor analysis. At the same time, if the Bartlett sphere test of the scale reaches a significant level, it indicates the existence of the correlation of the variables of the scale, and it can analyze its factors. In this paper, the factor analysis function of SPSS24.0 is used to test the KMO value and Bartlett sphere on the three component tables, and the results are shown in Table 3.

As shown from the table3, the KMO value of the scale is greater than 0.7, indicating that the questionnaire is well designed and that the probability of the significance of Bartlett's Test of Sphericity is 0.000, which is suitable for factor analysis through the significance test.

In addition, the study extracted 6 effective factors based on the hypothesis, the component 1 is named as "Perceived Risk" factor, ingredient 2 named "Attitude Toward Using" factor, ingredient 3 named "Behavioral Intention to Use" factor, ingredient 4 named "Perceived Interest" factor, ingredient 5 named "Perceived Ease of Use" factor, ingredient 6 named "Perceived Usefulness" factor. The six factors correspond to the six study variables in this model.

Correlation Analysis

Correlation analysis is a statistical analysis method to study the correlation between two or more random variables of equal status. In this paper, the correlation value of variables is estimated by using SPSS data analysis software to calculate the Pearson Correlation Coefficient. The larger the absolute value, the stronger the correlation. Pearson correlation coefficient is positive, it represents a positive correlation; if the Pearson correlation coefficient is negative, it represents a negative correlation.

As showed in Table 4, both the attitude toward using factor and the perceived usefulness factor were significantly higher at 0.01 and the correlation coefficient was 0.606, indicating that the visitor's attitude was related to perceived usefulness and conformed to the hypothesis H1. Both the attitude toward using factor and the perceived ease of use factor were significantly higher at 0.01, with a

Table 2. Credibility Statistics.

Cronbach's Alpha	Number
.929	18

Table 3. KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Sufficient Degree		.937
Bartlett's Test of Sphericity	Approximate Chi-Square	2616.648
	df	120
	Sig.	.000

Table 4. Correlation Analysis of Factors.

Hypothesis	Pearson Correlation Coefficient	Significance (Bilateral)	N
H1: Attitude Toward Using and Perceived Usefulness	.606**	0.000	281
H2: Attitude Toward Using and Perceived Ease of Use	.678**	0.000	281
H3: Perceived Usefulness and Perceived Ease of Use	.661**	0.000	281
H4: Attitude Toward Using and Perceived Interest	.676**	0.000	281
H5: Perceived Ease of Use and Perceived Interest	.620**	0.000	281
H6: Attitude Toward Using and Perceived Risk	.384**	0.000	281
H7: Attitude Toward Using and Behavioral Intention to Use	.662**	0.000	281

correlation factor of 0.678, which indicated that the visitor's attitude was related to the perceived ease of use, in line with the hypothesis H2. Both the perceived usefulness factor and the perceived ease of use factor were significant lying at 0.01 level, and the correlation coefficient was 0.661, which indicated that the perceived usefulness of the tourist was related to the perceived ease of use, which conformed to the hypothesis H3. The attitude toward using factor and the perceived interest factor were both significantly higher at 0.01, and the correlation coefficient was 0.676, i.e., the visitor's attitude was related to perceived interest, which conformed to the hypothesis H4. Both the perceived usefulness factor and the perceived interest factor were significant at 0.01 level, and the correlation coefficient was 0.620, i.e., the perceived usefulness of the tourist was related to the perceived interest, which conformed to the hypothesis H5. Both the attitude toward using factor and the perceived risk factor were significant at 0.01 level, and the correlation coefficient was 0.384, i.e., the visitor's attitude was related to perceived risk, but the correlation here was positive correlation and did not conform to the hypothesis H6. Both the attitude toward using factor and behavioral intention to use factor were significant lying at 0.01, and the correlation coefficient was 0.662, which means that the visitor's attitude was related to the behavioral intention to use, in line with the hypothesis H7.

The results show that there are correlations between hypothetical variables. However, assuming that H6 is negatively correlated, the data show that the correlation is still a positive correlation, so the correction assumes that H6 is a positive impact on the visitor's perceived risk attitude towards VR/AR projects.

Structural Equation Model Analysis

Initial Model Analysis

With AMOS24 modeling tools, according to the results of literature combing and data analysis with six elements such as perceive ease of use, perceive usefulness, perceive interest, perceive risk, attitude toward using, behavioral intention to use as the submersible variables, the initial structure equation obtained in this paper is shown in the following illustration (Figure 2). At in inputting the data, the path coefficient and related coefficients between the
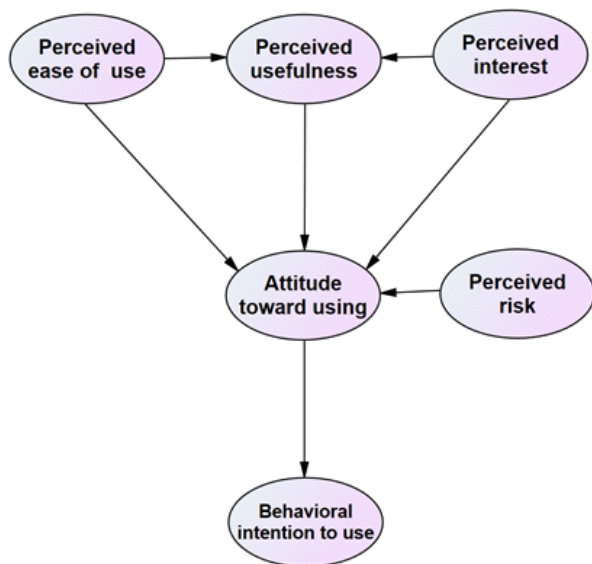
Figure 2. Initial Hypothesis Path.
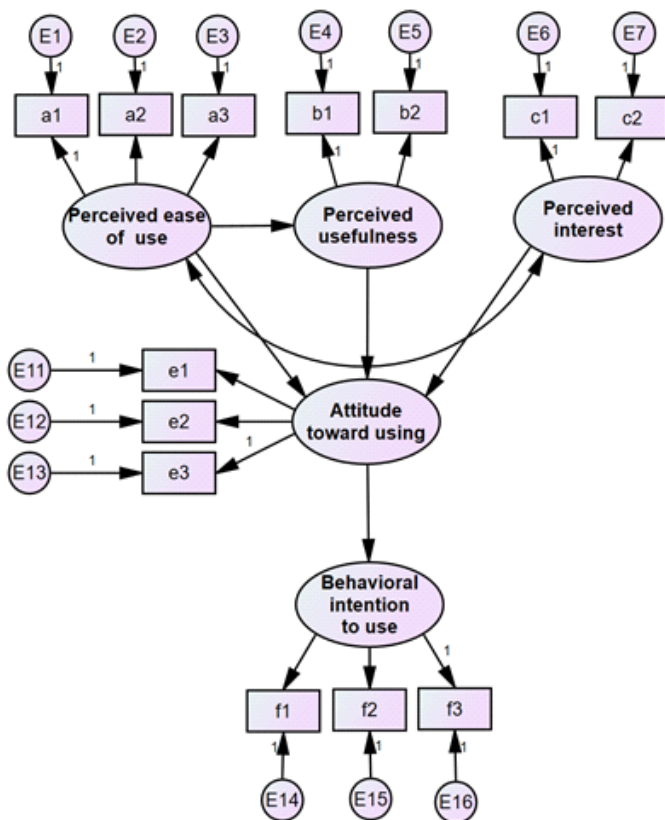
Figure 3. Modified Hypothetical Path.

submersible variables are calculated so as to determine whether the relationship between the potential variables is significant, and then verify the hypothesis.

Models and estimation are tested based on the original hypothetical path map lead to the data. According to the data requirements, RMSEA needs to be less than 0.05, and GFI, NFI, CFI, IFI are all needed to be greater than 0.9, x^2/df should be less than 2, the above conditions meet the model to be established. The initial model does not meet the criteria and needs to be adjusted.

Model Analysis After Adjustment

The adjustment of the structural equation model can be modified from the item with the largest M.I. value, generally from the item with the largest amount of value change, one path at a time, and the increased path should be meaningful in theoretical interpretation. The second is to remove the path

that fails in the test by the P-value. According to the results of the initial model data analysis, the correlation between two variables of perceptive ease of use and perceived interest is increased, and the variable of perceived risk is removed. The final structural equation model is tested by the data, and the final one is shown in Figure 3. Through adjustment, X^2/df =1.631, less than 2; RMSEA=0.047, less than 0.05; GFI=0.931, NFI=0.941, CFI=0.976 and IFI=0.976, all of which are greater than 0.9, and all the values are acceptable standards, indicating that the adjusted model fits well.

Model Evaluation and Hypothesis Testing

The overall evaluation of the model is shown in Table 5.

It can be concluded from the above table that the standardized load of each latent variable corresponding to the explicit variable is basically greater than 0.5, indicating that the overall

Table 5. Model Evaluation.

Item		Standardized Factor Load	P-value
b1	<—	.916	
b2	<—	.655	***
a1	<—	.728	
a2	<—	.807	***
a3	<—	.795	***
c1	<—	.804	
c2	<—	.785	***
d1	<—	.836	
d2	<—	.810	***
d3	<—	.848	***
f1	<—	.790	
f2	<—	.698	***
f3	<—	.751	***
e1	<—	.784	
e2	<—	.750	***
e3	<—	.799	***

Table 6. Results of Hypothesis Testing.

	Path		Standardized Coefficient	P-value	Result
Perceived usefulness	<—	Perceived ease of use	.582	.001	Supported
Perceived usefulness	<—	Perceived interest	.283	.119	×
Attitude toward using	<—	Perceived ease of use	.254	***	Supported
Attitude toward using	<—	Perceived usefulness	.340	***	Supported
Attitude toward using	<—	Perceived interest	.323	***	Supported
Attitude toward using	<—	Perceived risk	.090	.065	×
Behavioral intention to use	<—	Attitude toward using	.889	***	Supported

model fits well. The path coefficient is shown in Table 6.

Of the 7 paths, 5 pass the hypothesis test, and 2 paths fail. The summary is as following:

The path coefficient of perceived usefulness and attitude toward using is 0.340, which holds the significance level of 0.001, hypothesis 1 is valid. The visitor's perception of the usefulness of VR/AR projects in theme parks is helpful to their own play process, and the more frequently they are used or evaluated for these projects.

The path coefficient of perceived ease of use and attitude toward using is 0.254, which indicates at the significance level of 0.001, hypothesis 2 is valid. The more convenient, simple, and easy they consider to be in the process of experiencing VR/AR projects, the higher the frequency or evaluation of these projects.

The path coefficient between perceived ease of use and perceived usefulness is 0.528, which is valid at the significance level of 0.01, so hypothesis 3 is valid. When visitors experience VR/AR projects, they think the projects are simple, convenient, and easy, which will make them feel that it is helpful for their experience in the park.

The path coefficient of perceived interest and attitude toward using is 0.323, which holds the significance level of 0.001, hypothesis 4 is valid. When visitors find the VR/AR project experience interesting, they tend to experience them more.

The path coefficient between perceived interest and perceived usefulness of tourists is 0.283, and the significance level is not valid, so hypothesis 5 is not valid. When experiencing VR/AR projects, visitors' perceptions of fun have nothing to do with whether they think they are helpful to their play.

The path coefficient between perceived risk and attitude toward using is 0.090, and the significance level is not valid, so hypothesis 6 is not valid. Visitors' perception of risk is weak when experiencing the project, with no noticeable impact on whether they will continue to experience such projects.

The path coefficient of attitude toward using and behavioral intention to use is 0.889, which is valid at the significance level of 0.001, so hypothesis 7 is valid. Tourists' usage rate or evaluation of VR/AR projects will positively affect their continued experience or their recommendation to experience these projects.

DISCUSSION AND SUGGESTIONS

Discussion

Studies have shown that visitors' perceived usefulness, perceived ease of use and perceived interest in VR/AR projects have a positive impact on their attitude toward usage. Among them, perceived ease of use has a positive effect on perceived usefulness, indirectly affecting its attitude toward using, while the attitude of tourists has a positive influence on their behavioral intention to use, while the perceived risk level of tourists is not significant.

In this paper, the technology accepts the model to test the visitors' perception of the four dimensions of VR/AR project's usefulness, ease of use, interest and risk in theme park application. The result shows that the visitors' perception of the three dimensions of usefulness, ease of use and interest is significant, and not significant for the perceived risk dimension. VR/AR technology is used in various projects to create VR/AR scenes that are the most direct source of visitors to experience. Therefore, it can be said that these two technologies act on the theme park by taking VR/AR scenes as the medium and cooperating with various hardware facilities in the park to influence tourists' perception of the usefulness, ease of use and interest of relevant projects, so as to influence tourists' attitude towards projects in the park and thus affect their willingness to use them.

The application of VR technology makes relevant projects interactive and independent, and the strong sense of reality and immersion combined with AR technology enriches the content of relevant projects in the theme park. Moreover, realization possibility in the park is also greatly improved. This makes the VR/AR-related projects in the theme park different from other projects, and visitors have a useful perception of the VR/AR project scenes. However, the construction of theme parks in China is still in the initial stage, and everything in theme parks should be subject to the principle of theme and story service. The use of VR/AR in the theme park is different from other scenes. Due to the particularity of the theme park environment, visitors have special staff to guide and help them with the use of all kinds of equipment. In addition, thanks for the development of technology, some VR/AR projects have been replaced by scenes such as giant screen, ball screen and dark light control. Therefore, visitors have an easy perception of the VR/AR project scene. It is worth noting that in the research process, it is not difficult to find that some small interactive devices (such as AR camera devices) have poor usability, which is a hidden danger that affects the perception of usability of related devices.

At present, all kinds of amusement parks or theme parks are similar. The development of VR/AR technology makes up for the relative lack of innovation in the industry to some extent. By integrating VR/AR scenes into traditional projects, the diversity and playability of traditional projects are enriched. Therefore, tourists have an interesting perception of the VR/AR project scene. However, in most theme parks, VR/AR technology is mostly used in large equipment with a single application.

Suggestions

In order to improve tourists' perception of various dimensions in the theme park, this study proposes several optimization suggestions based on VR/AR user's experience.

In view of the low compatibility between VR/AR scenes and the theme of the park, the park should pay attention to and consider from the construction planning period to avoid this situation; After the completion of hardware equipment, this problem can be solved by improving the quality of VR/AR related image production. After operating the park for a period of time, users need to pay close attention to the evaluation and trends, and timely adjust the relevant hardware and software facilities and scenes to achieve the best results.

Theme park operators should timely pay attention to and solve the problem of poor usability of small interactive equipment, but this is a point which is easily ignored by many related operators. It is known to all that large equipment and projects are the focus of the maintenance of various theme parks, but relevant technicians should not ignore small interactive equipment, especially VR/AR related equipment, which has the characteristics of relatively immature technology, fast update speed and scene switchable. The equipment shall be periodically and irregularly serviced, upgraded and scene updated.

In addition, at present, the application of VR/AR technology in theme parks has a relatively single idea. The application of VR/AR technology in large equipment focuses on the mode of combining traditional projects with VR/AR scenes, while the application of VR/AR technology in small equipment focuses on several projects such as VR/AR photography. Therefore, the key to solve this problem is to break through the shackles of the application of VR/AR technology projects and flexibly apply relevant assistive technologies.

6 Conclusion

Based on the improved technology acceptance model, this paper combines literature analysis, data analysis and other methods to reach the following conclusions: tourists' perceived ease of use and perceived usefulness of VR/AR projects can affect tourists' behavioral intention to use them to a certain extent, and then affect tourists' attitude to use them. However, tourists' perceived interest and perceived ease of use of VR/AR projects indirectly affect their perceived ease of use by influencing the perceived usefulness. Therefore, theme parks can improve tourists' perception of the usefulness, ease of use and interest of VR/AR related projects in a variety of ways to improve their willingness and attitude towards high-tech projects.

There are still some deficiencies in this study. The first is that although VR/AR technology has been developed for several decades, relevant research are still in their infancy, and there are few literatures and technical systems to refer to. The relevant literature on the application of VR/AR in theme parks is even more limited, so it is inevitable that there will be greater subjectivity in the interpretation and induction process. In addition, in the design process of the questionnaire, there are some integrated questions, so there are inevitable omissions in the design. And the questionnaire is issued by convenient sampling method, which needs to be improved scientifically. Finally, the improved technology

acceptance model is adopted in this paper, which has been developed to a great extent. The model adopted in this paper only involves some factors, which cannot be verified in this paper. In the future research, relevant scholars can expand the model to a more rational degree.

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Taxonomy of E-Business Models for the Hospitality Industry

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ABSTRACT

With the advent of digitalization and modern technology, businesses have changed their modus operandi to adopt the paradigm shift from offline to online. The change in operation and innovations therein give birth to different business models. The objective of this study aims to summarise and uncover the inherent characteristics of existing e-business models in the hospitality industry. The research was carried out based on secondary data and case studies. The taxonomy of online business models in the context of the hospitality industry has been found out with the adoption of a systematic literature review followed by the taxonomy building approach suggested by Nickerson et al. (2013), and the case study approach. A taxonomy framework of e-business models for the hotel industry was proposed to explain the business models with their characteristics. This framework consists of six elements, twenty-three dimensions, and one hundred thirteen characteristics. From the case study, the business model patterns were derived based on a set of characteristics for each pattern and were grouped to form cases and sub-cases. This resulted in the extraction of eleven types of cases, twenty-four types of subcases, and one special case.

INTRODUCTION

With the changing trends of digitalization and technological transformation, entrepreneurs are constantly getting a lot of challenges to sustain in the market and their sustainability depends upon their innovative business skills and corrective plan of action to adapt to the changing trends (Gorevaya & Khayrullina, 2015). With the incorrect strategy and inadequate innovation in technology, the businesses succumb to vagaries (Atsan, 2016). The correctness of the business model and the innovation are often seen as the mantra of a successful business (Ramdani, Binsaif, & Boukrami, 2019; Nautiyal, 2018).

The business model is a term of art and hence people can recognize it but perceives it in a different manner (Baden-Fuller & Haefliger, 2013). Every business

grows with a firm strategy of creating business and generating revenue and profit that translates into its' business model (Nielsen & Lund, 2014). Several researchers have mentioned the term "Business Model" in their published scientific papers (Jones, 1960). A Business Model is a strategic way of doing and flourishing a business. It is a sustainable way of doing any business where sustainability refers to surviving and flourishing profitably in the long run (Nielsen & Lund, 2014). A business model that uses electronic communication technology such as the internet for exchanging information is called the e-business model (Aithal, 2016).

