



Investigating the Impact of Smart Tourism Technologies on Tourist Satisfaction, Engagement & Image and with the Mediation of Memorable Tourist Experience

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ABSTRACT

Discover the profound impact of tourist engagement, satisfaction, and destination loyalty on the thriving tourism industry. The accompanying diagram provides operational details of STT and MTEs and how they can influence these crucial factors. Sample size selected for this research was 150 respondents, data was collected through online questionnaire. System named for data analysis was structural equation model (SEM) done through Smart PLS3. Results of this study indicated that STT and MTE have significant and positive affect on Destination Image and Tourism Engagement, Tourism Satisfaction and Tourism Destination Loyalty. This recollection offers empirical evidence to demonstrate the contribution of smart tourism technology and memorable trip experiences in raising tourist happiness and loyalty to travel locations. This study's primary objective is to better understand how memorable travel experiences and smart tourism technologies might increase traveller happiness and loyalty to a location in a developing nation.

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1. Introduction

Smart tourism destination is being made on a technological infrastructure that makes sure that tourist areas are being developed sustainably, the whole world can have better accessibility, also visitors have a better interaction and engagement with these destinations, So that quality of life and quality of experience while a visit to these destinations is made exceptional (Lopez de Avila, 2015). Tourist satisfaction is highly important because it directly impacts the destination choice, tourist's experiences, and the consideration to come once again. Satisfaction is referred to as the expectations of a customer before consuming a product and after consuming it, in the tourism industry, it is known as a tourist's consideration to come once again before and after his visit to a destination. Pestana, Parreira, Moutinho, and Management (2020) stated that contentment is the passionate condition of tourist as soon as they uncover their familiarity on destination aspects. Destination loyalty relies on a longitudinal view, looking at travelers' lifetime visitation activity instead of just a cross-sectional view in which the current visitation is entirely distinct to recent visits or, more broadly, to past encounters.

Travelers select a destination to visit depending on the destination image. The image plays a major role in the advancement of tourism destinations, as destinations are differentiated based on their success rate (Carballo, Araña, León, & Moreno-Gil, 2015). Tourist Engagement is made up of a relation between an object or a place and a tourist (Loureiro & Sarmiento, 2019). A major reason why engagement studies are present everywhere and rising is comprehending the end-user roles and dynamic behaviors in a value formation process for a product, considering

their involvement (Singh & Sonnenburg, 2012). It is possible to summarize memorable tourism experiences as the experiences that the visitors find worthy to remember after their experience. The memorable experiences are very different from the experience, researchers have noted, and they are critical in creating a sustainable competitive advantage (Kim, Ritchie, & McCormick, 2012). A growing interest in tourism experience means that more attention should be paid to the directions that answer tourists' emotions instead of what is being provided 2009 (Rettie). Most academics agree that smart tourism technologies (STT) have a multidimensional structure and may be divided into four categories: accessibility, configuration, interactivity, and personalization. Smart tourism technologies have been recognized in the literature. Accessibility, according to Jeong and Shin (2020), describes how people use various forms of SST to access and utilize information that is offered at a place. In today's interconnected world, accessibility is crucial for people and organizations to connect with each other and technology. It enables seamless communication and fosters collaboration, making it essential for success in any field. So, let's embrace accessibility and unlock its immense potential to achieve our goals, together (Hassan, Sheikh, & Rahman, 2022). In today's world, accessibility is not just important; it's crucial. It's what connects people, organizations, and technology. In fact, did you know that the availability of the internet is what drives potential tourists to travel destinations? According to Domínguez Vila, Alén González, and Darcy (2019), accessibility plays a critical role in publicizing tourism sites, and it has a significant impact on travelers' intentions and behaviors. This is also confirmed by Awan, Rahman, Ali, and Zafar (2023); Fatima, Jamshed, Tariq, and Rahman (2023); Shahzadi, Ali, Ghafoor, and Rahman (2023) who underscored the importance of accessibility in the industry. It's clear that accessibility is the key to unlocking the full potential of the tourism sector.

According to Y. Khan (2022) personalization refers to a traveler's capacity to gather precise data in order to ascertain his or her own demands with regard to trip preparation basically, personalization is the process of collecting and using personalized information on customer to give them information and suggestions that are suited to their requirements and purchasing preferences (Li et al., 2022; Rehman, Ali, Idrees, Ali, & Zulfiqar, 2022). Some academics described customization as giving a certain product, service, or piece of information unique attention. Furthermore, it was emphasized that personalization would allow STT to give visitors the most pertinent and correct information to improve their journey. Previous studies looked at visitors' capacity to recall incidents related to pleasant vacations (WingSun & Ritchie, 2011). A crucial outcome of a tourist exposure is memorability, which has an impact on the satisfaction of visitors, the perception of destinations, tourist engagement, and destination loyalty (Jiang, Ramkissoon, & Mavondo, 2016; Khoula, ur Rehman, & Idrees, 2022). The primary goal of this research was to better understand the operational definition of STTs, MTE, and their effects by examining characteristics including visitor engagement, satisfaction, destination loyalty, and image. This work adapts pertinent elements from MTE constructs (Jeong & Shin, 2020; Kim et al., 2012) and SST constructs (Jeong & Shin, 2020; Zulfiqar et al., 2022). These components emphasize SST's technological component even more because the combination of SST and ICT is a key tool for ensuring the calibre of the trip experience (Lee & Gretzel, 2012).

This study presents a unique approach to attracting tourists by considering their contentment and loyalty to a tourist destination. The structure of tourist satisfaction, as cited in Jeong and Shin (2020); Kim et al. (2012), is taken into account, along with tourist destination loyalty adapted from Kim et al. (2012). The study aims to contribute significantly to the existing tourism literature and help tourist sites gain a competitive edge against other smart tourism destinations. Huang et al. (2017) argue that customization plays a vital role in delivering precise information to meet individual traveller needs. Personalization, as defined by Hafiza et al. (2022) is the process of acquiring and using personalized data on client preferences and needs to provide tailored content and recommendations that match their requirements. Furthermore, personalization refers to a person's interest in specific goods, services, and information, as stated by Shahid, Muhammed, Abbasi, Gurmani, and ur Rahman (2022). As per Hafiza et al. (2022) mWaheed Muhammad Waheed (2022) personalization is an effective way for smart tourism destinations to deliver the most relevant and accurate information to travellers, enhancing their travel experience. By leveraging personalization strategies, tourist sites can better understand their customer's preferences and deliver customized experiences that exceed their expectations. This can lead to enhancement in tourism and tourism can boost economy growth (Altaf, Awan, & Rehman, 2023; Awan, Arslan, & Hussain, 2023; Awan, Bibi, Bano, & Shoukat, 2023; Awan, Rahman, et al., 2023).

2. Literature Review

In 1990s, the view of Shrewdness was presented and hence been getting thought from society (Sarwar, Ali, Bhatti, & ur Rehman, 2021). The Embedment of (ICTs) identifies with the insightfulfulness of a city. A shrewd city is viewed as a city that fuses the city's establishments with ICTs (i.e., computerized reasoning, distributed computing, IOTs, and portable correspondences) (Rahman, Chaudhry, Meo, Sheikh, & Idrees, 2022). As urban communities secure different innovations to improve the value of inhabitants' life, the travel industry begin holding advances to improve not solely explorers' visit experience yet what's more area charm, subsequently offering heightening to shrewd the travel industry objections (Zhu, Fang, Rahman, & Khan, 2023). Screwed cities motivation is to inspire the appeal of a spot and advance the motivation to live or remain for all financial backers involving tenants and sightseers (Younas, Idrees, & Rahman, 2021). ICTs are a crucial component of STTs and the growth of smart tourism, and their integration into infrastructural facilities has made STs more well-known to academics and professionals. For this reason, advanced vacationers will presently just choose those locations that offer them a superior data framework will incorporate web offices and systems administration suggest that STTs need to include all strategies of operational the travel industry projects and information bases for example virtual travel planners, singular web journals, local area sites, company sites, web-based media and cell phones

2.1. Smart Tourism Technologies

Smart tourism is a game-changer when it comes to enhancing tourists' experiences and adding value for customers. With the help of smart tourism technologies, such as specific tools, goods, and services, you can enjoy enhanced connectivity, engagement, customization, and co-construction. By leveraging these innovative solutions, you can take your travel experiences to the next level and make the most out of your trip. Buonincontri and Micera (2016); Neuhofer, Buhalis, and Ladkin (2015) and enhance whole travel exposures (Femenia-Serra & Ivars-Baidal, 2018; Simeon, Buonincontri, Cinquegrani, & Martone, 2017). Shrewd tourism can also be assumed as a bionetwork prestigious by a keen corporate framework, shrewd destinations, and shrewd innovation foundations to gain using the value of the administrations and encounters for vacationers and mediate the traveler encounter and give (S. Ali, ur Rahman, & Anser, 2020) the information structure for regard co-advancement (Bakar, 2019). Information and communication technologies and their integration into physical infrastructures are essential to STTs and the growth of smart tourism, hence the concept has gained attention from researchers and experts. Because of this, advanced vacationers will presently just choose those locations that offer them a superior data framework will incorporate web offices and systems administration suggest that STTs need to include all strategies of operational the travel industry projects and information bases for example virtual travel planners, singular web journals, local area sites, company sites, web-based media and cell phones.