From time immemorial business houses have been adopting different strategies and plans of action to sustain and flourish in the market in the long run. Till the introduction of information and

communication technology (ICT), the business houses have been doing traditional brick-and-mortar forms of business and hence, have been experiencing a limited reach in the market (Svobodová & Rajchlová, 2020; Guo & Jun, 2014). During 1990 and so business models become the talk of the town among the business fraternity and the business influencers emphasizes shifting from traditional to online business (Baden-Fuller & Haefliger, 2013; Curtis et al., 2020).

After the world wide web (www) boom the business houses got the liberty to expand their horizon and hence able to reach out to the customers across the globe. After the 4G revolution and internet proliferation, the technology becomes accessible to many, which leads people to rely more and more on the internet. Due to the increasing adaptability of the internet by the population, business houses have resorted to internet platforms to sell their products and services. Now a small firm has access to the globe and hence they are more focused on creating an online business than making it offline (Jetter et al., 2009; Guerras-Martin & Ronda-Pupo, 2016). However, the business houses that are unable to adapt themselves in the era of digitalization, may not sustain in the market in the long run (Rachinger, Rauter, & Müller, 2019). The impact of the internet revolution and digitalization has been witnessed in the hospitality and tourism industry as well (Çýnar, 2020). The prices in this industry are very dynamic and volatile (Raya, 2011). Before the Corona Virus pandemic, this industry had witnessed rampant growth as well. To meet the expanding demand of this industry different businesses have adopted different types of business models.

RESEARCH GAP

Ample literature reviews on the types of business models have been studied so far. The researchers have given their insights on different types of online business models. Some of the prominent research papers devising the taxonomy of business models in a general context have been reviewed. Rappa (2010) addressed nine types of business models in an online context which are namely "Brokerage", "Advertising", "Infomediary", "Merchant", "Manufacturer", "Affiliate", "Community", "Subscription" and "Utility" models respectively. Lüdeke-Freund, Carroux, Joyce, Massa, and Breuer (2018) discussed 45 patterns of business models that support sustainability-oriented business model innovations. Gassmann, Frankenberger, and Csik (2014) discussed 55 types of business models to revolutionize and

navigate the business in their book. However, in these two publications, the meaning of the business models has been elucidated briefly, but the inherent nature and characteristics of the business models are missing from the picture.

Apart from these, the industry specific taxonomization have been performed by many researchers, out of which the taxonomization of business models on the web in general (Mich, Garigliano, Luigi, & Inverardi, 2008), data governance (Al-Ruithe, Benkhelifa, & Hameed, 2018), marketplace business models (Täuscher & Laudien, 2018), data driven business model (Hartmann, Zaki, Feldmann, & Neely, 2014), sharing economy (Sanasi, Ghezzi, Cavallo, & Rangone, 2020), platform business models (Täuscher & Laudien, 2018), industry-4 business models (Weking, Stöcker, Kowalkiewicz, Böhm, & Krcmar, 2020), digital business models for traditional industries (Weking, Mandalenakis, et al., 2020), sustainability business models (Lüdeke-Freund et al., 2018), internet of things platform (Hodapp et al., 2019), block chain business models (Tönnissen et al., 2020; Labazova et al., 2019; Weking, Mandalenakis, et al., 2020) smart mobility service (Cledou, Estevez, & Barbosa, 2018), car sharing business models (Remane, Nickerson, Hanelt, Tesch, & Kolbe, 2016) are prominent. Fielt (2013) has conducted a review of publications on business model taxonomy to understand the taxonomization or naming of the business models from different researcher's point of view.

Furthermore, several studies have been conducted taking the three most prominent and practiced business models across the hospitality industry in the online space. These are namely Merchant Model, Agency Model, and Opaque Model (Liao et al., 2019; Toh et al., 2011; Pilepiæ et al., 2015; Lee et al., 2013). The researchers tried to give a glimpse of the characteristics of these business models, precisely. Nicoli and Papadopoulou (2017) have conducted a study on the significance of TripAdvisor, a market leader in the Advertisement/ Content creation business model in the hospitality & tourism space. Dash & Sharma (2018) have conducted a competitive analysis study on different hotel aggregators in the Indian context. Stringam and Gerdes (2019) have conducted a comparative analysis study on different OTAs, Aggregators, and Peer-to-Peer accommodation booking platforms. Numbers of studies have been conducted on several types of business models, implemented in the hospitality industry. However, as of now, limited attention has

been given to enumerating and comprehending the online hospitality business models and their inherent characteristics in single research work. An integrated and holistic approach needs to be conducted to different online business models in the hospitality industry, which can abridge the knowledge gap. The purpose of this study is to taxonomize the business models and elucidate the nuances of the e-business models in the hospitality industry and their characteristics.

METHODOLOGY

To taxonomize the e-business models in the hospitality industry, the effort was made by combining different approaches (Reference: Table 1) namely (1) Finding Characteristics based on Systematic Literature Review and (2) Taxonomy Framework Building concerning the approach suggested by Nickerson, Varshney, and Muntermann (2013) (3) Case Study and Allocation of Characteristics for Taxonomization. The results have been validated with the help of industry experts.

SYSTEMATIC LITERATURE REVIEW FOR TAXONOMIZATION

At the outset, a systematic literature review was conducted aiming at taxonomization (Hallinger,

2013). To start with this approach review protocol was framed. The review protocol was followed to identify the needs which the online platforms serve and identify the types of online platforms in the hospitality industry. This step considered the goals, scopes, and needs of the business models to serve. The goal of this section is to provide structured knowledge based on different hospitality business models. The scope of this study is limited to e-business models in the hospitality industry. The needs of the business models define the reason why the customers land on the online platforms related to the hospitality industry. A selection-eligibility-inclusion process was followed to include the finalized paper for taxonomy framing in the next phase of work.

Selection: The preliminary search and identification of papers were carried out based on some initial criteria. (1) The language of the papers should be English. (2) The papers should be peer-reviewed (3) There must be a minimum of 5 citations & (4) Paper-based on relevant keywords including "Business Model Taxonomy", "Business Model", "Online Business Model", and "E-Business Models in the Hospitality industry", and "Platform Business Models". This resulted in the accumulation of 586 papers (370 based on the "Business Model" key

Table 1. Methodology Summary.

	Phase-1:	Phase-2:	Phase-3:
Objective	Finding Characteristics	Taxonomy Framework	Case Study and Taxonomization
Steps	Select Papers – Filter Papers – Finalization	Taxonomy Scale Development - Defining Ending Condition based on identified characteristics-Iterative Approach for Framework Building	Case Study – Allocation of hospitality business model characteristics
Method	Systematic Literature Review	Framework Approach by (Nickerson et al., 2013)	Case Study and Allocation
Source	Literature Review	Business Model Canvas (BMC) and VISOR model	Websites, Mobile Apps, YouTube Channels, Interviews
Results	* Identification of Customer Needs and Platform Type * Characteristics Standardization to fulfill those Needs	* Taxonomy Framework Building for E-Business Models in Hospitality Industry	* Taxonomizing e-business models in the hospitality industry

Source: Developed by Author.
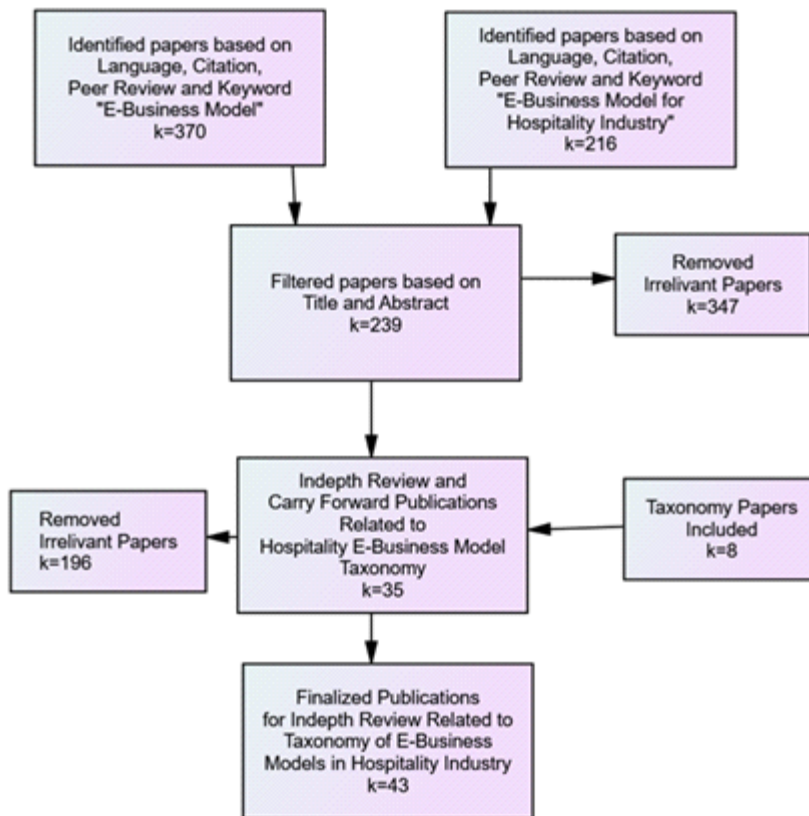
Figure 1: Systematic Literature Review Framework

word & 216 based on the "Hospitality Business Model" key word). Some of the popular databases were searched for finding the relevant research publications those are namely Google Scholar, Science Direct, Web of Science, and Scopus.

Eligibility: The papers were screened further, based on relevant titles and abstracts. This resulted in the elimination of 347 papers and the inclusion of 239 papers for the in-depth study. The numbers of papers that were extracted based on different targeted keywords have been depicted in table 2.

Inclusion: During the in-depth study, each research paper publication had to go through the proper technical scanning phase for identifying the underlying common characteristics of different business models supporting the hotel industry needs. A forward-backward approach has been conducted to do so. This resulted in the extraction of 35 publications. Further, 8 research publications about business model taxonomy were included. This

resulted in the finalization of 43 research publications (Reference: Figure1).

Inference from Systematic Literature Review (SLR)

The extracted papers are related to different e-business model platforms in the hotel context; more specifically on different online platforms catering to the need for hotel information search, review sharing, hotel booking, etc. (Reference: Table 2). These sets of needs have been obtained from the buying behavior of the guests. The characteristics based on the e-business models in the hospitality industry have been depicted in table 2. The depictions of the details consider the hotel consumption pattern of the ultimate guest. The business strategy which is also different from business models has also been ruled out due to their insignificance (Mustafa & Werthner, 2015). The common characteristics of the e-business models in the hospitality industry have been depicted

Table 2. Summary of Identified Characteristics from SLR.

Standardized Characteristics	Need it Fulfills for	Research Articles
Accommodation Type	Hotel information, & Assisting Hotel selection.	(Hussain & Kareem, 2020),(Mody et al., 2017),(Tsai et al., 2009)(Pegu et al., 2019)
Minimum Duration	Hotel information, & Assisting Hotel selection.	(Schwartz, 2008)
Accommodation Budget	Booking	(Lüdeke-Freund et al., 2018), (Das, 2017)
Service Type	Hotel information, & Assisting Hotel selection.	(Lüdeke-Freund et al., 2018), (Hartmann et al., 2014), (Ranerup et al., 2016), (Seth et al., 2005), (Pakurár et al., 2019)
Online Booking Service	Booking	(Oskam & Zandberg, 2016), (Seung Hyun Kim et al., 2012), (Rita et al., 2019), (Jaiswal & Singh, 2020)
Platform Involvement	Assessing Business Involvement	(Weking, Stöcker, et al., 2020), (Lu & Zeng, 2011), (Chen et al., 2018)
Innovative Services	Assessing Business Involvement, SWOT Analysis	(Cledou et al., 2018), (Durst et al., 2015), (Morrar, 2014)
Accommodation Infrastructure	SWOT Analysis	(Remane et al., 2016), (Täuscher & Laudien, 2018)
Hotel Ownership	Assessing Business Involvement, SWOT Analysis	(Adrodegari et al., 2015), (Remane et al., 2016), (Kortmann & Piller, 2016),
Hotel Operational Partner	Assessing Business Involvement, SWOT Analysis	(Hlee et al., 2018), (Kasper & Vela, 2011),
Hotel Branding	Assessing Business Involvement	(Štefan & Richard, 2014),(Remane et al., 2016), (Todeschini et al., 2017)
Exchange	Assessing Business Involvement	(Mich et al., 2008)
Employee's Control	Assessing Business Involvement, SWOT Analysis	(Mich et al., 2008)
Member's Control	Assessing Business Involvement, SWOT Analysis	(Mich et al., 2008)
Socio-Economic	Assessing Contribution to the Society	(Ciulli & Kolk, 2019), (Sanasi et al., 2020),(Schroeder, 2016), (Cledou et al., 2018), (Weking, Mandalenakis, et al., 2020), (Täuscher & Laudien, 2018)
Business Participants	Assessing Business Involvement, SWOT Analysis	(Tönnissen et al., 2020), (Hartmann et al., 2014), (Ciulli & Kolk, 2019), (Täuscher & Laudien, 2018), (Sanasi et al., 2020), (Urbinati et al., 2017), (Mich et al., 2008)
Market Type	Assessing Strength and Weakness of Business	(Weking, Hein, et al., 2020)
Platform Economy Type	Assessing Strength and Weakness of Business	(Jovanovic et al., 2020), (Ling et al., 2014)
Pricing	Assessing Revenue Stream of Business	(Lüdeke-Freund et al., 2018), (Adrodegari et al., 2015)
Price Discovery	Assessing Revenue Stream of Business	(Täuscher & Laudien, 2018)
Revenue Structure	Assessing Revenue Stream of Business	(Ju et al., 2016), (Weking, Stöcker, et al., 2020), (Lüdeke-Freund et al., 2018), (Štefan & Richard, 2014), Weking, Hein, et al., 2020), (Täuscher & Laudien, 2018), (Sanasi et al., 2020),(Mich et al., 2008),(Wrigley & Straker, 2016)
Revenue Source	Assessing Revenue Stream of Business	(Lüdeke-Freund et al., 2018), (Täuscher & Laudien, 2018)
Operational Activities	Assessing Revenue Stream of Business	(Täuscher & Laudien, 2018)

Source: Developed by Author.

in table 2. To standardize these characteristics two researchers were involved.

DEVISING TAXONOMY BUILDING FRAMEWORK

In the next phase, a taxonomy-building approach recommended by Nickerson et al. (2013) has been followed. This follows a few steps (Reference: Figure 2).

Step 1: Taxonomy Framework Measurement Scale

Weking, Hein, Böhm, and Krcmar (2020) have used Business Model Canvas (BMC) model suggested by Abdoun & Ibrahim (2018) for developing taxonomy in their study; Weking et al. (2020) followed four business model frameworks for the development of own framework containing the target customer, value proposition, the key element, and value capture. Few more researchers (Hodapp et al., 2019; Remane et al., 2017; Remane et al., 2016), used the VISOR model, and a value-based framework (Weking, Mandalenakis, et al., 2020) comprising of value proposition, value creation, value delivery, and value capture for the taxonomy building. In this study, a wholesome approach to framework building has been conducted. This step was performed to formulate a business model framework scale based on which the inherent characteristics of the hospitality business can be represented. The finalized elements together form a business model framework scale having six elements namely Value Delivery, Key Resources, Value Creation, Market-Related Pattern, Cost & Revenue Structure, and Key Activity (Reference: Table 4).
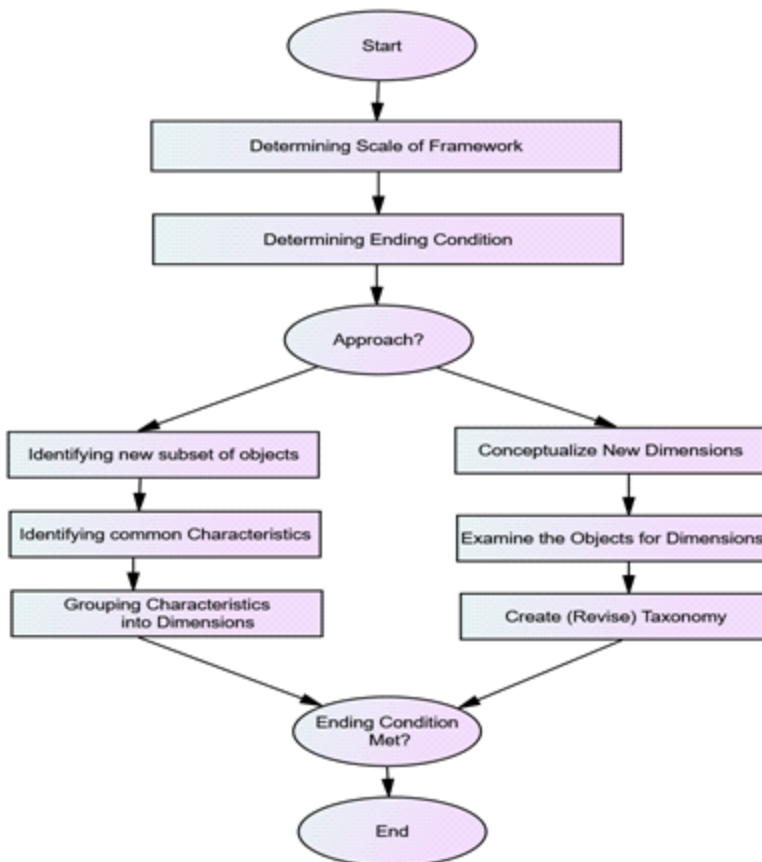
Figure 2: Taxonomy Building Approach, (Nickerson et al., 2013)

Table 3: Iterative Approach

	Iteration-1	Iteration-2	Iteration-3	Iteration-4
Approach	Conceptual to Empirical	Empirical to Conceptual	Empirical to Conceptual	Empirical to Conceptual
Elements	Dimensions			
Value Delivery	Accommodation type	Accommodation type	Accommodation type	Accommodation type
		Minimum Duration	Minimum Duration	Minimum Duration
				Accommodation Budget
	Service Type	Service Type	Service Type	Service Type
		Online Booking Service	Online Booking Service	Online Booking Service
			Platform Involvement	Platform Involvement
Key Resources			Innovative Services	Innovative Services
	Accommodation Infrastructure	Accommodation Infrastructure	Accommodation Infrastructure	Accommodation Infrastructure
Value Creation	Hotel Ownership	Hotel Ownership	Hotel Ownership	Hotel Ownership
		Hotel Operational Management	Hotel Operational Management	Hotel Operational Management
				Hotel Branding
			Exchange	Exchange
			Employee Control	Employee Control
			Member's Control	Member's Control
	Socio-Economic Value	Socio-Economic Value	Socio-Economic Value	Socio-Economic Value
Market-Related Pattern	Business Participants	Business Participants	Business Participants	Business Participants
	Market Type	Market Type	Market Type	Market Type
			Platform Economy Type	Platform Economy Type
Revenue Pattern	Pricing	Pricing	Pricing	Pricing
			Price Discovery	Price Discovery
	Revenue Structure / Stream	Revenue Structure / Stream	Revenue Structure / Stream	Revenue Structure / Stream
				Revenue Source
Key Activities	Operational Activities	Operational Activities	Operational Activities	Operational Activities

Source: Developed by Author.