2.2. Memorable Tourism Experiences

Many scholars have developed their own definitions of memorable tourism experiences based on a variety of fields, such as the study of mental processes, social relationships, human societies, tourism hospitality, and marketing. As a result, memorable tourism experiences have become an interdisciplinary area of study that catches the eye of many researchers. It's important to note that memorable tourism experiences and tourist experiences are two distinct concepts that are interlocked, but have different meanings, subtexts, and implications. (Seyfi, Hall, & Rasoolimanesh, 2020; Zhang, Wu, & Buhalis, 2018). The tourism experience of each tourist evaluates how memorable their tourism experiences were at a selective destination. A traveler's interpretation of a guest's stay is shown as a generic and otherworldly condition, and its importance does not represent a memorable trip encounter, (J.- H. Kim et al., 2012; Otto and Ritchie, 1996; Tsai, 2016; Zhang et al., 2018). When travelers are portraying a certain vacation experience, they recreate memorable tourism experiences. Kim et al. (2012); Seyfi et al. (2020) determined what they are able to remember and recall from travel-related events (Sthapit, Coudounaris, & Björk, 2018; Zhang et al., 2018).

2.3. Tourist Satisfaction

In tourism perspective, satisfaction is denoted as a purpose of pretravel anticipations and post-travel experiences, which is an association among pre-travel assumptions with the authentic travel experiences. One scholar asserted that fulfillment reproduces where a user depends on that the guardianship and utilization of an assistance convince positive perspective grounded on

the disconfirmation model in measure hypothesis (Amin, Isa, & Fontaine, 2013; Amin & Nasharuddin, 2013). Satisfaction is powerfully prejudiced by customer assumption, the disconfirmation model can be diminished, as performance residues inside satisfactory or bearable zones. Tourist satisfaction denotes a cognitive-evaluative method resulting from the objective whole valuation of tourists who tours a particular destination. Most studies focus at many factors to assess consumer happiness.

2.4. Tourist Destination Loyalty

Some scientists have focused on the notion that tourist destination loyalty would eventually replace the idea of customers' satisfaction that was first introduced by. In this philosophy, attitudinal and behavioral loyalty measures a customer's loyalty. As said by Zeithaml, Berry, and Parasuraman (1996), interactive trustworthiness speak of a user's behaviors for instance preferring a particular item or administration and their repurchase points. The presence of loyalty is not clarified by this philosophy. The loyalty of a destination is specified by revisiting and recommendation intent by R. Chen, Zhou, Zhan, and Zhou (2020). Tourists' commitment to revisit a destination refers to destination loyalty. Attitudinal loyalty is regularly accustomed to comprehend and quantify tourists' destination loyalty and It has a perspective that represents travelers' desires to return to a place based on their prior experiences in the world. (Chi & Qu, 2008; Oppermann, 2000). Vacationer location choice is naturally hit by curiosity looking for along with the complexity of the dynamic strategy Chew and Jahari (2014). Furthermore, R. Chen et al. (2020) Identifying target certainty as a re-questioned and recommended target. Submitted to Javaid, Noor, Hassan Iftikhar, Rahman, and Ali (2023) Tour is the intention of travellers to go to a particular location in the future. An excellent destination, for instance, should be made available to visitors who desire to travel there (R. Chen et al., 2020; Mukhtar et al., 2023). Tourists' observations of past trips will greatly affect the decision-making process, others' choices (R. Chen et al., 2020) and tourists' travel intentions (Chi & Qu, 2008).