Step 2: Determining Ending Condition

In the next step five subjective and six objective conditions have been defined as the ending conditions. The subjective conditions are (1) All the business models should be related to the hospitality industry, (2) The selected dimensions should be mutually exclusive, (3) The taxonomy should consist of the meaningful dimensions that can classify application cases, (4) The taxonomy must differentiate each application case from the other, (5) The taxonomy must be comprehensive and extensible. The objective conditions are (1) The cases must be classified with taxonomy, (2) No two taxonomy dimensions should merge and form a single dimension, (3) Each dimension must represent each case, and (4) No new dimensions or pattern has to be added and (5) The elements must not be merged or split, (6) Every dimension must be unique

Step 3: Iterative Approach (Empirical to Conceptual and Conceptual to Empirical)

In the next step, the iterative approach is applied with three iterations which derive certain dimensions of hospitality industry business models from the literature (Reference: Table 3). The first iteration was from conceptual to empirical, and the subsequent iterations were from empirical to conceptual. This means that the dimensions which were derived from the literature need to be evaluated and allocated on the business model framework scale. For each element of the framework, at least one dimension was developed. For example, for the first element of the taxonomy framework, i.e., value delivery, a new dimension Accommodation type was defined. This dimension was developed as an outcome of different businesses in the hospitality sector.

In the first iteration, some dimensions were obtained namely Accommodation Type, Service Type from 1st element of the framework, i.e. Value Delivery; Accommodation Infrastructure was obtained from Key Resources; Hotel Ownership, and Socio-Economic Value from Value Creation; Business Participants and Market Type from Market-Related Pattern; Pricing and Revenue Stream from Revenue Pattern; and Operational Activities from Key Activities. In the second iteration, a few more dimensions were developed namely Minimum Duration and Online Booking Services from Value Delivery, and Hotel Operational Management from Value Creation were developed. In the third iteration, Platform Involvement was obtained from Value Delivery; Innovative Services were obtained from Key Resources; Exchange, Employee Control, and Member Control have been obtained from Value Creation; Platform Economy Type was obtained from Market-Related patterns and Price Discovery was obtained from Revenue Pattern. In the 4th iteration, Accommodation Budget was developed from Value Delivery; Hotel Branding was developed from Value Creation, and Revenue Source was developed from Revenue Pattern. This process helped in deriving 23 dimensions from 42 papers (Reference: Table 2). Next, the numbers of possible characteristics were extracted and depicted to create the scope for representing each business model (Reference Table 4).

Tips to Read the Figure and Taxonomizing Business Models:

The initial column depicts the elements of the taxonomy framework measurement scale. The second column relates the elements with industry-specific dimensions which were derived from the systematic literature review. Each dimension in the second column elaborates some characteristics which are required to define the business models of the cases. The characteristics refer to the nature of the dimensions available in each business model. The accommodation type explains which accommodation you can book. Several types of accommodation types are found namely Hotels/Resorts, Hostels, Home Stays/Apartments, Camping, PG, Bed & Breakfast. The accommodation types which are found from minimum duration explain the minimum time for which you can book the accommodations. It was seen that the bookings can be made in any type of business model in either of the three types, which are Hourly, on a Day Basis, or for a Long Period. The accommodation category explains the budget of the accommodation units whereas Budget, Standard, Premium, and Elite explain the categories from lower to higher budget accommodations, respectively. The service type explains the type of service the business offers, in which the Community Platform pattern refers to the business interaction in the community, Trading refers to holding inventory at a lower cost and selling those at a higher price, and Brokering refers to selling without any prepurchase which involves hotels in guiding the price rather pre-purchasing or holding the inventory at any cost for future sells, Service Enabling refers to allowing the other service providers for rendering service, and Service Providing refers to providing service by own without mediating, in addition to the transaction. Online booking services refer to the services online platform offers which are namely platform Review, Guest Review/Ratings/Images, Online Booking/Cancellation, Online Payment, searching options, Listing & Publishing, and Real-Time Availability Check. Under platform involvement, One to One refers to the interaction of one platform in the transaction, Many to One refers to the interaction of many platforms from one seller in the transaction, and multi-Platform refers to the involvement of many platforms from many sellers, in managing inventory and price. Under innovative services, Transparent Service refers to only transparent sharing of information between two platforms, Participatory refers to the participation of platforms in the value delivery where all platforms are involved in information creation, Anticipatory means the services are anticipated as per the requirement of the users, Co-created means customers are involved in the value creation and value delivery, Context-Aware refers to

Table 4: Taxonomy Framework of E-Business Models for the Hospitality Industry

	Dimensions	Characteristics
Value Delivery	Accommodation type	Hotel/Resort · Hostels · Home Stays/Apartments · PG · Camping · B&B
	Minimum Duration	Hourly · Day Stay · Long Stay
	Accommodation Category	Budgeted · Standard · Premium · Elite
	Service Type	Community Pattern Business · Platform (Sharing Business) · Trading · Brokering · Service Enabling · Service Providing
	Online Booking Services	Inquiry · Platform Review · Guest Review/Ratings /Image sharing · Online Booking/Cancellation · Online Payment · Searching options · Listing & Publishing · Realtime Availability Check
	Platform Involvement	One to One · Many to One · Multi-Platform
Distinguishable Key Resources / Service Platforms	Innovative Services	Transparent · Participatory · Anticipatory · Co-created · Context Aware
	Accommodation Infrastructure	Dedicated · Shared · Makeshift
Value Creation	Hotel Ownership	Operator Owned · Private Hotels · Individually Owned
	Hotel Operational Mgmt.	Maintained By Operator · Maintained By Hotels · Maintained By Individuals
	Hotel Branding	By Operator · By Hotels · By Individuals
	Exchange	Information Exchange · Commercial Exchange · Complex Exchange
	Employee Control	Light Control from Employees · Medium Control from Employees · Specific Control from Employees
	Member's Control	Light Control from Members · Medium Control from Members · Specific Control from Members
	Socio-Economic	Cooperative Ownership · Co-Share · Not for Social Cause
Market-Related Pattern	Business Participants	B2B · B2C · B2B2B · B2B2C · Pure P2P · P2B2P · B2B2B2B · B2B2B2C · O2O · Non-E-Commerce
	Market Type	Global Market · Mass Market · Niche Market · Multi-Sided Market
	Platform Economy Type	Conventional E-Commerce · Marketplace · Accommodation Aggregator · Information Aggregator · Website Aggregator · Sharing · Distribution
Revenue Pattern	Pricing	Dynamic · Flat Rate · Differentiate/Differential · Subscription · Free
	Price Discovery	Fixed By Hotel Owner · Fixed By Current Platform · Fixed By Merchant · Reverse Auction · Negotiation · No Price
	Revenue Structure / Stream	Mark-Up · Brokerage · Brokerage Share · Usage Fee · Transaction Fee · Rent/Lease · Subscription Fee · Membership Fee · Shelve Fee · Advertising
	Revenue Source	Buyer · Supplier · Channel Partner · Third Party-Advertiser
Key Activity	Operation Activities	Community Building · Content Creation · Aggregation · Distribution · Accommodation Partner · Platform Integration · Network

the delivery of awareness information without involving booking service. Under accommodation infrastructure, dedicated refers to exclusive accommodation, Sharing refers to sharing accommodation, and Makeshift refers to temporary accommodation. The ownership of the accommodation unit can either lies with hotels or the Service Web Portal or by Individuals. The accommodation unit's operation and branding can either be made by accommodation units or by the service web portal. Different services are exchanged by the platforms such as Information, Commercial or Complex types involving the non-transaction of information or commercial with the platform but making a transaction with a partner's platform or offline. The service creation may involve less interference (Light Control) or mediocre type of interference (Medium Control) and interference in certain degrees in certain areas (Specific Control) and these are made either by the Employee of the service web portal or by the hotel managers, otherwise called as Members. The businesses are meant to serve various socio-economic services which are either Cooperative Ownership type having a group of owners for any accommodation unit creating a sustainable business or Co-sharing type which allows individuals rather than business entities, in creating value through the online platform or not for any social cause (Not for Social Cause) type. The business participants' involvement in service delivery may be Business to Business (B2B), Business to Customer (B2C) or Online to Offline (O2O) type involving two-party in business or Business Business Customer (B2B2C) or Business to Business to Business (B2B2B) involving three stake holders in transaction or Business to Business to Business to Business (B2B2B2B) or Business to Business to Business to Customer (B2B2B2C) involving four stakeholders in the transaction. The involvement of individuals rather than a business hotel is called peer transactions which are of various types namely Pure Peer to Peer which involves individuals in the transaction without the involvement of a platform or Peer to Business to Peer (P2B2P) involving business in between peer-to-peer transaction. Online to offline (O2O) business is the process in which service commitment is done online mode but the transaction is made directly by the business entity from their physical outlet. The Non-E-Commerce business does not allow the monetary transaction. Under market type Global Market refers to the acquisition of inventories across the globe to serve the global audience, Mass Market refers to serving a large audience for a comparatively small inventory, Niche Market refers to dealing in a niche product or service and serving niche customers, and Multi-Sided Market refers to allowing different vendors to enlist their product and services and serving large customers on the service platform without playing a role of middle man in the transaction. The business models possess different types of the platform economy, such as Conventional E-Commerce which involves the platforms of the concerned business and the customers, Marketplace allows the other vendors in selling through the platform of the concerned business, and Aggregator platform aggregates the product or services or the information. The Accommodation Aggregator platform sells the product or service of other entities with their brand name whereas the Website Aggregator aggregates the information from different websites. Moreover, the Information Aggregator aggregates the information on its own. The Sharing platform allows individuals to make transactions within themselves. The Distribution system helps in the distribution process by connecting the live inventory of different reservation systems to the agent's platform. Various pricing patterns can be witnessed in the business models such as Flat Rate, Dynamic Rate, Differential Pricing, Subscription, and Free. The price set is made by one, out of the several ways which include Hotel Owner, Current Platform, Merchant, Reverse Auction where hotels make an offer based on affordability of customer, finalized based on negotiation between platform and customer or no price setting. Various revenue structures can be found in business models such as Mark-up, Brokerage, Transaction Fee, Shared Brokerage, Rent/Lease, Usage Fee, Subscription Fee, Membership Fee, Shelve Fee, and Advertising. The revenue is generated from the Suppliers, Channel Partners, Third Party companies who want to advertise their products, from the Buyer directly, or from the community member. The operational activities performed by the businesses are of different kinds, such as; Community Building, Content Creation, Aggregation, Distribution, Accommodation Partner Management, Platform Integration, and networks.

Case Study Approach

The purpose of this phase of work is to study the business models of the existing businesses in the hospitality industry. For this, some company database websites like "Crunchbase", Startup India website, Fundoodata, and direct company websites have been searched to get the details of the business

models of existing businesses. The study of the business model of each company is considered a case. The information regarding the characteristics of each case was analyzed considering the taxonomy framework of e-business models for the hospitality industry.

RESULTS

The taxonomy building framework was proposed for the online hospitality industry which comprises 23 dimensions and 113 defining characteristics to distinguish the business models   table 4. The case studies were performed to distinguish the business models and define the characteristics of each business model based on this framework. The set of characteristics of each case is called a business model pattern of the case. The cases with a similar business model pattern are grouped. The similar groups having little difference are again grouped and are called "case type". The case groups which come under the case types are named "sub case types". The case types are named concerning the literature references and business model pattern. The sub-cases are named concerning the name of case type and the business model pattern of case groups.

Business Model Taxonomy

The case study of the e-business models in the hospitality industry resulted in the taxonomization of 11 types of online hospitality business model cases, 24 types of sub-cases, and a special case. The cases under each case type have been found that suit the business model patterns and illustrated against the business model case and sub-case types. Some cases have been founded under more than one case and sub-case types. It indicates that online hotel businesses try to become more flexible in terms of the adoption of any type of business model to exploit the benefit from the market as much as possible.

CASE TYPE 1: MERCHANT MODEL

Sub Case Type-1: OTA Merchant Model

The merchant model is nothing but a traditional way of doing business of purchasing a bunch of products or a bunch of services with paying a price and selling those at a higher price, in addition to the mark-up or profit margin, (Liao et al., 2019; Toh et al., 2011; Pilepiæ et al., 2012; Lee et al., 2013). The business entity under the merchant model plays the role of intermediary which provides the required advice and hotel booking services, (Chow, 2017). Cases: Make My Trip, Goibibo, Yatra.com, Cleartrip.com, Akbar Online, Easy My Trip, Expedia, Booking.com, Agoda, Hotels.com, Hrs.com, Happyeasygo.com (Reference: Table 5)

Sub Case Type 2: Niche Type Merchant Model

This type of business Model deals in some specific niche types of properties, though other characteristics of this model remain the same as the general features of the Merchant Model. There are several types of niche type Merchant Models; those are Eco-friendly Merchants and Makeshift property Merchant Model (which deals in camping accommodations, and Caravans). Cases: Reserve America (www.reserveamerica.com). (Reference: Table 5)

CASE TYPE 2: AGENCY MODEL

Sub Case Type 1: OTA Agency Model

Out of the several explored cases, the companies like MMT, Goibibo, Yatra.com, Cleartrip.com, Akbar Online, Easy My Trip, Expedia, Booking.com, Agoda, etc. work as per the Agency Model. Unlike the Merchant Models, the Agency Models diminish the risk of doing business but keep less control on the inventory and price (Liao et al., 2019; Toh et al., 2011; Pilepiæ et al., 2012; Lee et al., 2013). The agency model allows the vendors to onboard their properties on the OTA platform either directly or by allowing the vendors a vendor panel to manage their properties. Cases: Make My Trip, Goibibo, Yatra.com, Cleartrip.com, Akbar Online, Easy My Trip, Expedia, Booking.com, and Agoda (Reference: Table 5).

Sub Case Type 2: Negotiation Based Agency Model

In a negotiation-based Agency Model, the minimum price of any hotel is provided on the platform, and the customers are allowed to click the "negotiation"/ " make offer" button and put the price, the customer desires to pay for the stay. The Agency, in turn, accepts the offer or shows a maximum negotiated offer that can be provided to the customer. The customer then has to pay if any of the conditions are matched to confirm the booking. Cases: "bid2travel.com", "onlybidding.com" etc. (Reference: Table 6).

Table 5: Taxonomy of E-Business Models in the Hospitality Industry

	Dimensions ↓	Characteristics ↓		
	Model Name →	**OTA -MERCHANT MODEL**	**NICHE-TYPE MERCHANT MODEL**	**OTA -AGENCY MODEL**
Value Delivery	Accommodation type	Hotel/Resort/Hostels/Home Stays/Apartments/ Camping/ Bed & Breakfast	Any Niche type (Hotel /Resort/Hostels/Home Stays/Apartments/Camping/ Bed & Breakfast)	Hotel /Resort/Hostels/Home Stays/Apartments/Camping/Bed & Breakfast
	Minimum Duration	Day Stay	Hourly/Day Stay/Long Stay	Day Stay
	Accommodation Category	Budgeted, Standard, Premium, Elite	Budgeted, Standard, Premium, Elite	Budgeted, Standard, Premium, Elite
	Service Type	Trading	Trading	Brokering
	Online Booking Services	Guest Review-Ratings-Image sharing/ Inquiry/Online Booking Cancellation/Online Payment/Searching Options/Real-time Availability Checking	Guest Review-Ratings-Image sharing/ Inquiry/Online Booking Cancellation/Online Payment/Searching Options/Real-time Availability Checking	Guest Review-Ratings-Image sharing/ Inquiry/Online Booking Cancellation/Online Payment/Searching Options/Listing and Publishing/Real-time Availability Checking
	Platform Involvement	One to One	One to One	Multi-Platform
Distinguishable Key Resources / Service Platforms	Innovative Services	Transparent	Transparent	Participatory
	Accommodation Infrastructure	Dedicated/Shared/Makeshift	Dedicated/Shared/Makeshift	Dedicated/Shared/Makeshift
Value Creation	Hotel Ownership	Private Hotels	Private Hotels	Private Hotels
	Hotel Operational Management	Maintained By Hotels	Maintained By Hotels	Maintained By Hotels
	Hotel Branding	By Hotels	By Hotels	By Hotels
	Exchange	Information Exchange/Commercial Exchange	Information Exchange/Commercial Exchange	Information Exchange/Commercial Exchange
	Employee Control	Medium Control from Employees	Medium Control from Employees	Light Control from Employees
	Member's Control	Medium Control from Members	Medium Control from Members	Specific Control from Members
	Socio-Economic	Not for Social Cause	Not for Social Cause	Not for Social Cause
Market-Related Pattern	Business Participants	B2B /B2C	B2B /B2C	B2B2C/B2B2B
	Market Type	Mass Market	Niche Market	Multi-Sided Market
	Platform Economy Type	Conventional E-Commerce	Conventional E-Commerce	Marketplace
Revenue Pattern	Pricing	Dynamic/Flat Rate	Dynamic/Flat Rate	Dynamic/Flat Rate
	Price Discovery	Fixed By Platform	Fixed By Platform	Fixed By Hotel
	Revenue Structure / Stream	Mark-Up	Mark-Up	Brokerage
	Revenue Source	Buyer	Buyer	Buyer
Key Activity	Operational Activities	Distribution	Distribution	Distribution/Accommodation Partner Management

Source: Developed by Author.