2.5. Destination Image

DI is for the most part characterized as the amount of the information, emotions, and generally discernment that a vacationer have for a location (Fakeye & Crompton, 1991). It is viewed as a multidimensional idea that is made out of 3 parts, that is, scholarly, feelings, and conative estimations. The scholarly estimation implies sightseers perspective of objective qualities or highlight (Nawaz, Rahman, Zafar, & Ghaffar, 2023) while the enthusiastic estimation suggests travelers slant about an objective (Tabassum, Rahman, Zafar, & Ghaffar, 2023). The conative estimation insinuates how travelers act contingent upon their game plan of mental and enthusiastic pictures (Awan, Rahman, et al., 2023). A hyphen icon is a perception icon of a target location for a particular travel market. The foundation for developing and managing an image is active communication. Different target sites provide tourists with specific target sites through different channels. The tourist then starts to notice, comprehend, and form an opinion on the location (ter and zdoan, 2005:129). Envisioned state Visitors can ascertain the real truth (Bigne and etc., 2000: 607). While choosing a vacation, the concept of the destination's image is crucial (Watkins, Hassanien and Dale, 2006:321). The way tourist destinations are portrayed may differ from how they actually are. The larger the discrepancy between the depicted situation and the actual one, or between the location and the object, the less satisfied tourists are. (Avci Kurt, 2003:24). The most important thing is the tourists' perception of the landform of the target and the real state of the place.

2.6. Tourist Engagement

Tourist engagement conventionally implies sightseer's relationship with and commitment to a tourism industry experience (Brodie, Hollebeek, Jurić, and Ilić, 2011). (Podgorny, 2004) exhibited that both the minutes spent on a specific outing and the age and development of the vacationers influenced their responsibility. The greatest factor making voyagers show significant responsibility was a huge level of instinct and composed exertion. Most tourist engagement contemplates focus on the timeframe sightseer's use in the locations rather than on their commitment to the travel industry experience. Therefore, those investigations were ineffective to totally assess the degree of traveler commitment (Taheri, (Brodie et al., 2011) showed that each comparable doesn't have same sort of commitment. Vacationers engaged with more get more benefits from their experience. The possibility of commitment fuses portions of association, energetic affiliation, obligation, and devotion .Despite the fact that various research had looked at the idea of consumer/tourist involvement (e.g. Rahman, & Bakar, (2018) it was not fully explored ,Hence, new studies have looked at consumer/tourist involvement from many angles.

He examines consumer/travel knowledge, for instance, from the expanded area of business interactions, with an emphasis on applicability to individuals. This point of view asserts that "consumer/tourist participation" refers to how tourists engage with other individuals and their surroundings, and that this concept has subsequently developed into the mainstay of the tourist industry marketing system. From an organizational perspective, participatory work organization is a stable concept that helps clarify and identify consumers of justice. Attention, absorption, and identification are the primary psychological components of participation in the workplace (Bakar, 2019).

2.7. STT and MTE

Memorable tourism experiences and smart tourism technologies are backed by profound shreds of evidence from numerous studies. For example, a bibliometric review calls attention to the reason for the travel industry to characterize the joining of various components that partner with people to improve vacationer encounters. Also, scholars underlined that a shrewd city the travel industry objective needs to make best in class advancements to deliver vacationer encounters and brought together traveler encounters (Bakar, 2019). State of the Art technology user-friendliness for example, web organization, cloud administrations, and cell phone or versatile gadget network will deliver seriously genuine needs to find the travel industry objections (Bakar, 2019). During this period, numerous researchers have come to an agreement and similar decision that tourist user-friendliness using progressive technology has to turn out to be a crucial tactic for encouraging tourism destinations and enticing probable tourists (Domínguez Vila et al., 2019; Lee & Gretzel, 2012). Therefore, the subsequent hypothesis is established:

H1: Memorable tourism experiences are significantly impacted by Smart tourism technologies.