Table 6: Taxonomy of E-Business Models in the Hospitality Industry

Dimensions ↓	Characteristics ↓		
	Model Name →	**OTA-NEGOTIATION-BASED AGENCY MODEL**	**NEGOTIATION ENABLER AGENCY MODEL**	**WHITE LEVEL SOLUTION**
Value Delivery	Accommodation type	Hotel /Resort/Hostels/Home Stays/Apartments/Camping/Bed & Breakfast	Hotel /Resort/Hostels/Home Stays/Apartments/Camping/Bed & Breakfast	Hotel/Resort/Hostels/Home Stays/Apartments/Camping/Bed & Breakfast
	Minimum Duration	Day Stay	Hourly/Day Stay/Long Stay	Day Stay
	Accommodation Category	Budgeted, Standard, Premium, Elite	Budgeted, Standard, Premium, Elite	Budgeted, Standard, Premium, Elite
	Service Type	Brokering	Service Enabling	Trading/Brokering/Service Enabling
	Online Booking Services	Guest Review-Ratings-Image sharing/Inquiry/Online Booking Cancellation/Online Payment/Searching Options/Listing and Publishing/Real-time Availability Checking	Guest Review-Ratings-Image sharing/Inquiry/Online Booking Cancellation/Online Payment/Searching Options/Listing and Publishing/Real-time Availability Checking	Guest Review-Ratings-Image sharing/ Inquiry/Online Booking Cancellation/Online Payment/Searching Options/Listing and Publishing/Real-time Availability Checking
	Platform Involvement	Multi-Platform	One to One	Multi-Platform
Distinguishable Key Resources / Service Platforms	Innovative Services	Anticipatory	Anticipatory	Participatory
	Accommodation Infrastructure	Dedicated/Shared/Makeshift	Dedicated/Shared/Makeshift	Dedicated/Shared/Makeshift
Value Creation	Hotel Ownership	Private Hotels	Private Hotels	Private Hotels
	Hotel Operational Management	Maintained By Hotels	Maintained By Hotels	Maintained By Hotels
	Hotel Branding	By Hotels	By Hotels	By Hotels
	Exchange	Information Exchange/Commercial Exchange	Complex Exchange	Information Exchange/Commercial Exchange
	Employee Control	Light Control from Employees	Light Control from Employees	Light/ Medium Control from Employees
	Member's Control	Specific Control from Members	Specific Control from Members	Medium/Specific Control from Members
	Socio-Economic	Not for Social Cause	Not for Social Cause	Not for Social Cause
Market-Related Pattern	Business Participants	B2B2C	B2B2C	B2B2B2C/B2B2B2B/ B2B2C/B2B2B
	Market Type	Multi-Sided Market	Mass Market	Multi-Sided Market
	Platform Economy Type	Marketplace	Conventional E-Commerce	Marketplace
Revenue Pattern	Pricing	Differentiate/Differential	Dynamic/Flat Rate	Dynamic/Flat Rate
	Price Discovery	Negotiation	Negotiation	Fixed by Hotel/Merchant
	Revenue Structure / Stream	Brokerage	Brokerage	Brokerage Sharing
	Revenue Source	Buyer	Buyer/Supplier	Buyer/Channel Partner
Key Activity	Operational Activities	Distribution/Accommodation Partner Management	Distribution/Platform Integration	Distribution/Accommodation Partner Management

Source: Developed by Author.

Table 7: Taxonomy of E-Business Models in the Hospitality Industry

Dimensions ↓	Characteristics ↓			
	Model Name →	**OTA O2O AGENCY MODEL**	**AFFILIATE HOTEL BOOKING SITES**	**OTA OPAQUE MODEL**
Value Delivery	Accommodation type	Hotel/Resort/Hostels/Home Stays/Apartments/PG/Camping/Bed & Breakfast	Hotel/Resort/Hostels/Home Stays/Apartments/PG/Camping/Bed & Breakfast	Hotel/Resort/Hostels/Home Stays/Apartments/Camping/Bed & Breakfast
	Minimum Duration	Hourly/Day Stay/Long Stay	Hourly/Day Stay/Long Stay	Day Stay
	Accommodation Category	Budgeted, Standard, Premium, Elite	Budgeted, Standard, Premium, Elite	Budgeted, Standard, Premium, Elite
	Service Type	Service Enabling	Service Enabling	Service Enabling
	Online Booking Services	Guest Review-Ratings-Image sharing/ Inquiry /Online Booking Cancellation/Online Payment/Searching Options/Listing and Publishing/Real-time Availability Checking	Searching Option (Redirect to Merchant/Agency/Aggregator sites)	Guest Review-Ratings-Image sharing/ Inquiry/Online Booking Cancellation/Online Payment/Searching Options/Listing and Publishing/Real-time Availability Checking
	Platform Involvement	Multi-Platform	One to One/Many to One/Multi-Platform	Multi-Platform
Distinguishable Key Resources / Service Platforms	Innovative Services	Participatory	Transparent	Anticipatory
	Accommodation Infrastructure	Dedicated/Shared/Makeshift	Dedicated/Shared/Makeshift	Dedicated/Shared/Makeshift
Value Creation	Hotel Ownership	Private Hotels	Private Hotels/ Operator Owned	Private Hotels
	Hotel Operational Management	Maintained By Hotels	Maintained By Hotels/Operator	Maintained By Hotels
	Hotel Branding	By Hotels	By Hotels/Operator	By Hotels
	Exchange	Information Exchange/Complex exchange	Complex Exchange	Information Exchange/Commercial Exchange
	Employee Control	Medium Control from Employees	Light Control from Employees	Medium Control from Employees
	Member's Control	Specific Control from Members	Medium/Specific Control from Members	Medium Control from Members
	Socio-Economic	Not for Social Cause	Not for Social Cause	Not for Social Cause
Market-Related Pattern	Business Participants	O2O	B2B2C/B2B2B2C/B2P2B2P	B2B2C
	Market Type	Multi-Sided Market	Global/Mass/Multi-Sided Market	Multi-Sided Market
	Platform Economy Type	Marketplace	Conventional E-Commerce/Marketplace	Marketplace
Revenue Pattern	Pricing	Dynamic/Flat Rate	Dynamic/Flat Rate	Differential
	Price Discover	Fixed by Hotel	Fixed by Hotel/Merchant	Reverse Auction
	Revenue Structure/ Stream	Brokerage	Shared Brokerage	Brokerage
	Revenue Source	Buyer	Channel Partner	Buyer
Key Activity	Operational Activities	Distribution/Accommodation Partner Management	Distribution	Distribution/Accommodation Partner Management/Network

Source: Developed by Author.

Table 8: Taxonomy of E-Business Models in the Hospitality Industry

	Dimensions ↓	Characteristics ↓		
	Model Name →	**FRANCHISEE BASED AGGREGATOR**	**PROFIT SHARING TYPE AGGREGATOR**	**MINIMUM VOLUME GUARANTEE AGGREGATOR**
Value Delivery	Accommodation type	Hotel/Resort/Hostels/Home Stays/Apartments/PG/Camping/Bed & Breakfast	Hotel/Resort/Hostels/Home Stays/Apartments/PG/Camping/Bed & Breakfast	Hotel/Resort/Hostels/Home Stays/Apartments/Camping/Bed & Breakfast
	Minimum Duration	Day Stay	Day Stay	Day Stay
	Accommodation Category	Budgeted, Standard, Premium	Budgeted, Standard, Premium	Budgeted, Standard, Premium
	Service Type	Service Providing	Service Providing	Service Providing
	Online Booking Services	Guest Review-Ratings-Image sharing/ Inquiry/Online Booking Cancellation/Online Payment/Searching Options/Listing and Publishing/Real-time Availability Checking	Guest Review-Ratings-Image sharing/ Inquiry/Online Booking Cancellation/Online Payment/Searching Options/Listing and Publishing/Real-time Availability Checking	Guest Review-Ratings-Image sharing/ Inquiry/Online Booking Cancellation/Online Payment/Searching Options/Listing and Publishing/Real-time Availability Checking
Distinguishable Key Resources / Service Platforms	Platform Involvement	Many to One	Many to One/Multi-Platform	One to One
	Innovative Services	Participatory	Participatory	Transparent
	Accommodation Infrastructure	Dedicated/Makeshift	Dedicated/Makeshift	Dedicated
Value Creation	Hotel Ownership	Operator Owned	Private Hotels	Private Hotels
	Hotel Operational Management	Maintained By Operator	Maintained By Hotels	Maintained by Hotels
	Hotel Branding	By Operator	By Operator	By Operator
	Exchange	Information Exchange/Commercial Exchange	Information Exchange/Commercial Exchange	Information Exchange/Commercial Exchange
	Employee Control	Specific Control from Employees	Medium Control from Employees	Specific Control from Employees
	Member's Control	Medium Control from Members	Specific Control from Members	Specific Control from Members
	Socio-Economic	Not for Social Cause	Not for Social Cause	Not for Social Cause
Market-Related Pattern	Business Participants	B2B/B2C	B2B2C/B2B2B	B2B/B2C
	MarketType	Mass Market/Global Market	Mass Market/Global Market	Mass Market/Global Market
	Platform Economy	Accommodation Aggregator	Accommodation Aggregator	Accommodation Aggregator
Revenue Pattern	Pricing	Dynamic/Flat Rate	Dynamic/Flat Rate	Dynamic/Flat Rate
	Price Discover	Fixed By Platform	Fixed by Hotel	Fixed by Platform
	Revenue Structure	Mark Up	Brokerage	Mark Up
	Revenue Source	Buyer	Buyer	Buyer
Key Activity	Operational Activities	Aggregation/Distribution/Accommodation Partner Management	Aggregation/Distribution/Accommodation Partner Management	Aggregation/Distribution/Accommodation Partner Management

Source: Developed by Author.

Table 9: Taxonomy of E-Business Models in the Hospitality Industry

	Dimensions ↓			
	Model Name →	**HOURLY STAY AGGREGATOR**	**LONG STAY AGGREGATOR**	**PROFIT DRIVEN CO-SHARING**
Value Delivery	Accommodation type	Hotel/Resort/Hostels/Home Stays/Apartments	Hotel/Resort/Hostels/Home Stays/Apartments/PG	Hotel/Home Stays/Apartments/PG
	Minimum Duration	Hourly Stay	Long Stay	Day Stay, Long Stay
	Accommodation Category	Budgeted, Standard, Premium	Budgeted, Standard, Premium	Budgeted, Standard, Premium
	Service Type	Service Providing	Service Providing	Community Platform Pattern
	Online Booking Services	Guest Review-Ratings-Image sharing/Online Booking Cancellation/Online Payment/Searching Options/Listing and Publishing/Real-time Availability Checking/ Inquiry	Guest Review-Ratings-Image sharing/Online Booking Cancellation/Online Payment/Searching Options/Listing and Publishing/Real-time Availability Checking/ Inquiry	Guest Review-Ratings-Image sharing/Online Booking Cancellation/Online Payment/Searching Options/Listing and Publishing/Real-time Availability Checking
	Platform Involvement	Many to One/Multi-Platform	Many to One/Multi-Platform	Multi-Platform
Distinguishable Key Resources / Service Platforms	Innovative Services	Transparent/Participatory	Transparent/Participatory	Participatory/Co-created
	Accommodation Infrastructure	Dedicated	Dedicated/Shared	Dedicated/Shared
Value Creation	Hotel Ownership	Private Hotels	Private Hotels	Individuals
	Hotel Operational Mgmt.	Maintained By Hotels/Operator	Maintained By Hotels/Operator	Individuals
	Hotel Branding	By Operator	By Operator	By Individuals
	Exchange	Information Exchange/Commercial Exchange	Information Exchange/Commercial Exchange	Information/Commercial
	Employee Control	Medium /Specific Control from Employees	Medium/Specific Control from Employees	Light Control from Employees
	Member's Control	Medium/Specific Control from Members	Medium/Specific Control from Members	Specific Control from Members
	Socio-Economic	Not for Social Cause	Not for Social Cause	Co-share
Market-Related Pattern	Business Participants	B2B/B2C/B2B2C/B2B2B	B2B/B2C/B2B2C/B2B2B	P2B2P
	Market Type	Mass Market	Mass Market	Multi-Sided Market
	Platform Economy Type	Accommodation Aggregator	Accommodation Aggregator	Sharing
Revenue Pattern	Pricing	Dynamic/Flat Rate	Dynamic/Flat Rate	Flat Rate
	Price Discovery	Fixed by Hotel/Fixed by Platform	Fixed by Hotel/Fixed by Platform	Fixed by Hotel
	Revenue Structure / Stream	Mark Up/Brokerage	Mark Up/Brokerage	Brokerage
	Revenue Source	Buyer	Buyer	Buyer
Key Activity	Operational Activities	Aggregation/Distribution/Accommodation Partner Management	Aggregation/Distribution/Accommodation Partner Management	Distribution/Accommodation Partner Management

Source: Developed by Author.

Table 10: Taxonomy of E-Business Models in the Hospitality Industry

	Dimensions ↓			Characteristics ↓	
	Model Name →	**MISSION DRIVEN CO-SHARING**	**PROPERTY LISTING WEBSITE**		**CONTENT CREATION-BASED / ADVERTISEMENT MODEL**
Value Delivery	Accommodation type	Hotel/Home Stays/Apartments/PG	Home Stays/Apartments/PG		Hotel/Resort/Hostels/Home Stays/Apartments/PG/Camping/Bed & Breakfast
	Minimum Duration	Day Stay, Long Stay	Long Stay		Hourly Stay/Day Stay/Long Stay
	Accommodation Category	Budgeted, Standard, Premium	Budgeted, Standard, Premium		Budgeted, Standard, Premium, Elite
	Service Type	Community Platform Pattern (Sharing Business)	Service Enabling		Community Platform Pattern
	Online Booking Services	Guest Review-Ratings-Image sharing/Online Booking Cancellation/Online Payment/Searching Options/Listing and Publishing/Real-time Availability Checking/ Inquiry	Searching Options/Listing and Publishing/ Inquiry		Platform Review/Guest Review-Ratings-Image sharing/Searching Option
	Platform Involvement	Multi-Platform	Multi-Platform		One-to-One/Multi-Platform
Distinguishable Key Resources / Service Platforms	Innovative Services	Co-created	Anticipatory/Co-created		Context Aware
	Accommodation Infrastructure	Dedicated/Shared	Dedicated/Shared		Dedicated/Shared/Makeshift
Value Creation	Hotel Ownership	Individuals	Individuals		Private Hotels
	Hotel Operational Management	Individuals	Maintained By Individual		Maintained By Hotels
	Hotel Branding	By Individuals	Individuals		By Hotels
	Exchange	Information	Information/Complex Exchange		Information Exchange
	Employee Control	Light Control from Employees	Light Control from Employees		Medium /Specific Control from Employees
	Member's Control	Specific Control from Members	Specific Control from Members		Medium/Specific Control from Members
	Socio-Economic	Co-share	Co-share		Not for Social Cause
Market-Related Pattern	Business Participants	P2P	Pure P2P		Non-E-Commerce
	Market Type	Multi-Sided Market	Multi-Sided Market		Global Market
	Platform Economy Type	Sharing	Sharing		Non-Commercial
Revenue Pattern	Pricing	Free	Differentiate/Differential		NA
	Price Discovery	No Price Setting	Fixed by Hotel		Fixed by Hotel/Merchant
	Revenue Structure / Stream	Membership Fee	Shelve Fee/Usage Fee		Advertising
	Revenue Source	Community Member	Supplier		Advertiser
Key Activity	Operational Activities	Network	Distribution/Network		Community Building/Content Creation

Source: Developed by Author.

Table 11: Taxonomy of E-Business Models in the Hospitality Industry

	Dimensions ↓		Characteristics ↓	
	Model Name →	**META-SEARCH ENGINE**	**HOTEL/HOTEL CHAIN'S DEDICATED BOOKING SITE**	**DIRECT HOTEL/HOTEL CHAIN'S SUBSCRIPTION MODEL**
Value Delivery	Accommodation type	Hotel/Resort/Hostels/Home Stays/Apartments/Camping/Bed & Breakfast	Hotel /Resort/Bed & Breakfast	Hotel/Resort/Bed & Breakfast
	Minimum Duration	Day Stay	Day Stay	Day Stay
	Accommodation Category	Budgeted, Standard, Premium, Elite	Budgeted, Standard, Premium, Elite	Budgeted, Standard, Premium, Elite
	Service Type	Service Enabling	Service Providing	Service Providing
	Online Booking Services	Guest Review-Ratings-Image sharing/ Online Booking Cancellation/Online Payment/Searching Options/Listing and Publishing/Real-time Availability Checking	Inquiry/Guest Review-Ratings-Image sharing/Online Booking Cancellation/Searching Options/Real-time Availability Checking	Inquiry /Online Booking Cancellation/Searching Options/Real-time Availability Checking
	Platform Involvement	Multi-Platform	One to One	One to One
Distinguishable Key Resources / Service Platforms	Innovative Services	Transparent	Transparent	Transparent
	Accommodation Infrastructure	Dedicated/Shared/Makeshift	Dedicated	Dedicated
Value Creation	Hotel Ownership	Private Hotels	Private Hotels	Private Hotels
	Hotel Operational Management	Maintained By Hotels	Maintained By Hotels	Maintained By Hotels
	Hotel Branding	By Hotels	By Hotels	By Hotels
	Exchange	Information/Complex Exchange	Information Exchange/Commercial Exchange	Information Exchange/Commercial Exchange
	Employee Control	Light Control from Employees	Specific Control from Employees	Specific Control from Employees
	Member's Control	Medium/Specific Control from Members	Specific Control from Members	Specific Control from Members
	Socio-Economic	Not for Social Cause	Not for Social Cause	Not for Social Cause
Market-Related Pattern	Business Participants	B2B2B2C	B2B/B2C	B2B/B2C
	Market Type	Global Market	Mass Market/Global Market	Mass Market/Global Market
	Platform Economy Type	Website Aggregator	Conventional E-Commerce	Conventional E-Commerce
Revenue Pattern	Pricing	Flat/Dynamic	Flat Rate	Subscription
	Price Discovery	Fixed by Hotel/Merchant	Fixed by Hotel	Fixed by Hotel
	Revenue Structure / Stream	Transaction Fee/ Advertising	Rent/Lease	Subscription Fee
	Revenue Source	Buyer	Buyer	Buyer
Key Activity	Operational Activities	Content Creation/Aggregation/Accommodation Partner Management/Platform Integration	Distribution	Distribution

Source: Developed by Author.