2.8. MTE on TS and TDL

Several academics have emphasized the important impact that positive travel experiences have on travelers' loyalty to their chosen destinations and their overall enjoyment while travelling. For example, as said by unforgettable tourism experiences, this will provide a fantastic experience that saturates visitors' excitements with thrilling encounters (Tung & Ritchie, 2011). Some scholars argued that travel motivations and MTE's are the main factors which influences destination loyalty (H. Chen & Rahman, 2018; Yoon & Uysal, 2005). According to Jeong and Shin (2020), tourists feel satisfied and are more inclined to revisit a destination is whenever they return from a trip with a lovely recollection that is valued. Also, past visitors' encounters with distinctiveness and empathic sentiments are the most remembered qualities that boost visitor contentment and interaction intentions (F. Ali, Ryu, & Hussain, 2016; Coudounaris & Sthapit, 2017). Especially, once a tourist defines his/her optimistic feelings such as pleasure, affection and encouraging amazement, gratification, and interactive intents will be boosted (Hosany & Gilbert, 2010; Hosany, Prayag, Deesilatham, Caušević, & Odeh, 2015). In the same way, when a tourist enjoys, amuses and is ecstatic, it will absolutely influence experimental tourist satisfaction and results in a extended stay of Tourists (Dickinson, Lumsdon, & Robbins, 2011; Jiang et al., 2016). Multiple studies have emphasized the positive impact of memorable tourism experiences on visitors' likelihood to return and recommend the destination to others. In fact, these experiences have been shown to play a key role in encouraging word-of-mouth marketing and repeat visitation. This highlights the importance of creating memorable experiences for tourists, as it not only benefits the individual traveler, but also the overall success of the tourism industry. (H. Chen & Rahman, 2018; Woodside, Caldwell, & Albers-Miller, 2004). Therefore, the subsequent hypothesis is established:

H2: The level of happiness of tourists is greatly influenced by remarkable travel experiences

H3: Tourist destination loyalty is significantly affected by memorable tourism experiences

2.9. TS on TDL

Several researchers debated that satisfaction have a vital role in forecasting and comprehending tourist feedbacks after an ingesting tourist experience. In Spain, a study was conducted that suggested that tourist satisfaction plays a crucial role in fostering loyalty and encouraging repeat visitation, as well as positive word-of-mouth marketing to friends and family. This underscores the importance of creating a positive and memorable experience for tourists, as it can have a significant impact on their willingness to return and recommend the destination to others. By prioritizing visitor satisfaction, destinations can cultivate a loyal customer base and

drive long-term success in the tourism industry (San Martín, Herrero, & García de los Salmones, 2019). Some researchers expressed that visitors feel more inclined to a visited destination when their stay at that place surpasses what they thought of that place which creates a great word of mouth for tourist satisfaction (Hou, Lin, & Morais, 2005; Hultman, Skarmeas, Oghazi, & Beheshti, 2015). Tourists like to participate in a discussion to express their own experience and a positive word of mouth of a visited destination (Eid, El-Kassrawy, & Agag, 2019). For this cause, several researchers have concluded that visitors incline to come back to a tourism locations or endorse other tourists to visit these locations when they are pleased with the happenings conducted and places visited. Tourists are eager to blowout destructive word-of-mouth and will not endorse others or come back to a tourist destination if they are displeased (C.-F. Chen & Chen, 2010; Jeong & Shin, 2020).

H4: Tourist destination loyalty is significantly affected by Tourist satisfaction.

2.10. MTE on DI

Many scholars have debated numerous factors of Destination image, i.e. tourists' experience after using tourism amenities, marketing tactics, and additional features (e.g., broad communications and mainstream society, others). Amid these elements, tourists' destination experiences are questionably the utmost significant. While backing up this view, Martín-Santana, Beerli-Palacio, and Nazzareno (2017); Suhartanto (2018) proposed that an actual travel experience while on visit is prime reason influencing the destination choice of tourists. Once a tourist stays at a tourism location and explores it, the destination image turns out to be more genuine, complex and distinguished (Gartner and Hunt, 1987). Beerli and Martin (2004) furthermore, it stresses how intensive the experiences were, which depends on how well tourist interaction with specific location was, by recognizing a positive liaison among the level destination image and experiences. Vacationers make MTEs as a result of a strong impact on their visit insight, all things considered, MTEs will move their assessment of a location. The positive consequence of memorable tourist experiences on location picture is inside the idea of the travel industry intake strategy, which proclaims that sightseers' valuation of one location experience influences their entire location evaluation (Woodside & Dubelaar, 2002). Therefore, the subsequent hypothesis is established:

H5: The relationship between memorable tourist experience and destination image is positive.

2.11. MTE on TE

A healthy bond is proposed between tourist engagement and convincing memorable tourist experiences in location settings (Brodie, Hollebeek, Jurić, & Ilić, 2011). From tourism viewpoint, Taheri, Jafari, and O'Gorman (2014) claimed that healthy bond with a tourist's desires and insides would improve the whole tourism insights. Therefore, it's predicted that if the tourist engagement is greater than the level of memorable tourist experience will be even higher. Particularly for traditional tourists as they are typically eyeing to submerge themselves in the traditional experience, more engagement will most probably build a satisfying memorable tourism experience. Therefore, the subsequent hypothesis is established:

H6: Memorable tourist experience has a positive and significant impact on Tourist Engagement

2.12. STTs on TS

All facets of tourism, including transportation, lodging, and attractions, are covered by smart tourism technology. Tourists' experiences in the destination will be pleasant if they have positive attitudes and feelings towards STTs. Travel satisfaction leads to tourist satisfaction as a result.

The following hypotheses are put forth because this study concentrates on STTs in tourist satisfaction:

H7: Smart Tourism Technologies are positively associated with Tourist Satisfaction.

2.13. STTs on TDL

H1 tourism refers to tourism technology, welcoming experience and unforgettable tourism. It turns out that a high level of natural outcome of tourism can greatly influence tourist loyalty. The use of technology by tourists could boost their level of location loyalty. Most tourists

are STTs who incentivize tourists and tourism activities to use the area. Furthermore, Kim and Chen (2019) suggested that social interaction, novelty, enthusiasm and learning. Tourists' opinions and perceptions are impacted by STTs, which in turn affects their behaviour. Extensive research has shown that smart tourism technology (STT) is travel experience is an important factor in determining satisfaction tourist class. Case studies on smart tourism destinations or the use of STTs in travel destinations or tourist attractions make up the majority of the research in this field. As a result, the following theories are developed:

H8: Smart Tourism Technologies is significantly affected by Tourist destination loyalty.

2.14. STTs on DI

The significant rise in tourism, changes in traveler behavior, and passengers' extensive use of digital technology have all led to the development of smart tourist destinations (Corte, D'Andrea, Savastano, & Zamparelli, 2017). The use of tailored information technology by the tourism sector, such as the Internet of Things, also known as information and communication technology, and cloud computing [IoT], to facilitate interactions between tourists, promote internationalization of tourism, and enhance the quality of the visitor experience is referred to as "smart tourism." Innovative technology can raise a destination's positive reputation, increase passenger and referral traffic, and improve the quality of service given by government authorities and tourism companies.

H9: Smart Tourism Technologies has positive effect on destination image.

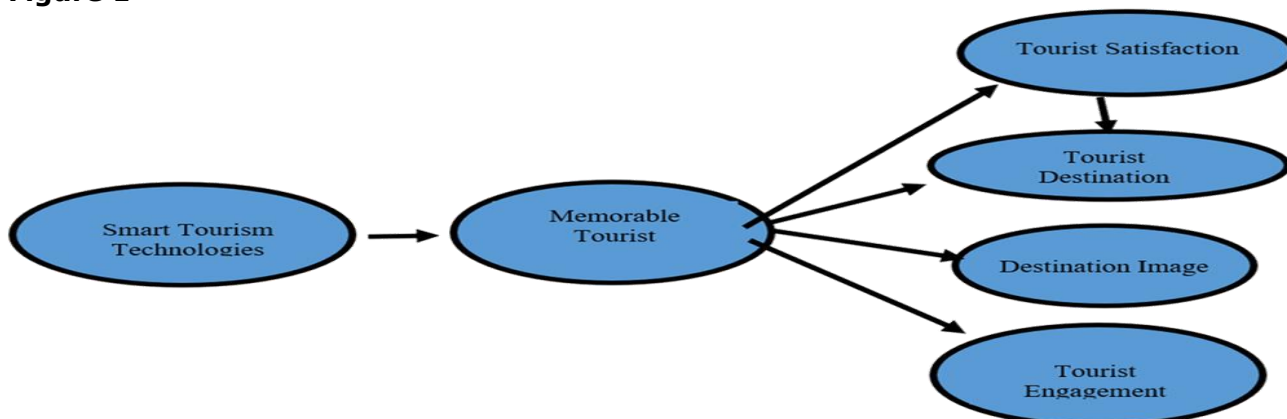
2.15. STTs on TE

One of the foundational pillars of smart tourism is the use of technology-enhanced experiences. The concept of technology enhanced destination experiences was developed by Ilyas, Banaras, Javaid, and Rahman (2023) through their exploration of technology mediation in the destination setting. They contend that by combining ICTs with co-creation, experiences occur not only in the real world but also in online and virtual spaces. Spaces simultaneously. This has implications for destinations in that it creates a network of interconnected actors in the destination ecosystem that help to enable and co-create experiences centered on a certain tourist location. Shahid, Gurmani, Rehman, and Saif (2023); Usman, Rahman, Shafique, Sadiq, and Idrees (2023) identify the needs of smart technologies for experience creation in order to jointly build more customized visitor experiences. The destination as a physical co-creation place is inextricably tied to experiences improved by technology (S. M. Khan & Saif-ur-Rehman, 2023). However, following the introduction. Viewpoints on destinations have changed and been incorporated in the revolutionary "smart destination" approach as a result of the concept and the quick development of new technology (Chaudhary, Nasir, ur Rahman, & Sheikh, 2023).