Table 12: Taxonomy of E-Business Models in the Hospitality Industry

	Dimensions ↓			
	Model Name →	**COOPERATIVE OWNERSHIP MODEL**	**TME SHARE OWNERSHIP MODEL**	**GDS**
Value Delivery	Accommodation type	Hotel/Resort	Hotel/Resort	Hotel/Resort/Bed & Breakfast
	Minimum Duration	Day Stay/Long Stay	Long Stay	Day Stay
	Accommodation Category	Budgeted, Standard, Premium, Elite	Budgeted, Standard, Premium, Elite	Standard, Premium, Elite
	Service Type	Service Providing	Service Providing	Service Enabling
	Online Booking Services	Inquiry	Inquiry/Searching Option	Online Booking/Cancellation/Online Payment//Searching Options/Real-time Availability Checking
	Platform Involvement	One to One	One to One	Multi-Platform
Distinguishable Key Resources / Service Platforms	Innovative Services	Transparent/Co-created	Transparent	Participatory
	Accommodation Infrastructure	Dedicated	Dedicated	Dedicated
Value Creation	Hotel Ownership	Private Hotels	Operator Owned	Private Hotels
	Hotel Operational Management	Maintained By Hotels	Maintained By Operator	Maintained By Hotels
	Hotel Branding	By Hotels	By Operator	By Hotels
	Exchange	Information Exchange	Information Exchange	Information Exchange/Commercial Exchange
	Employee Control	Specific Control from Employees	Specific Control from Employees	Light Control from Employees
	Member's Control	Specific Control from Members	Specific Control from Members	Specific Control from Members
	Socio-Economic	Cooperative Ownership	Not for Social Cause	Not for Social Cause
Market-Related Pattern	Business Participants	B2B/B2C	B2C	B2B
	Market Type	Mass Market	Niche Market	Global Market
	Platform Economy Type	Conventional E-Commerce	Conventional E-Commerce	Distribution System
Revenue Pattern	Pricing	Differentiate/Differential	Subscription	Dynamic
	Price Discovery	Fixed by Hotel	Fixed by Platform	Fixed by Hotel
	Revenue Structure / Stream	Rent/Lease	Membership Fee	Shelve Fee/Transaction Fee/Set-Up and Subscription Fee
	Revenue Source	Buyer	Buyer	Supplier/Buyer
Key Activity	Operational Activities	Distribution	Distribution	Distribution/Accommodation Partner Management/Platform Integration

Source: Developed by Author.

Sub Case Type 3: Negotiation Enabler Agency Model

An integrated platform enables the hotel website to allow the customers to negotiate like the negotiation-based model. Unlike the Negotiation based Agency Model, this does not serve the hotel deals with a separate platform but offers the guests the dedicated hotel's platform with its integrated platform and software. The Negotiation enabler Agency model earns brokerage on every confirmed booking like a traditional agency model. The business model offers a service-enabling type of service. Cases: private deal (www.privatedeal.com) (Reference: Table 6).

Sub Case Type 4: White Label solutions

White Label Solution is an agreement between the dealer and retailer of the agency-type business model to share the revenue between both the parties by selling the hotels and other travel products with an agency-type business model platform (Dwivedi et al., 2021). The retailer of the White level Agency type business model markets the hotels and the dealer of the White level Agency model works for negotiating and on-boarding the hotels on the platform. Cases: Travel Boutique Online (TBO), Technocraaft, Travel Pro, and Trawex (Reference: Table 6).

Sub Case Type 5: O2O Agents

O2O (Online-to-offline commerce) is a business model in which businesses find the consumers online and bring them into the offline purchase. In the O2O model, payment can be made Online or Offline and the business model is more secure for the customer due to the less turnaround time (TAT) for both purchase and return due to cancellation and Product Transparency, (Talwar, Dhir, Kaur, & Mäntymäki, 2020). The O2O model was first implemented in the travel industry by C-Trip (now trip.com). Cases: C-Trip (Reference: Table 7).

CASE TYPE 3: AFFILIATE WEBSITES

Accommodation affiliate websites sell the hotels of some other booking sites from their platform in return for an affiliate commission (Slivar, 2008). The main website provides an affiliate link to the affiliate sites and generates revenue without involving in the direct sales process. Cases: booking buddy (www.bookingbuddy.com) (Reference: Table 7).

Case Type 4: Opaque Model

The Opaque Model was pioneered by Priceline.com. The model was also termed as "Name Your Price Model" (Toh et al., 2011; Pilepiæ et al., 2012; Lee et al., 2013). In this type of business model, the customers put the destination, hotel specification, and the price he/she wants to pay. The platform in turn checks the price with the available inventories as per the guest specification and offers the possible hotel matches. The mechanism is managed with the automated software for this model. Though the feature is currently not available with "Priceline". Cases: hotelbids.com, bidmystay.com (Reference: Table 7).

CASE TYPE 5: ACCOMMODATION AGGREGATORS

The platform which compiles various hotel deals and displays on its platform is called Accommodation Aggregator (Sharma, Jain, Kapoor, Gaur, & Roy, 2017). The hotels are normally branded with the aggregator's name, unlike the Merchant or Agency Model.

Sub Case Type 1: Franchisee-based Aggregator Business Model

In a Franchisee based Aggregator Model, the complete room inventory of any hotel is rebranded with the brand name of the aggregator company. In a franchise-type aggregator model, the aggregator promotes the hotel and generates revenue for the hotel. The profit is shared between the hotels and the aggregator periodically. Cases: OYO, Fab Hotels, Treebo Hotels (Reference: Table 8).

Sub Case Type 2: Minimum Volume Guarantee Aggregator

The aggregating platform gives a minimum volume guarantee to the hotels and agrees to pay a minimum amount against the committed volume for a certain period. However, the business possesses the liberty to sell at a lower or higher rate on its platform, as per the market situation. It helps the business secure the inventory at a lower rate and create optimum revenue. Cases: OYO in earlier days (Reference: Table 8).

Sub Case Type 3: Profit-sharing Agency type Aggregator Model

This model is similar to the Franchisee-based Aggregator Business Model but differs in certain ways. The aggregating platform shares the profit generated out of hotel booking without involving in the operation. The Aggregator reduces risk by not giving any type of minimum volume guarantee and hence works as an Agency Model. The difference is that the rooms are branded with the Aggregator's

name, unlike Agency Model. Cases: OYO in earlier days (Reference: Table 8).

Sub Case Type 4: Hourly Stay Hotel Aggregators

The duration type of the stay is hourly basis unlike the other form of the Aggregator Model. The rest of the characteristics may follow any type of Aggregator Model from the franchisee, minimum volume guarantee, or profit-sharing agency type aggregating platform. Cases: Mistay, Bookbyslot, Frotels, Hourly Rooms Beta, etc. (Reference: Table 9).

Sub Case Type 5: Long Stay Hotel Aggregators

The duration type of the stay is on a long stay basis unlike the other form of the Aggregator Model. The rest of the characteristics may follow any type of Aggregator Model from the franchisee, minimum volume guarantee, or profit-sharing agency type aggregating platform. Cases: Zolo, Grexter, Colive.com, Nestaway, Coliving.com, etc. (Reference: Table 9).

Note: Niche-type aggregator can adopt any of the above aggregator models and can concentrate on promoting a particular kind of property called niche segment. Hence, it does not require a separate sub-case type. The niche aggregator serves various segments which include makeshift accommodations like camping, eco-friendly accommodations, co-living accommodations, etc.

CASE TYPE 6: CO-SHARING

Sub Case Type 1: Profit-Driven Co-Sharing Model

The profit-driven co-sharing type of accommodation booking platform allows people to list their homes, Bed & Breakfast and PG then add some values in this process and include its profit before allowing other people for booking (Menor-Campos et al., 2019). Cases: Air BnB (Reference: Table 9).

Sub Case Type 2: Mission-Driven Co-Sharing Model

The mission-driven co-sharing platform helps the travellers in connecting similar to a social network site. It allows the travellers to connect with the host and vice-a-versa for a completely free stay or a nominal charge on any stay-related components. A gateway charge is taken by the platform for verification of the members from which the platform generates revenue (Menor-Campos et al., 2019). Cases- Couchsurfing (Reference: Table 10).

CASE TYPE 7: PROPERTY LISTING SITES

These are pure peer-to-peer sites in which the platform does not get involved in the transaction process and the customers are allowed to negotiate and transact in the rental process (Lin, G. Anderson, T. Anderson, 2004). The platform does not add any value to the service delivery as well. Cases: Magicbricks, Zillow, Realtor.com, OLX, Quikr (Reference: Table 10).

CASE TYPE 8: CONTENT CREATION TYPE BUSINESS MODEL (ADVERTISEMENT MODEL)

The Content Creation Type Business Models are not directly involved in the hotel distribution but provide their content and facilitate user-generated content. The model has also been termed the Advertisement model by some researchers due to the business model's advertisement-based revenue model (Nicoli & Papadopoulou, 2017). Cases: Travello, Trip Advisor & Lonely Planet (Reference: Table 10).

CASE TYPE 9: META-SEARCH ENGINE

The Hotel Meta-search type of business model is the search aggregator model which helps in retrieving the real-time hotel information from different OTA and Hotel Aggregator sites with the help of API connection and web crawl mechanism (Vila et al., 2021). Cases: Trivago, Kayak, Wego, Skyscanner, Google, and Hotelscombined.com (Reference: Table 11).

CASE TYPE 10: DIRECT HOTEL MODELS

Sub Case Type 1: Hotel/Hotel Chain's Dedicated Hotel Booking Site

Out of the various cases, the hotel's dedicated websites are found under this category. These are made especially for taking bookings for a particular hotel or chain of hotels. Cases: Taj Hotels, Radisson Hotels, Selections Hotels, Oberoi Hotels, The Park Hotels, IHG Hotels and Resorts, Lemon Tree Hotels, Accor Hotels, The Lalit, Hilton, Jaypee Hotels, Hyatt, The Grand, Eros Hotels, Roseate Hotels, Marriott Hotels, Pride Hotels, Shangri La, ITC Hotels (Reference: Table 11).

Sub Case Type 2: Direct Hotel with Subscription

Few hotels have started adopting subscription models in hotel booking like Marriott, Accor Group, Intercontinental Hotel Group, Taj Hotels, Oberoi, Lemon Tree, ITC group, etc. With this type of model, the corporates are provided with subscription plans, on a monthly or yearly basis. Cases: Marriott, Accor Group, Intercontinental Hotel Group, Taj Hotels, Oberoi, Lemon Tree, and ITC group (Reference: Table 11).

Sub Case Type 3: Cooperative Ownership

Cooperative Ownership was pioneered by the cooperative Kerala Land Reforms and Development Cooperative Society in India. Under this model few properties are owned by cooperative society and are rented out for earning profits. The profit goes to the Cooperative Society. Cases: Kerala Land Reforms and Development Cooperative Society (Reference: Table 12).

Sub Case Type 4: Time Share Ownership

The time share ownership is similar to direct hotel on the club membership plan. The ownership is provided to the guest for some specific room nights within some specific period (A. Powanga & L. Powanga, 2008). These are otherwise termed Condos. Numbers of persons generally hold the right to use the property for some nights within some specified time. The bookings are confirmed based on room availability as per the guest's requirement. Cases: Club Mahindra, Country Vacations India, Sterling Holiday Resorts Limited, Marriott Vacation Club, Wyndham Destinations Vacation Club (Reference: Table 12).

CASE TYPE 11: GDS

The Global Distribution System (GDS) is a booking channel that connects the travel agents with the service provider's booking systems like hotel reservation systems, airline reservation systems, and car rental systems (Aamir & Atsan, 2020). The channel system connects the travel agents with the service provider's CRS system and gives lock-in benefits to the GDS system.
Cases: Amadeus, Galileo, Worldspan, and Apollo (Reference: Table 12).

SPECIAL CASE

Integrated Platforms

The integrated platforms for hotel business are of many types such as "affiliate networks which help affiliate sites in connecting to the primary hotel booking sites and getting good affiliate deals", "a channel manager which connects the OTA platforms with the hotel reservation system to manage Real-time availability and price without manual involvement", "a software connecting and accumulating deals from different GDS, accommodation aggregators, affiliate networks, and white level solution sites for creating the accommodation inventory at a comparably economic price than that of market price and providing a robust booking platform to the small travel agencies with the help of integration" or such kind of new technology like block chain which are yet to be implemented for the mass usage among the travellers. The companies do not involve in the sales or distribution of accommodation or information and generate revenue from other types of online hotel businesses, either in the form of a subscription fee or a commission for booking and transaction. Due to the limitation of such platforms in accommodating the distinguishable hospitality business model framework", these have been considered under special case type. Cases: www.pathfinder.io, (website integrates small travel agent to the B2B vendor and white level solution provider), Travel payout (affiliate network), eZee Centrix, Hotelogix, SiteMinder, Staah, Sirvoy, Open Hotel, RateGain, Djubo (Channel Managers).

DISCUSSION

The commonalities and the differences between different types of Business Models can easily be understood from the taxonomy. The scope of e-business models in the hospitality industry is limited to the dimensions and characteristics as depicted in the taxonomy framework of e-business models for the hospitality industry (Reference: Table 4). The common set of characteristics under the dimensions determines forms a business model pattern which indicates a business model type. From the case study, eleven types of business model cases with the subtypes of some business models (sub-cases) were found and named. The taxonomized business models are named as 1- Merchant Models with subtypes OTA Merchant (*OTA stands for Online Travel Agency) and Niche type Merchant, 2- Agency Models with subtypes OTA-Agency Model, OTA-Negotiation based Agency Model, Negotiation Enabled Agency Model, White Level Solution Agency Model, and OTA-O2O Agency Model, 3-OTA Opaque Model, 4- Affiliate Model, 5-Aggregator Model with subtypes Franchisee based Aggregator,

Profit Sharing type Aggregator, Minimum Volume Guarantee Aggregator, Hourly Stay Aggregator, and Long Stay Aggregator, 6- Co-Sharing Model with subtypes Profit-Driven and Mission-Driven Co-sharing Model, 7- Property Listing Website Model, 8- Content Creation Based Model or Advertisement Model, 9- Meta-Search Engine, 10- Direct Hotel Booking Models with subtypes Hotel or Hotel Chain's Dedicated Website, Hotel or Hotel Chain's Subscription Model, Cooperative Ownership Model, and Time Share Ownership Model, and 11- Global Distribution System (GDS). Some subtypes of the Aggregator model can also be niche types serving a particular accommodation segment but representing the characteristics of any of the subtypes of Aggregator Models. A special type case with some subtype was also found from the case study approach which is named Integrated Platform for B2B online hotel businesses. The integrated platforms are of different types namely Channel Manager, Affiliate Network, and other Software which connects Hotel Portal with different reservation systems for distributing live information on availability and price change. As these platforms are not representing the characteristics of the taxonomy framework of e-business models for the hospitality industry, these have been kept under a separate category.

SCOPE AND LIMITATION

After clarifying the existing business models in the market and understanding the value addition of the characteristics, business innovations can be made by the budding entrepreneurs. This study will give a base for exploring new opportunities in doing online hotel business in the hospitality sector with consideration to the set of possible characteristics. This research is focused on clarifying the inherent nature of different business models in the online hotel industry so that the start-up companies can get a clear picture of each business model and can choose the best fit model for their business endeavor. It can also help the industry players in giving base knowledge if they want to modify their business model. The research was limited to online business models in the hospitality industry as per the currently implemented and existing businesses. The new technologies such as Blockchain, Internet of Things, and Metaverse are yet to be implemented for commercialization and hotel industry-specific distribution hence these have been kept apart from the scope of this research. The new research on the new business models with these technology

implementations can contribute more to the current pool of knowledge.

CONCLUSION

Online space in hotel booking has witnessed different business models. The taxonomy building was very much necessary to understand the existing business models in the hotel industry. The scope of innovative business models can also be derived from the set of characteristics. The opportunity can surely open different dimensions of carrying out business. These opportunities can guide start-up companies in grabbing new opportunities and thriving in the industry. The existing players can also get the benefit of understanding the possible dimensions by which they can transform themselves and can maneuver their business amid stringent competition. The taxonomy building framework has been built based on existing frameworks and this has been made specifically for the hotel industry. The characteristics and dimensions may differ significantly for different industries. This paper provides a systematic framework for the managers which can guide them in building and carrying out business effectively.

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Risk Perceived by Domestic and International Tourists in the State of Goa, India

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ABSTRACT

Any kind of risk perceived by the tourists while or before travelling makes a lot of difference to make travel arrangements. The present study examines the risk perception of tourists in the state of Goa (India). For this study primary data is collected from 300 domestic and 330 international tourists. Risk factors such as Financial risk, Health risk, Physical risk ,Crime risk, Terrorism risk, Psychological risk and Natural Disaster risk are analysed with the help of descriptive statistics. Secondly Factor Analysis is done to reduce the perceived internal risk factors of both domestic and international tourists and lastly external risk factors were analysed with the help of frequency and percentage.

Results shows that domestic tourist perceive Crime, Financial and Physical Risk, while international tourists perceive Crime, Physical, Health and Financial risk. The internal risk for domestic tourist are sence of security ,safety concerns by tourist, travel risk and tourist behaviour, while safety concerns by the tourists, travel risk and safety measures at destination are for international tourists. Lastly the external risk factors for domestic and international tourists mainly includes mass media, self-experience and Friends and relatives.

Suggestions are given to various tourism stakeholders such as Police Department, Destination marketing organisations at Goa, mass media and other stakeholders to reduce the various risk perceived by the tourists.

INTRODUCTION

Tourism is one of the fast-growing industry which contributes to creating jobs, supporting cultural activities, and attracting international trade which gives employment to unskilled to highly skilled people(Garg, 2013; Sawant, Biwal, Ragde2021).