H10: Smart Tourism technologies has significant impact on Tourist Engagement.

3. Framework

Figure 1



4. Methodology

4.1. Measurement Model Assessment

The model was measurement and assessed, and convergent reliability was evaluated by the use of loading, AVE, and CR. The values of factor loadings are above 0.60, values of CR are

above 0.7 and the values of AVE is above 0.50 (Hair Jr, Hult, Ringle, & Sarstedt, 2016). All items with factor loading below 0.6, AVE below 0.5 and CR below 0.7 were deleted. Similar to this, Heterotrait-Monotrait Ratio (HTMT) and Fornell-Lacker were used to evaluate the discriminant validity, and all values were below 0.9. Values attained confirmed that research conducted is no danger by Discriminant validity.

Table 1: Convergent Validity

Constructs	Items	Loadings	Alpha	CR	AVE
Destination Image	DI1	0.903	0.755	0.891	0.803
	DI3	0.889			
Memorable Tourism Experience	MTE1	0.742	0.823	0.883	0.654
	MTE2	0.865			
	MTE3	0.8			
	MTE4	0.824			
Smart Tourism Technology	STT10	0.626	0.93	0.939	0.507
	STT11	0.692			
	STT12	0.782			
	STT13	0.62			
	STT14	0.764			
	STT15	0.79			
	STT16	0.713			
	STT2	0.62			
	STT3	0.709			
	STT4	0.694			
	STT5	0.765			
	STT6	0.709			
	STT7	0.726			
	STT8	0.659			
	STT9	0.776			
	Tourism Destination Loyalty	TDL1			
TDL2		0.849			
TDL3		0.811			
Tourism Engagement	TE1	0.742	0.864	0.894	0.514
	TE10	0.684			
	TE2	0.699			
	TE3	0.802			
	TE4	0.687			
	TE5	0.743			
	TE6	0.669			
	TE9	0.698			
	TS2	1			
Tourism Satisfaction	TS2	1	1	1	1

Table 2: Discriminant Validity (Fornell-Larcker)

	DI	MTE	STT	TDL	TE	TS
DI	0.896					
MTE	0.373	0.809				
STT	0.51	0.619	0.712			
TDL	0.581	0.679	0.635	0.832		
TE	0.61	0.741	0.68	0.694	0.717	
TS	0.48	0.618	0.57	0.548	0.687	1