World Travel and Tourism Council (WTTC, 2021) states that tourism generated a total GDP contribution of 6.1%, USD 5,812 bn and for 5.8% for India with INR 13,161 bn (USD 178.0bn) of India's total GDP contribution in 2021 and 32.10 mn jobs which are 6.9% of total employment. Many studies focus on the concerns about various forms of risks while travelling and the insecure image of the destinations which directly or indirectly affect the decision-making of pre-travel process of the tourists (Bansode, & Sawant, 2018, Bras, 2015, Hameed &

Azhar, 2021). (Pizam & Mansfield, 2006) focuses on terrorism and public disorder in the context of tourism. (Kovari & Zimanyi, 2011) assess that there is a need to introduce 'Risk Management' subject in tourism academic curricula. In the year 2020, World Economic Forum (WEF, 2020) reported that the Covid-19 Pandemic lead to the global health crisis and economic recession. Similarly, the World Tourism Organisation (WTO, 2021) mentions that international tourism had declined by over 70% and affected the travel risk perception of tourists. Hence in today's scenario safety and security in tourism plays a vital role.

The present study examines in detail the risk perceptions of domestic and international tourists in the state of Goa,India. This risk perception is bifurcated into two types i.e. internal risk perception

and external risk perception. In internal risk perception, types of risk such as financial, health, physical, crime, terrorism, psychological, and natural disaster risks were analyzed. Secondly internal risk factors perceived by both domestic and international tourist are studied by using factor analysis. Lastly external risk perceived by domestic and international tourist too at goa is studied with the help of frequency and percentage.

REVIEW OF LITERATURE

Risk prediction and the concepts related to it goes back to 3200 BC during the ancient Babylonia (Ryu & Zuhair, 2011). Furedi (1997) pointed out that the risk concepts are determined through understanding the differences between reality and possibility. However (Yang & Nair 2014) after doing extensive literature review points out that definitions of safety, security, and risk are confusing and overlapping and are based on macro determinants to micro attributes. Two important factors shape the risk perceived which are – internal and external factors.

(Adam, 2015) pointed out that internal risk has six kinds of perceived risk namely expectation risk, physical risk, health risk, financial risk, and political risk and is closely associated with as behaviour of the tourist.(Heung, Qu, & Chu, 2001) also states that Internal factors are related to tourist themselves whereas external risk perceived factors include the previous information sources such media and the image of the destination perceived by the tourists. (Neumayer 2011& Demos 1992) points out that external factors have high level of influence on tour planning especially when they know about the victimisation of tourists from information sources such as Mass Media, Word of Mouth Formal Education, travellers reveiws, guide books ,self experiences, travel agents and tour operators, advertisements, promotional brochures others etc.

Financial Risk-Financial risk perceived by the tourists during various catastrophic events are mentioned are 1997 Asian financacial crisis where failing value of Asian currencies in korea had lead to increase in the cost of overseas travel, 1999-2002 Argentinean financial crisis, 2001 World stock market downturn after 9/11 and 2008 Global financial crisis which had negative economic impacts at the destinations(Faulkner 2001 &Prideaux 1999).

The volatly of exchange rates extensively affect tourist destinations in the long term which influences the purchacing behaviour of the tourists,abandoning their travel plans as they perceive the destination to be more expensive(Juric, Lawson & Mclean, 2002).

For this marketing strategy suggested by (Quan et al., 2022) for the stakeholders is to lower the customer awareness of financial risk while working on their marketing strategies.

It is not onlythe tourists but the tourism stakeholders especially the medium and small scale travel companies face problems of financial risk where they have to pay high taxes (El-Sisi,Abdelkafy, Soliman, 2020).

Health Risk-Personal health and wellbeing is risked due to travelling especially at the distant palces and unfamiliars ones, therefore precautions before travelling would be able to reduce risk(WHO 2020). Theorotically health risk can be explained on the basis of perceived susceptibility, severity, and psychological risks. Negative feelings such as worry, anxiety and fear also increases the health risk perception(Chua,Al-Ansi, Lee & Han (2021).

World has faced many health related risks such as HIV-AIDS, Foot and mouth disease in 2001, SARS in 2003,BIRD FLU in 2002,CHOLERA in 2008 (Ryu and Zuhair 2011) and COVID 19 pandemic in 2020.

The interrelationship between travel, tourism, and health is closely associated with well-being, well-ness and health, and places that have branded itself as health tourism products(Hindley&Marmion, 2019) therefore enhancement of the tourists'trust in the security and health of the destination is very important as safety and clean destinations are new characteristcs of travel behaviour especially after Covid 19 pandemic(Singh &Dhankhar 2021). Health risks exceedingly affects the government burden to plan forsalary support of employees and creation of separate tourism funds especially for the hard hit industries like hotel and avaition(Gautam, 2021)

Physical Risk-The concept of physical risk is related to any possibility of physical injury or sickness(Roehl &Fesenmaier, 1992). Tourist perception of physical risks are more at adventure tourism destinations(Bentley and Page, 2001 & Vasileios Bellos, Apostolos Ziakopoulos, and George Yanni, 2019). Accidents are caused due to lack of cooperation from health care professional, tour operators and public sector agencies therefore preventive active and passive measuresmust be implemented by the tourists(Page & Meyer, 1996).

Crime Risk-The concept of crime risks is the possibility of crime incidences with tourists at vacations. (Jud ,1975, Pizam,1982 and De Albuquerque 1981)mentions that property-related crimes are strongly related to tourism, while violent crimes are marginally related to tourism.

(Pizam&Telisman-Kosuta, 1989) illustrated that, tourism has increased the number of organized crimes, burglary and rape (Fuji &Mak, 1980) robbery during the peak tourist season in comparison to off season (McElroy 1982 & de Albuquerque 1983) sex tourism, drug tourism, illegal medical tourism, dark tourism, extreme risk adventure tourism, gambling tourism, and suicide tourism(Papathanassis, Stavros & Diner, 2019).

Terrorism Risk-Disturbing trends are observed by the terrorist group who target the tourists like hijacking planes, attacking the tourist sites, tourist infrastructure like hotels, airlineset. This exhibit high levels of concern for safety by tourists which avoids them to travel (Araña& León, 2008& Ma et al., 2020) moreover terrorists urge for global media attention and here theexternal factors related to terrorism, like media reports, authorized advisories of travel, the recovery campaign creats negative image of the destinations. Locals too face unemployment and many other socioeconomic impacts. (Baker, David 2014). Researchers like (Agarwal et al., 2021 & Sönmez &Graefe 1998) highlightsmethodological gap in terrorism risk management research and urge to avoid legal exposure by the tour operators before hand by communicating terrorism security risk to their clients. Not only this travel profesionals must understand the international tourists attitutes towards foreign travel, risk perception level and their income to implemrnt and plan marketing activities to counteract them (Sönmez & Graefe, 1998). Political Instability Risk in a wider context too poses potential risk of disinvestent in tourism business (Poirier 1997). Due to sensitive attitude of the tourist for political risk there is a huge impact on tourism business performance with regard to revenue generated and less intension of travelling by foreign tourist rather saving their disposable income (Muzindutsi & Manaliyo, 2016 & Haddad et al., 2015)

Psychological Risk- Psychological Risk is the risk of self-image or self-concept damage by the tourists(Zhang J, 2012). It is one of the multidimensional risk factor as the school of consumer behavior recognizes it recognises cognitive behaviour of the tourist after wrongly purchasing a travel product(Cui et al., 2016), it mentions the embarrassed or self-esteem damaged feeling while travelling(Boksbergera, Biegerb, Laesserb 2007) hence this risk is considered to be one of the important risk to be focussed on by the tourism stakeholders.

Natural Disaster Risk- Natural disaster leads to infrastructure damage, weakened economy, undermine investment into tourism supply.Economic damage can be less notable then the number of people affected or killed e.g inforest fires and storms.(Rosselló, Becken, & Santana-Gallego, 2020). Natural and man-made disasters leads to pessimistic impact on the tourists arrivals and theirexperiences. Consequently it is obligatory to strengthen the prevention of disastersby the stakeholders by reducing the prospect of disaster occurrence (Ma et al., 2020). For marketing these sites stakeholders ideally align while communicating the magnitude, focussing on a need for vertical integration after a disaster occurred (Hughey & Becken, 2016).

STATEMENT OF PROBLEM

Although India attracts tourists globally for its vast tourism produts like cultural tourism to other important niche products like medical, film, health tourism etc ,international tourists in India have had experiences of being harassed, defrauded and robbed, murdered, kidnapped and experienced violence crime and minimal sexual abuse ((Moore, 1995,Chiu & Lin, 2011 and Chhabra, 2019)yet in some parts of India lack of security has increased crime related to women especially foreign tourists like sexual harassment, rape and demands security system (Basak et al., 2019). Tourism industry being an imporatnt component tourism stakeholders need to strategise measures to protect and support the tourist who travel to various states in India.

According to the Times of India (Shetye, 2020& National Crime Records Bureau, 2020) crime against and by foreigners in Goa State ranks fourth with 11 cases and 76.9% of cases are charge-sheeted. These kinds of incidences had tarnished the image of Goa state.

Goa's Safety and security related to lives of the tourist is an area of concern as deaths have been occurred due to natural causes or drowning and overdose of drugs apart from harassment to women(Shaikh, 2018) .Other major issues goa faces due to tourism development is dispute over the use of land and beaches with issues of community involvement in tourism development in unsustainable way (Brammer & Beech, 2014).

In Goa, crime rates are increasing rapidly (Khan, 2019 RTI report) mentions 245 death of foreign tourist, horrifying incidences like rape and murder of Irish British women Danielle McLaughlin by an unauthorized guide, as well as Scarlett Keeling rape

and murder case in 2008 which grabbed lot of media attention. Crime data was collected by the authors(Bansode and Sawant, 2018) with the help of (RTI -Right to Information act-2005)against domestic and international tourists at different police stations in goa. These government documents received flashed light on the maximum number of cases registered which were thefts, kidnapping, attempt to murder, and murder which were received from Panji Police station, Old Goa Police Station, Calangute Police Station, Vasco Police Station, and Agacaim Police Station. Additionally, the largest numbers of cases such as matka gambling, motor vehicle accident, narcotic drug cases thefts, children and women crimes were registered at Porvorim Police Station, Anjuna Police Station, Pernem Police Station, and Verna Police Station. Maximun passport crimes cases were registered at Dabolim Police Station where as huge numbers of immoral trafficking human cases were registered at Margao Police Station. Lastly, large number of molestation cases were registered at Ponda and Collem Police stations.

Exposure of some of the crimes of goa naturally have increased the risk perceived by global tourists which has affected travel trends .Although the reviews focus on crime risk the researchers have made an attempt to study the other risks such as financial, health, physical, crime, terrorism, psychological, and natural disaster risks at goa along with the Internal and external risk factors.This research will be useful to reduce the risk perception of tourists during pre-travel arrangements and develop risk management strategies for sustainable tourism at Goa.

Considering the statement of problems this study aims to study the types of risk perceived, internal as well as external risk perceptions by the domestic and international tourists at Goa. For this the hypotheses and research questions are as follows:

(Ho)1: There is no significant difference in the types of risk levels associated with travel in the study area.(Descriptive Analysis used)

(Ho)2: In the internal risk perception of tourists, the determining factors have statistically high loadings, when they think of the study area.(Factor Analysis used)

RQ1: Which external factors have the most influence on the risk perception of the study area? (Multiple Choice Analysis used)

RESEARCH METHODOLOGY

For meeting the objectives of present study the data is primary. Simple random sampling was used to collevct data from 300 domestic and 330 international tourists at Goa with the help of structured questionnaire. Data was collected around world heritage sites i.echurches, and beaches. To study risk perception a quantitative method with respect to 5-point likert scale and dichothomous scale were used. This paper is divided into 4 parts. The first part focuses on analysis of demographic profile of the respondents, which includes name, gender, age groups, marital status, education, annual income group, and nationality of respondents. The second part focuses on the analysis of types of risk with respect to international respondents at world heritages sites and touristdestinations of Goa focussing on Financial, Health, Physical, Crime, Terrorism, Psychological and Natural Diaster Risk. The third part focuses on internal risk perception of respondents on Travel Risk, Destination Risk, Safety Concern and International Travel versus Domestic Travel. The fourth part focuses on external risk perception of respondents which pertains to information sources such as Mass Media, Friends and Relatives. Formal Education, Traveller Reviews, Books and Literature, Self experience, Travel Agent and Tour Operator, Guide Books, Advertising, promotional Brochures and others.

Data Analysis and Coding

The collected data was transformed into codes and was entered into the SPSS 16.0 for analysis. The data was coded before entering into the SPSS. The rates or rank data for types of risk and internal risk perception, the rates or rank data i.e. 5-point Likert scale data ranges from "Very High(1)" to "Very Low(5) and "Strongly Agree (1)" to "Strongly Disagree (5)" werecoded.Fordichotomous data i.e. external risk perceptions was coded as 0 = No, 1 = Yes.

For analyzing the raw data editing, coding classification, and tabulation techniques were used. Mathematical analysis was carried out, Descriptive Statistics such as mean, median, mode and standard deviation. For analyzing and processing statistical data Statistical Package for Social Sciences (SPSS) software was used. The factor analysis was used to analysed the internal risk perception of respondents and multiple choicemethodwasused to analysed the external risk perception.

Table No. 1 shows that the results of demographic profile of domestic and international tourists. Majority of samples are males visiting goa. The age of the samples lies between 21-40 years. The marital statuses of majority of samples for domestic tourists are married and for international tourists are single.

Table 1. Demographic profile of respondents.

Demographics Variables	Sub-Variable	Domestic Tourists Goa (N=300)		International Tourists Goa (N=330)	
		Frequency	Percent	Frequency	Percent
Gender	Male	211	70.3	190	57.6
	Female	89	29.7	140	42.4
Age (yrs)	1 – 20	9	3.0	20	6.1
	21 – 40	216	72.0	230	69.7
	41 – 60	75	25.0	60	18.2
	61 – 80	—	—	20	6.1
Marital Status	Single	64	21.3	170	51.5
	Married	230	76.7	150	45.5
	Divorce	6	2.0	—	—
	Widows	—	—	10	3.0
Education	Post Graduation& above	196	65.3	180	54.5
	Graduation	91	30.3	150	45.5
	Higher Secondary	13	4.3	—	—
Annual Income	0 - 20,00,000	241	80.3	200	60.6
	20,00,000 - 40,00,000	40	13.3	40	12.1
	40,00,000 - 60,00,000	8	2.7	40	12.1
	60,00,000 - 80,00,000	8	2.7	40	12.1
	80,00,000 and above	2	7	10	3.0
Occupation	Government Service	201	67.0	110	33.3
	Private Service	6	2.0	80	24.2
	Professionals	42	14.0	50	15.2
	Business	43	14.3	50	15.2
	None	4	1.3	30	9.1
	Retired	4	1.3	10	3.0

The majority of samples have completed their education up to post graduation and above, therefore the literacy levels are very satisfacory. The annual income of the domestic tourists is 80.3% and international tourists is 60.6% for annual incomeupto Rs 20,00,000. Major number of domestic and international tourists are working in government services.

Findings from Table No.2 shows that Standard deviation (SD) of domestic tourists relating toCrime Risk **(1.41294)** is at high level followed by Financial Risk(1.36201), Physical Risk(1.12251). Meanwhile standard deviation (SD) of international tourists relating to Crime Risk(0.63603) is also at high level followed by Physical Risk(0.47449), Health Risk(0.46683), and Financial Risk (0.44455). Hence (Ho) 1 null hypothesis was accepted as there are no significant difference measures in types of risk levels associated with travel at Goa.

Table 2. Result of Descriptive Statistics of Domestic (DT) and International Tourists(IT) related to types of risk perceived by them at Goa.

Risk Types	N		Mean		Median		Mode		SD		Variance	
	DT	IT	DT	IT	DT	IT	DT	IT	DT	IT	DT	IT
Financial Risk	300	330	2.8667	3.1455	2.0000	3.0000	2.00	3.00	1.36201	.44455	1.855	.198
Health Risk	300	330	3.7667	3.9000	4.0000	4.0000	4.00	4.00	.85322	.46683	.728	.218
Physical Risk	300	330	3.5867	3.1091	4.0000	3.0000	4.00	3.00	1.12251	.47449	1.260	.225
Crime Risk	300	330	3.0600	2.1818	3.0000	2.0000	2.00	2.00	**1.41294**	**.63603**	1.996	.405
Terrorism Risk	300	330	4.3000	3.9818	4.0000	4.0000	4.00	4.00	.93071	.44752	.866	.200
Psychological Risk	300	330	4.2533	4.0000	4.0000	4.0000	4.00	4.00	.76885	.40513	.591	.164
Natural Disaster Risk	300	330	4.1467	3.9818	4.0000	4.0000	4.00	4.00	.91357	.42666	.835	.182

Internal risk perception of the respondents

Result of Factor Analysis of Domestic Tourist at Goa

Kaiser-Meyer-Olkin Measure of Sampling (KMO) measures of sampling adequacy is 0.732,the high values (between 0.5 and 1.0) indicate factor analysis is appropriate which measures desirable sampling.

The Bartlett's Test of Sphericity was significant (P < 0.001) sufficient correlations was found among selected variables.

The table 4 shows the application of principal component analysis to internal risk perceptions under communality for each variable, that is 1.0 as unities were inserted in diagonal of the correlation matrix.

Table 3. KMO and Bartlett's Test Goa Domestic Tourists

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		**.732**
Bartlett's Test of Sphericity	Approx. Chi-Square	1841.475
	Df	78
	Sig	**.000**

Table 4. Communalities Goa Domestic Tourists

	Initial	Extraction
I feel nervous about traveling	1.000	.744
Traveling is risky now	1.000	.740
Because of terrorism	1.000	.721
I feel very comfortable traveling	1.000	.719
Travel to natural areas such	1.000	.516
Trips to natural areas	1.000	.785
Vacation travel is perfectly safe	1.000	.780
Visiting world heritage site	1.000	.816
Safety is the most important	1.000	.769
Safety is a serious consideration	1.000	.877
Additional security measures	1.000	.698
International travel safe	1.000	.425
Domestic travel safe	1.000	.798

Table 5. Total Variance Explained -Goa Domestic Tourists.