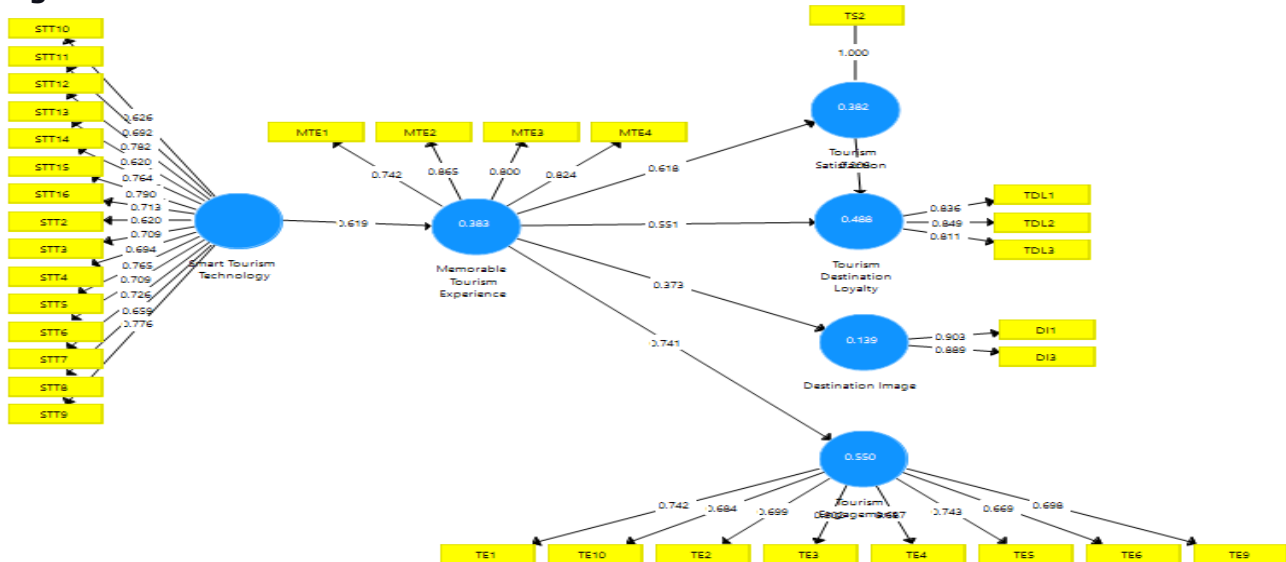
4.2. Heterotrait-Monotrait Ratio

In a study by, this was suggested a new metric for discriminant validity in structural equation modelling with variance. They both agreed that cross-loadings and the Fornell-Larcker criteria are the primary methods for evaluating the discriminant validity of variance-based structural equation modelling. Additionally, they argued the fact that a lack of discriminant validity in various study contexts had not been taken into account by these methods(Ilyas et al., 2023) provided an alternate technique named "the heterotrait-monotrait ratio of correlations," This has a "multitrait-multimethod matrix" as its foundation. The HTMT ratio has been used to assess discriminant validity as recommended by a number of studies (Dawood, ur Rehman, Majeed, & Idress, 2023; Hafiza et al., 2022; Qadri et al.; Shahzadi et al., 2023; Ullah, ur Rahman, & Rehman, 2023; Zahra, Nasir, Rahman, & Idress, 2023; Zhao et al., 2023).

Table 3: Discriminant Validity (HTMT)

	DI	MTE	STT	TDL	TE	TS
DI						
MTE	0.469					
STT	0.604	0.692				
TDL	0.758	0.842	0.741			
TE	0.765	0.87	0.75	0.849		
TS	0.554	0.681	0.587	0.622	0.732	

Figure 2: Measurement Model Assessment



4.3. Structural Model Assessment:

Structural model is performed to guesstimate the hypothesis in perspective of tourism after model was accepted through the validity tests conducted in measurement model. All the values of structural model are calculated to confirm that model and connections are substantial with data gathered. Path coefficient values confirmed whether hypothesis is accepted or rejected. Table 4 shows that STT is has a significant and positive relation with MTE ($\beta = 0.619$, $t = 9.71$; LL =- 0.479, UL =- 0.698), therefore H1 is supported. Table 4 also shows that MTE has a significant and positive relation with TS ($\beta = 0. 618$, $t = 6.996$; L.L =- 0.464, U.L =- 0.752), therefore H2 is also supported. Table 4 also showed that MTE has a significant and positive relation with TDL ($\beta = 0. 551$, $t = 4.957$; L.L =- 0.369, U.L =- 0.732), therefore H3 is also supported. It was seen in the Table 4 that TS has a significant and positive relation with TDL ($\beta = 0.208$, $t = 1.877$; L.L =- 0.041, U.L =- 0.405), therefore H4 is also supported. Table 4 showed that MTE has a significant and positive relation with DI ($\beta = 0.373$, $t = 3.706$; L.L =- 0.216, U.L =- 0.527) and MTE has a significant and positive relation with TE ($\beta = 0.741$, $t = 15.946$; L.L =- 0.648, U.L =- 0.804), therefore H5 and H6 are also supported.

5. Discussions and Conclusions

Motive of study was to see that whether Memorable Tourism experience and Smart tourism technologies vital to uplift Tourism satisfaction, Tourism destination loyalty, Destination image and Tourist engagement with a destination. The results derived from Smart PIs after conducting hypothesis tests showed that all the variables positively impact each other which satisfies our motive of conducting this research that Memorable Tourism experience and Smart tourism technologies does play a vital role to uplift Tourism satisfaction, Tourism destination loyalty, Destination image and Tourist engagement with a destination. So entrepreneur can use technopreneur-ship in tourism sector (Awan, ul Hasnain, & Arshad, 2023).

5.1. Limitations and Future Research Directions

Sample size through which data was collected was just limited to 100 respondents, so if the sample size can be increased than results and conclusion of this research might be different. Using mixed methods instead of quantitative technique in the future research will change the validity of this study. Another limitation which arises is that MTE can be measured as a multidimensional constructs as in this study it was measured as a unidimensional construct and

they mediating role should be measured as well. There is more information on related techniques to use as adjustment amount.

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