Component	Initial Eigen values			Extraction Sums of Squared Loading			Rotation Sums of Squared Loading		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.997	30.744	30.744	3.997	30.744	30.744	2.859	21.992	21.992
2	2.775	21.348	52.092	2.775	21.348	52.092	2.533	19.487	41.480
3	2.588	12.218	64.310	1.588	12.218	64.310	2.189	16.836	58.315
4	1.027	7.903	72.213	1.027	7.903	**72.213**	1.807	13.898	**72.213**
5	.807	6.207	78.420						
6	.689	5.298	83.718						
7	.560	4.306	88.024						
8	.409	3.149	91.174						
9	.305	2.348	93.522						
10	.287	2.210	95.731						
11	.202	1.552	97.283						
12	.193	1.485	98.768						
13	.160	1.232	100.000						

From table 5 according to criterion, factors with Eigen values less than 1 are rejected. Based on the above table only 4 factors had value greater than 1.0. These factors explained 72.21% of the variance in the data.Hence the number of variables are reduced from 13 to 4 underlying factors.

From table 6 the rotated factor matrix, 4 components with variables having high loading were extracted, which are as follows:

Factor 1: Sence of security (variable: 1,2,3,4)

Factor 2: Safety Concernsby tourist (variable: 5.6,7)

Factor 3: Travel Risk. (variable: 8,9,10)

Factor 4: Tourist behaviour (variable: 11,12,13)

Hence (**Ho)2 null hypothesis was accepted** as it can be observed that Rotated Matrix Component is more interrelated with each other and these determining factors have statistically high loadings.

Result of Factor Analysis of International tourist at Goa

Kaiser-Meyer-Olkin Measure of Sampling (KMO) measures of sampling adequacy is 0.680 , the high values (between 0.5 and 1.0) indicate factor analysis is appropriate which measures desirable sampling. The Bartlett's Test of Sphericity was significant (P < 0.001) sufficient correlations was found among selected variables.

Table 8 shows the application of principal component analysis to internal risk perceptions under communality for each variable, which is 1.0 as unities as were inserted in the diagonal of the correlation matrix.

From table No. According to criterion, factors with Eigen values less than 1 are rejected. Based on the above table only 3 factors had greater than 1.0. These factors explained 90.21% of the variance in the data, which is a good sign. **Hence we have reduced the number of variables from 13 to 3 underlying factors.**

From Table No.10 the rotated factor matrix, 3 components with variables having high loading were extracted, which are as follows:

Factor 1: Safety concerns by the tourists(variable: 1,2,3,4,5,6)

Factor 2: Travel Risk. (variable: 7,8,9,10)

Factor 3: Safety measures at destination. (variable: 11,12,13)

Table 6. Rotated Component Matrix Goa -Domestic Tourists.

Var.		Component			
No.		1	2	3	4
1	Visiting world heritage sites are safe tourist activities	**.896**			
2	Vacation travel is perfectly safe	**.834**			
3	Trips to natural areas scenic attraction are safe right now	**.833**			
4	Travel to natural areas such as world heritage sites are not risky	**.662**			
5	Safety is a serious consideration when choosing a travel destination		**.921**		
6	Safety is the most important attribute a tourist destination can offer		**.811**		
7	Additional security measures at airports make traveling safe		**.783**		
8	Domestic Travel is just as risky as International Travel			**.859**	
9	Because of terrorism, visits to many tourist destinations shall be avoided			**.729**	
10	Traveling is risky right now		**.701**		
11	I feel very comfortable traveling right now				**.810**
12	International travel is just as safe as domestic travel				**.589**
13	I feel less nervous about traveling right now				**.542**

Note: Extraction Method: Principal Component Analysis Rotation Method: Varimax with Kaiser Normalization a Rotation Converged in 10 iterations

Table 7. KMO and Bartlett's Test Goa International Tourists

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.680
Bartlett's Test of Sphericity	Approx. Chi-Square	9177.422
	Df	78
	Sig	**.000**

Table 8. Communalities Goa International Tourists.

	Initial	Extraction
I feel nervous about traveling	1.000	.949
Traveling is risky now	1.000	.926
Because of terrorism	1.000	.905
I feel very comfortable traveling	1.000	.740
Travel to natural areas	1.000	.920
Trips to natural areas	1.000	.911
Vacation travel is perfectly safe	1.000	.855
Visiting world heritage site	1.000	.916
Safety is the most important	1.000	.926
Safety is a serious consideration	1.000	.950
Additional security measures	1.000	.963
International travel safe	1.000	.888
Domestic travel safe	1.000	.881

Table 9. Total Variance Explained -Goa International Tourists

Component	Initial Eigen values			Extraction Sums of Squared Loading			Rotation Sums of Squared Loading		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	7.356	56.583	56.583	7.356	56.583	56.583	5.347	41.134	41.134
2	2.285	17.573	74.156	2.285	17.573	74.156	3.395	26.114	67.248
3	2.088	16.062	90.218	2.088	16.062	**90.218**	2.986	22.971	**90.218**
4	.603	4.636	94.854						
5	.252	1.939	96.794						
6	.172	1.325	98.119						
7	.095	.728	99.847						
8	.079	.609	99.457						
9	.042	.322	99.778						
10	.013	.100	99.878						
11	.007	.054	99.933						
12	.005	.039	99.972						
13	.004	.028	100.000						

Hence (**Ho)2 null hypothesis was accepted** as it can be observed that Rotated Matrix Component is more interrelated with each other, these determining factors have statistically high loadings.

External Risk Perception of the Respondents

Table 11 display that the Goadomestic tourists have a high influence on the risk perceptions are as follows:

·   Mass Media (81.0%),
·   Friends and Relatives (80.3%),
·   Self Experience (72.3%),

Other information sources likeAdvertisement/ Promotion Brochures (61.3%), others (52.7%),

Traveller Reviews (53.0%), Travel Agents and Tour Operators (46.0%), Formal Education (32.0%), Guide Books(23.3%), and Books and Literature (22.3%), have less influence on tourist's risk perceptions.

The Goainternational tourists have a high influence on the risk perceptions are follows:

·   Friends and Relatives (88.4%),
·   Mass Media (85.7%),
·   Self Experience (61.0%),

Other information sources like Traveller Reviews(57.9%), Travel Agents and Tour Operators (54.9%), Guide Books(28.4%), Formal Education(27.4%), Advertisement/Promotion

Table 10. Rotated Component International Tourists Goa.

Var. No.		Component		
		1	2	3
1	International travel is just as safe as domestic travel	.911		
2	Travel to natural areas such as world heritage sites are not risky	.911		
3	Trips to natural areas scenic attraction are safe right now	.902		
4	Domestic Travel is just as safe as International Travel	.896		
5	Visiting world heritage sites are safe tourist activities	.876		
6	Vacation travel is perfectly safe	.871		
7	I feel nervous about traveling right now		.949	
8	Because of terrorism, visits to many tourist destinations shall be avoided		.944	
9	Traveling is risky right now		.902	
10	I don't feel very comfortable traveling right now		.657	
11	Additional security measures at airports and hotels make traveling safe			.966
12	Safety and security is the most important attribute a tourist destination can offer			.940
13	Safety must be a serious consideration when managing a travel destination			.921

Note: Extraction Method: Principal Component Analysis Rotation Method: Varimax with Kaiser Normalizationa Rotation Converged in 6 iterations

Table 11. Result of external risk perceptions of Domestic tourists(DT) and International tourist(IT). (Dichotomy group tabulated at value 1)

	Responses				Percent of Cases	
	N		Percent			
	DT	IT	DT	IT	DT	IT
Mass Media	243	281	15.4%	19.6%	**81.0%**	85.7%
Friends and Relative	241	290	15.3%	20.2%	80.3%	**88.4%**
Formal Education	96	90	6.1%	6.3%	32.0%	27.4%
Traveller Reviews	159	190	10.1%	13.2%	53.0%	57.9%
Books and Literature	67	20	4.3%	1.4%	22.3%	6.1%
Self Experience	217	200	13.8%	13.9%	72.3%	61.0%
Travel Agents and Tour Operators	138	180	8.8%	12.6%	46.0%	54.9%
Guides Books	70	93	4.5%	6.5%	23.3%	28.4%
Advertisement / Promotion Brochures	184	50	11.7%	3.5%	61.3%	15.2%
Others	158	40	10.0%	2.8%	52.7%	12.2%
Total	**1573**	**1434**	**100.0%**	**100.0%**	**524.3%**	**437.2%**

Brochures(15.2%), Others(12.2%),and Books and Literature (6.1%), have less influence on tourist's risk perceptions.

CONCLUSION

The finding shows that domestic tourist at Goa percieve Crime Risk Financial Risk and Physical Risk, while international tourists perceive crime, physical, health and financial risk. The factors extracted for the internal risk for domestic tourist are sence of security, Safety Concerns by tourist, Travel Risk and Tourist behaviour. While factors

extracted for the internal risk factor for international tourist are Safety concerns by the tourists, Travel Risk and Safety measures at destination.Lastly the external risk factors for domestic and international tourists mainly includes mass media, self-experience and Friends and relatives

RECOMMENDATIONS

The existing security laws must be implemented effectively. The police department should make use of advanced technological systems for creating strong intelligent network to monitor the tourist destination

in Goa, identify and take appropriate action against the wrongdoers, culprits, and criminals. To ensure the safety and security of the tourists the Village panchayat, Municipal Corporation, public and police station should work in collaboration. Post Covid-19 pandemic maintaining cleanliness, hygiene and proper sanitation measures must be improved at tourist destinations in Goa.The tourism stakeholders must be trained in Natural Disaster Management systems. Financial risk can be reduced by monitoring the Service Providers at the destination to ensure fair services. Destination Marketing Organization (DMO) must work in collaboration with the tourism stakeholders at the tourist destinations to rebrand and reposition Goa as a safe destination with the help of scientific research.

For both domestic and international tourist, physical evidence (one of the important "P's" of Marketing) at the tourist destinations in Goa must reflect infrastructure which make the tourist feel safe as safety concerns are of out most importance to them.As safety is a serious consideration when choosing a travel destination stakeholders must take measures to make the tourist feel secure and more emphasis must be given to promote of goa through digital marketing as safe destination. There is a need to study the cognitive behaviour of domestic as well as international tourists which will be helpful to develop new tourism products at Goa.

DMO's must develop a special market research department forgoa tourism, to study reviews posted by travellers which are circulated in mass media, such as newspapers, magazines, radio, television and the internet. There is an urgent need to change theGoa,s image as safe and risk-free destinations. Mass media which can be controlled such as newspapers, magazines, radio and television can be urged not to put negative news about the safety and security at Goa. Tourists have self experienced risk measure which are communicated to the potential tourist through friends and relatives by word of mouth(WOM), hence there is a need of soft skills traning to the tourism stakeholders regarding safely measures of the tourists and risk management.

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Role of Wellness Tourism in Promoting Health of Corporate Employees

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KEYWORDS	ABSTRACT
	Employees are considered to be the brand ambassadors for big corporates and deliver on the value that may be locked in other corporate resources in terms of financial, physical, technology and thereby conveying a corporate or brand image to consumers. Corporate wellness programmes offer a Research in the management field and proved to be an effective means to manage health care costs, which is a biggest operational issue (O'Rourke and Sullivan 2003). Unlike traditional healthcare benefits, these programmes focus on prevention and the goal of a healthy workplace which can provide a better success in corporate world. The current paper will mainly examine different types health related issues including their causes, how to maintain the health and lifestyles in corporates in traditional ways and the roll of wellness tourism for improving the health conditions of the employee and thereby increase the productivity as well in Indian scenario.

INTRODUCTION TO WELLNESS & WELLNESS TOURISM

Rejuvenation and Detoxification is growing tremendously among corporate employees and business community to keep them mentally and physically fit to achieve more. This is the best opportunity for Wellness Tourism to grow in to a big vertical.

Earlier tourism was focused around enjoyment, luxury and fun ignoring the health aspects of Individuals. Health conditions were considered as an age related development and neglected not gaining much of attention. Dormant chronic diseases were never considered factors to increase mortality under co-morbid condition. Immunity never gained such wide spread acceptance as only saviour from all evils. Entry of this pandemic in to the society has taught us that health should be the only criteria of success. Immunity is the only weapon to save ourselves from any kind of epidemic.

In post pandemic era the importance leading a healthy life has increased and people's perception towards life also has changed. The helplessness experienced despite of having all resources at disposal has undoubtedly taught the lesson of health first principle for each individual, rich or poor.

The concept which has recently emerged is to get prepared proactively and ensure good health instead of being reactive after the disease has engulfed. This approach has reached all class of the society and the best witness to that is the consumption of KADHA (the traditional herbal medicine) started during the early pandemic days by all age group and across all strata of the society.

WELLNESS TOURISM

It is estimate that the wellness tourism market is worth $639 billion dollar and has been growing at a steady rate of 6.5% from 2015 to 2017. Since the current growth rate for tourism overall is 3.2% so wellness travelling growing twice as faster in comparison to the tourism growth. Out of total tourism expenditure, Wellness trips are accounting for 17% of total tourism expenditures. Wellness seekers are mainly interested in travel to Asia-Pacific, Latin America, Caribbean, Middle East-North Africa and Sub-Saharan Africa to get in shape and return

home relaxed to perform their duty in a relaxed manner.

Although the term medical tourism and wellness tourism are used interchangeably, but both terms are different on the basis of their significance, destinations, and objectives. Medical tourism manly focuses on people travelling to other countries for cheaper and better medical treatments and surgeries or higher quality treatment or better access to medical care in comparison to their home country. Wellness travel on the other hand leads to undertaking activities which enhance health and wellbeing. Here the main factors are location-based, therapies, or experiences which are not easily available in their home country. In comparison to medical tourism, the decision to opt for a wellness journey is a less serious one.

LITERATURE REVIEW

According to (Patterson et al. in 2004), mentioned in their study that it has been proved both theoretically as well as empirically that several tangible benefits which companies might gain from employee wellness programmes including increased productivity employee trust (Gilson in 2006), commitment (Makrides et al. in 2007), and citizenship behaviours (González and Garazo 2006), and reduced turnover (Mosadeghrad 2014) and absenteeism (Ho, in 1997). As a result, firms firmly believes that maintaining good health of their employees will result in their corporate success (Mokaya et al. in 2013).

According to Rosen's in 1986, suggested that 'Healthy people can make healthy companies', with greater profitability and returns on investment, industry practitioners appear to concur that healthy people and relationships are central to business success (Pelletier, 1993). According to the author, this consideration is particularly important in the hospitality industry, as the employees have to work in a challenging working condition due to long working hours, shift duty, severe work pressure low salary etc. As a result, it is seen that up to 80% of hotel and tourism related employees indicate health-related problems related to their work (Economics 2002). Thus, it is evident that the role of health promotion programmes thus is especially acute in the hospitality industry, to provide practical implications for practitioners and researchers.

According to Guzik and Guzik in 2013, employee wellness programmes implemented by various organisations have beneficial impacts on society at large. Employees come from families, whatever form they take, and healthy employees generally bring more happiness to their families, which in turn affects the community and society as a whole. In this sense, sound employee wellness programmes may lead to greater societal happiness.

According to Saini and Mukul in 2012; Whitehead in 2005, wellness programmes if succeed in one organisation may be applied for the benefit of employees in other firms or industry and can also be applied to the entire community if needed.

CONCEPT OF WELLNESS ACCORDING TO VEDA:

According to the traditional Indian scriptures (Maharishi Shushruta) –

"Sama dosha samagnisncha Sama Dhatu Malkriya, Prasannatmanendriyamanah Swasth Itimidhiyate" - The meaning of this sentence saying is that, when all the three doshas, Vat, Pitta, & Kapha of the body are in equilibrium, the digestive capacity of the stomach is normal, The mind, body and sole will remain happy only when all the seven substances of body including the ten senses are also in normal state. In this case we may say that such a person is said to be healthy. Therefore, one has to maintain equilibrium of all the listed coordinates to keep the mind and body happy which shall eventually keep the soul happy.

According to Vedic principles human mind is continuously engaged or dominated by either of these five kind of negative moods. These moods beyond their normal limit generally contributes to unhealthy physical conditions. Namely they are Fact(Praman), Viparyaya(Transposition), Vikalp(Alternate), Smriti (Memory) and Sleep(Nidra). To remain mentally healthy, one has to get rid or minimise the dominance of these negative moods. These five negative moods keeps us attached to the worldly affairs and deeply anchored with the lower stages of human mind and are causes of various disorders.

Physical & Mental Health are major factors of good health

Life is an experience. Experiencing life happily is termed as happiness. When both physical & mental state are perfectly in sync we experience happiness. Constantly remaining happy can be termed as wellness, in layman terms. Unless one remains physically and mentally well, cannot experience happiness on continuous basis. The term wellness is otherwise remaining well for longer period for longer time and this can be achieved through various life style choices.

Root cause of diseases in human beings may be either genetic, viral, bacterial, communicable, non-

communicable or due to lifestyle disorder. However, most people suffer from diseases only due to their selection of lifestyle. In addition to this continuous and deep thinking of any situation or subject leads to psychosomatic disorder which also influences both physical & mental health in many ways. Therefore, other than physical health, mental health also plays an important role in influencing physical health and also in cure of most of the diseases.

Health & Wellness according to Vedas

According to Yajur Veda "All source of happiness only found in a body when it is disease free". The Yajur Veda also says that "A man builds a home for himself in the earth because he wants to simply lives in it just like a human body is the home of the soul. Therefore, it is necessary to keep the body healthy and disease free. This can be achieved by taking simple food, making the life more disciplined.

According to Rigveda "to make a human more intelligent, longevity and strong our dietary habit should be proper. According to Vedas, Dharma, Artha, Kama and Moksha are the principal components of body. So, proper diet, and disciplined daily routine good health must be maintained by proper diet, disciplined daily routine and good conduct if someone wants to achieve spiritual happiness and a healthy body.

Lifespan & longevity

We often come across news of individuals surviving 100 plus years. It means that the human body is designed to last/ survive more than 100 years. This gives us an idea about the fact that if we take care of the body, we can cross 100 years of age in our life span. People living in the blue zones like Okinawa are the examples of longest surviving humans and the credit goes to their daily routine & food habits. In India if we follow the lifestyle as per our ancient belief systems and proven methods then we can certainly survive a longer life span.

CORPORATE LIFESTYLES & DISEASES:

In today's business world, people are leaving with fears of loss of earnings(facts) and continuously thinking of alternates(vikalpa) or about past memories(smriti). Continuous dominance of negative moods on mind leads to stress and eventually it disturbs the physical systems. Many people suffer from diseases only because they keep continuously thinking about hypothetical situations like loss of earnings, suffering in case of contraction of disease

etc. So always keeping a free mind is one of the most important acts to avoid diseases.

Physical Health

Corporates employees are engaged in long hours office work with high intake of fat & carbohydrates rich food and following sedentary lifestyles. On top of it factors such as stress & anxiety give birth to various diseases. It is observed that lifestyle diseases are growing exponentially in society mainly in corporates due to various influencing factors i.e. stress, anxiety, wrong food habits & lack of exercise etc. As employees keep growing in the hierarchy and increase the earnings, they are knowingly or unknowingly buying different lifestyles diseases, due to their negligence towards of health knowingly or unknowingly.

o **Incompatible Food Habits**
o **Stressful & Anxiety filled daily routines.**
o **Lack of Exercises**

The recent survey conducted by confederation of Indian Industry on Public sector undertakings revealed that obesogenic environment is mainly prevailed due to less physical activity and consumption of energy rich diets which are the major causes of different disease.

According to Business Line, India is currently suffering a silent transition in which various infectious diseases are being substituted with lifestyle diseases causing a major source of illness and death, in both urban and rural areas. In case of infectious diseases several causative agents or the enemies are known — like bugs, bacteria or viruses — As there is no bug to be fought in case of non-communicable diseases and there are no antibiotics. Lifestyle is the bug.

Most of the youngsters joining the corporates neglect healthy routines and eventually catch-up lifestyle diseases. The trend is growing exponentially due to lack of awareness of both employers as well as employees. After the pandemic, all those activities which were believed to promote employees health may not be helpful. Rather a wholly new set of activities have become the need of the hour. For example, mental health was not considered so important in the past but in the post pandemic era, mental health has become crucial to employee health. Physically & mentally happy employees are far more efficient than the ones struggling in their health fronts. Currently the Indian corporate employees are struggling both in terms of physically and emotionally to maintain a healthy lifestyle. So, employers should focus more on the health and wellness of the

employees and make a periodic budget to cover the expenses

Mental Health

As discussed earlier, mental health contributes equally to the health and wellness of individuals. Surprisingly a large number of people are suffering from mental health conditions. In December 2017, our honourable President Dr. Ramnath Kovind, of India mentioned that in India, out of 1.3 billion strong population about 10 percentage of population suffered from one or more mental health problems. A report given by World Health Organisation clearly mentioned that India is currently accounted for nearly 15 percent of the global mental, neurological and substance abuse disorder burden on its credit. In this regard a meta-analysis of community surveys was conducted and estimates that the prevalence of depression and anxiety in Indian people could be up to 33 per 1,000 persons. The report also mentioned that mental health services in India are highly inaccessible and up to 40 per cent of patients are travelling more than 10km to reach the first available service at the different district headquarters of various states.

A survey conducted by ASSOCHAM depicts that, 43 percent of Indian employees are currently suffering from depression, with at least 23% are mainly suffering from obesity including high blood pressure, slip disc, diabetes, and arthritis are all most common disease.

A STATISTICAL OUTLOOK ON EXPENSES BY CORPORATES ON WELLNESS

According to GWI wellness expenses means " the expenditures made by employers to improve employee wellness" which is growing @4.8% per annum. Whereas the expenses incurred by employers to improve wellness at workplace is much lower than the losses in global economic output due to loss of productivity, work related stress, injuries, illness and disengagement due to unwell workforce, which is @10-15% per annum.

o   North America – 54%
o   Europe – 25%
o   Asia Pacific – 5%
o   Sub Saharan Africa – 1%
o   Latin America Caribbean – 5%
o   Middle East-North Africa – 8%

(**Source: GWI**: Percentage of Employed Workers in Each Region who have access to Workplace Wellness Programmes.).

Indian Scenario: In India the overall workforce includes nearly 477 million individuals, out of which 85% are from unorganised blue collared employees. Since due to the effects of pandemic mainly focus on employee health, merely 15% i.e., around 72 million of India's overall workforces is covered with corporate health and wellness programs, as per data provided by management consultancy Redseer.

According to Redseer report, in the employee wellness category, recently health check-up and telemedicine consultations offerings for employees have picked up in a bigger scale, since corporates are now started to provide these services to all its staff members. According to the study, both the activities are currently contributed to 61% of India's ₹ 23,000 crore corporate wellness market. At present, the corporate health and wellness market in India is worth ₹ 55,000 crore. This is potential for wellness tourism to look forward to explore through different modes.

Undoubtedly, healthy employees put in more of efforts and work happily in comparison to the ailing or unhealthy workers. In the international scenario, for example in case of Canadian employees with two or more lifestyle risk factors are due to doing desk job causing overweight, smoking, or with high alcohol intake are absent 50% more often than those without these risk factors and they cost their employers 2-3 times more in health benefit costs. According to the Conference Board of Canada, every year billions and billions of dollars revenue lost to the company especially to the Canadian employer due to absenteeism for being affected by the above types of disease.

The purpose of wellness initiative is to enhance wellbeing of individuals by selecting the activities, choices, Lifestyles leading to the state of holistic health. The purpose of wellness is directly linked to productivity in corporate world. For the very same reason, the concept of wellness has a very important place in the life of all corporate employees. It is evident from the above data that the loss of productivity due to the unwell workers is far more than that of the investments, to maintain the physical, social & mental wellbeing of the employees.

According to the report submitted by McKinney Global Institute, factors including long working hours, financial insecurity, work–life conflict, and high job demands together with low job control are as harmful to health as second-hand smoke which causes stress in the workplace. As a result, the cost in the United States is approximately $180 billion and approximately 120,000 unnecessary deaths occur annually.

Redseer report stressed that In India, merely 15 % of the total workforce are covered under such wellness programmes. Nearly 405 million employees across sectors are still not part of such corporate programme. From this we may say that there is a long way to go for proper implementation of this program in corporate industry. Since the link between health and performance organisation is direct so efforts should be made to increase the reach into such programs in a way how to move the needle of employee well-being.

METHODS OF MAINTAINING A HEALTHY LIFESTYLE IN CORPORATES

Out of the experience gathered over last few decades, we can assume that there are primarily four coordinates to maintain a healthy body-

Stress Free Workspace Ambience

This aspect plays a vital role in motivating the employees. Any office which has stressful work environment is bound to impact the health and wellbeing of employees physically or mentally over a period of time. So it is the duty of corporate management team to ensure that the office environment makes less burdensome to employees. Employees should feel like staying more time or even if less time should be happily working.

Regular Deep Breathing or Pranayama

Breathing is the most important aspect of body functions. If we observe carefully, living beings breathing at slower rate live for longer period of time. Normally birds like doves breath at the rate of 40-45 cycles per minute and they live for an average period of 15 to 16 Years. Human beings breathe at the rate of 15 to 16 cycles per minute and live up to 70 to 80 years on an average. Whereas animals like Turtles breathe at the rate of 2 to 3 cycles per minute and live up to 200 to 300 years, in cases. This gives us an impression that, living beings breathing at the rate less cycles per minute live a longer life.

So breathing and especially deep breathing has extremely benefiting impact on human body. It is believed that in yoga & pranayama, 99% benefit comes from breathing. So breathing is aptly important for a healthy human body.

Promoting Regular Practice of Yoga Asanas

Yoga plays vital role in enhancing life experiences. Yoga revives dormant energy and is also an experience, in itself. As we remain healthy so we remain happy and to remain healthy following Yogic lifestyle is extremely important, irrespective of age.

According to Inc42DataLabs, the global Yoga industry is worth over USD 88 Bn worldwide and projected to reach USD 215 Bn by 2025, growing at a CAGR of 11.7%, representing a massive market for Yoga-based wellness companies to tap into it. This is again one area where wellness tourism can make its presence established by promoting Yoga Tourism.

Establishment of a Wellness Corner/ Yoga Room in every Office to inculcate habit –

Most of the corporate employees complain lack of time to practice yoga due to their travel or work schedule. However, since yoga Asanas and Pranayama can be practiced at any time of the day(with a gap of 2 hours before or after meals) employees can also practice the same at office, if missed in the morning due to hectic day schedule.

Therefore, all employers should give equal importance as is given to Pantry/ Wash room/ Smoking zone in a work place to maintain a Yoga Corner/ Room. Employees can spend at least an hour out of the non-effective working hours of the day and practice deep breathing/ yoga asana to maintain their mental and physical well-being.

As a cultural imposition all business houses should ideally maintain Yoga Corner/ Room and accessories of acupressure and yoga in the specific zone. Also a mechanism to monitor the time spent in the zone and activities undergone will enhance the overall productivity through mental and physical wellbeing of employees.

Restricted Food Consumptions

Food habits play extremely important role in keeping us healthy & happy. In our corporate culture processed and packaged food has the best importance. Any day and everyday packaged and processed food are being consumed without bothering about the ingredients or additives. So Corporate employees visiting different locations can feel the importance of organic foods and benefits of fasting while staying at wellness centers.

Periodic Health Check-Ups

Even periodic health check-ups after visiting wellness centers as tourists can show the results. Many wellness centers are equipped with in-house check-up facilities. This can help corporate employees to understand the deviation in the marks of body

functions and changes after their visit to the wellness centres.

Periodic Visit to different Tourist Locations

Periodic visit to different locations or tourist locations help in reducing the stress level. Many corporate employees feel the difference visiting a tourist location after long period of working at office environment.

Wellness tourism is going to be high demand activity since the benefits of touring the wellness destinations are going to increase manifold in the days to come. In comparison to yester years, most of the travellers are interested to improve health at the same time while enjoying a holiday.

The Influencers

The influencers of wellness and its requirement are the emerging scenarios of new variants entering the global viral network. Society is more concerned on the need to protect the civilisation from the deadly and aggressive virus. Variants. Since Wellness is a proactive activity to help individuals to protect their health and immunity therefore it plays a vital role in te fight against the viruses.

Secondly, as we have witnessed that the average life span has been increasing in comparison to the yesteryears, therefore keeping healthy on continuous basis is an emerging need of all society and the same can be achieved through wellness.

The real challenges to increase the span of wellness tourism is multi-faceted since tourist destinations are not inclined towards wellness rather the destinations are more inclined to enjoyment without giving attention to health and wellness. However, below is the paradigm shift taking place over a period of time.

HOLISTIC WELLNESS CENTRES – FOR INTEGRATED THERAPIES AND DRUGLESS CURE

Naturopathy has gained importance due to the reason that it aims to treat patients without using medication through yoga, diets and therapies. The therapies at naturopathy wellness centers target to cleans and relax the human body through all the alternate therapies. Periodic cleaning, detoxification and relaxation is a must for every human body. Since Naturopathy believes in drugless cure and emphasizes on Yoga & Diets, therefore, periodic stay in theses wellness centers changes the habit and lifestyles of the individuals.

As corporate citizens develop wrong lifestyles due to long hour of seating, binge eating, smoking, consuming alcohol etc. visiting these centers and staying there for a specific period can help them in detoxifying the body through the ancient technics of body internal cleaning, relaxation and rejuvenation. Also the wellness centers can teach the correct procedures of yoga & pranayama, which the employees can learn and follow regularly to remain healthy, internally.

The wellness centers target to deliver therapies by considering both aspects of the body i.e. mental & physical as one. A strict and disciplined lifestyle along with practice of Yoga is followed in the wellness centers. The stay at the center might range from 7 days to 3 months. So every individual must visit a wellness center on periodic basis to receive the therapies for cleansing, detoxification and relaxation of nerves & muscles of the body.

Few of the regularly used therapies are Yoga, Shatkarma, Panchakarama, Accupressure, Accupuncture, Chiro practic healing, Massages,

PARADIGM SHIFT

Old Paradigm	New Paradigm
Business processes are only priorities	Workforce wellness along with business processes are the priorities
Workplace is only for deliveries of business	Workplaces are both for business deliveries and employee wellness initiatives
Primary requirement of workforce is engagement	Primary requirement of workforce is engagement alongwith wellness security
Organisations spend resources to meet compliance only	Organisations spend resources to meet compliances and also attract talent
Resilience is not considered as an important aspect	Resilience is the primary aspect of business success and can be achieved by workforce wellness

Yagnic Healing, Refflexology, Naturopathic Dietic Healing etc.

ROLE OF WELLNESS CENTRES IN CORPORATES

Wellness canters play important role in promoting health & wellness among individuals by inculcating a culture of selecting choices, activities and lifestyles with an objective to achieve holistic health. Wellness centers can play pivotal role in reducing stress level, improving immunity level and energising corporate employees, if visited periodically for rejuvenation and detoxification.

Few of the benefit for corporates if adopted wellness are:

- Increased Job Satisfaction
- Improve employee commitment
- Enhance employee engagement
- Increased productivity at workplace
- Maintain the health risk in the organisation
- Reduce medical cost
- Reduced instances of leaves due to health problems
- Lower insurance claims by the employee resulting in saving extra cost for organisation.
- Improved performance and positive attitude
- Reduced corporate stress and conflicts
- Improved staff retention as the employees feels the organization cares for them

Wellness centres run on the concept of providing treatment at distant or exotic locations away from home. This in fact is one of the secrets of success of wellness centres. Patients receive the treatment better when applied at a location different from their routine one. Same medicines or treatment workout to be more effective while administered at different location. Apart from this the wellness centres follow the Naturopathy diets and fasting which is believed to be a super medicine in treatments.

Naturopathic treatment (earlier known as Panchmahabhut chikitsa) is growing acceptance each day. People are more interested to go for drug less cure rather than treatment with medicines. The number of wellness centres are growing gradually and many more organisations are entering to this business and a new vertical is emerging in global market.

Corporates can use these wellness centers for periodic stay of their employees and go for detoxification and rejuvenation using integrated holistic treatment methods. In fact Patanjali Wellness has started establishing Wellness Centers integrating all alternative treatment methods under one roof.

MAJOR CHALLENGES FOR CORPORATES TO PROMOTE WELLNESS

Among the several challenges faced by the wellness industry, the performance of India in terms of wellness is very minimal in comparison with the global wellness industry. India has a long way to go to contribute a sizable amount in wellness field whose global value is estimated to be close to $4.2 trillion. Different factors like lack of adequate infrastructure and shortage of skilled workforce are some of the biggest obstacles of this sector. In this regard, Wellness centres in India often provide a comprehensive and holistic wellness model to improve the market share. In the last couple of years, the government has made a notable contributions to support the wellness sector for the transformation of the industry into a more robust one but still there is a long way to go to make this a noticeable one in front of global market. The biggest challenges in India in this regard are:

Creating Awareness: India must focus on creating awareness on health and wellness especially during the post phase of a global pandemic. Very few people in India give importance to mental well-being previously. So, People in India need to promote emotional wellness as a part of the immunity-building exercise as well.

Scaling up: making huge investments in artificial intelligence and machine learning for this will be a better solution to overcome technology-related challenges. Since, some of these interfaces are expensive so they are posing a bigger challenge for start-ups.

Willingness to pay: In general most wellness platforms are offering free trial sessions or services. However, sometimes it was observed that the clients are not very interested to subscribe or enrol for a longer period of membership which makes it difficult for start-ups to financially sustain their business.

Post-Pandemic Advantage

Several wellness service providers have introduced a varied range of new activities and options which are mostly cater to the post-Covid recovery of different individuals. Profiling the clients through online, a well-established health and well-being plan is administered which provides an exclusive program for clients.

Recently this industry is witnessing tremendous growth with a lot of wellness brands hopping onto the bandwagon to help the day-to-day needs of the

consumers. With the presence of several players competing with each other for the same set of the target audience, local businesses are now proving themselves by giving on-demand doorstep services. In this competitive environment, each of these wellness business units aims to constantly move up one step ahead to make consumers' lives more comfortable and healthier.

WELLNESS TOURISM – A GAME CHANGER

Wellness tourism can help in planning of holidaying along with wellness focused activities and can act as a game changer for today's corporate and business world by conceptualising, promoting & delivering total wellness packages to the medium & large scale organisations. In fact wellness tourism can support in creating a culture of wellness among corporate employees by customising the wellness visit plans for employees. All organisations consider their employees as assets but don't have sufficient partners available in market to drive this activity in planned and seamless manner.

In order to keep both mental & physical wellbeing, an emerging concept of integrated holistic therapies is gaining importance as wellness process, which are delivered at specific locations only. The aim of these Wellness centres is either to rejuvenate, detox through cleansing or to pamper the body through relaxation. Unlike the medical tourism where the target is to deliver treatment for diseases, wellness tourism is to improve wellness of guests through integrated and holistic treatments and therapies along with many alternative therapies, which were never accepted earlier.

It is the right time for all stake holders of wellness tourism to conceptualise proposals for corporates to arrange periodic wellness programmes from their employees to boost mental & physical health, which is the need of the hour. There are Large scale Wellness Centers or chain of wellness centers i.e. Patanjali Wellness Limited, which can accommodate visit of group of Employees for integrated holistic wellness delivery. Earlier this activity was partially managed by international tour operators by arranging packages to oriental and European countries, which were expensive. However, due to the development of domestic wellness centers it is easier for employees to travel to receive therapies for the purpose of rejuvenation, detoxification and cure. Corporates have resources and are concerned with both physical & mental health of employees so wellness tour operators can act as a catalyst to promote employee

health at the same time develop the tourism industry, once again to see new horizons.

Wellness Trip/ Tour

Corporates can plan short/ long trips to rejuvenation and detox centers or destinations i.e. Panchkarma Centres, Naturopathy Centers, Hot Springs, Mud Therapy Centers etc… as per their availability of resources and time for employee groups, with specific focus on employee's health.

CONCLUSION

World is undergoing a health crisis currently due to the pandemic. Corporates are witness to the downward curve of economy and market. In this given scenario, wellness tourism can help corporate in maintaining the health of corporate employees by providing them with both the benefits in one action i.e. addressing health issues and also holidaying.

This will indirectly develop a huge vertical of Wellness Tourism and there will be time when corporate employees will only looking forward to go for holidaying only if it has wellness elements available at the destinations. Fresh Oxygen, Organic Vegetables, Naturopathic Treatments and Yoga are the steps for Wellness Tourism to unleash the potential of Corporate clients and to convert the currently poorly performing vertical to a high demand based successful business vertical.

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