

ISSN 2348 - 3784



THIAGARAJAR
School of Management

(Autonomous)
Madurai, Tamil Nadu

Accredited by NAAC with 'A' Grade



TSM BUSINESS REVIEW

Volume: 8

Number: 1

June 2022

Articles

Purchase Intention of IoT Enabled Smart Hotels Rooms among Young Adults-Insights from Machine Learning Algorithm and Sentiment Analysis

- Nataraj Balasubramanian, Nachiketas Nandakumar and Gouthamraj. M.P

Spillover Effects of COVID-19 on Global Financial Markets

- Md Zeeshan and Nausherwan Raunaque

Durga Puja as a Driver for Promoting Tourism in Villages of West Bengal

- Swati Basu Ghose

Visitors' Intention to Switch from Tactile Experience to Phygital Experience Amid Pandemic in Tourism Industry

- Pragha and Krantiraditya Dhalmahapatra

Promoting Happiness in Organisations: The Guiding

Principle for Cultivating Positive Work Environments in the Current Era

- Palak Verma

TSM Business Review
INTERNATIONAL JOURNAL OF MANAGEMENT
(A Double Blind, Peer Reviewed Bi- Annual Journal)

Volume 8

Number 1

June 2022

Editor-in-Chief

Dr. Murali Sambasivan

Associate Editor

Dr. Mathiyazhagan Kaliyan

Editorial Assistant

Mr. Thavaprakash A &

Mr. Perumalsamy L



THIAGARAJAR
SCHOOL OF MANAGEMENT
(Autonomous)
Madurai, Tamil Nadu
Accredited by NAAC with 'A' Grade

Pambanswamy Nagar
Thiruparankundram, Madurai
Tamil Nadu
www.tsm.ac.in

TSM Business Review (TBR) is the official bi-annual publication of Thiagarajar School of Management, Madurai, India. TBR is published since 2013 regularly during the months of June and December. It provides an open platform for reading and sharing articles, research papers and case studies that have a high impact on the management field. It has a special emphasis on management issues that are relevant to emerging economies and aims at providing a link between academic research and practical implications.

CONTACT ADDRESS

*Chief Editor
TSM Business Review Office
Thiagarajar School of Management
Pambanswamy Nagar, Thiruparankundram
Madurai – 625005, India
Email: editortbr@tsm.ac.in*

DISCLAIMER

The authors are solely accountable for the contents of the papers compiled in this volume. The publishers or editors do not take any responsibility for the same in any way. Errors, if any, are purely involuntary and readers are requested to communicate such errors to the editors or publishers to avoid discrepancies in future.

PUBLISHING CONSULTANCY

*Shanlax Journal
61, TPK Main Road, Vasantha Nagar, Madurai – 625 003
E-mail: editor@shanlaxjournals.com
Web: www.shanlaxjournal.com*

TSM Business Review
INTERNATIONAL JOURNAL OF MANAGEMENT
(A Double Blind, Peer Reviewed, Bi- Annual Journal)

Volume 8

Number 1

June 2022

Editors-in-Chief

Dr. Murali Sambasivan

Director, Thiagarajar School of Management

Associate Editor

Dr. Mathiyazhagan Kaliyan

Chairperson – Research Centre, Thiagarajar School of Management

Editorial Assistant

Mr. Thavaprakash A & Mr. Perumalsamy L

Research Scholar, Thiagarajar School of Management

Editorial Board

Dr. Atour Taghipour, Normandy University, France.

Dr. Veronica Scuotto, Università degli Studi di Napoli Federico II, Italy

Dr. Sachin Kumar Mangla, Director, Jindal Global Business School (JGBS), Haryana, India.

Dr. Ho Jo Ann, Universiti Putra, Malaysia.

Dr. Vinitha Guptan, Saito University, Malaysia.

Dr. Md Imtiaz Mostafiz, Sheffield Business School, UK.

Dr. Mukund Janardhanan, University of Leicester, England.

Dr. Angappa Gunasekaran, School of Business Administration, USA.

Dr. Andrea Appolloni, Università di Roma Tor Vergata, Italy.

Advisory Board

Prof. N. Venkiteswaran, Emeritus Professor, Thiagarajar School of Management, Madurai.

Shri. B. T. Bangera, MD, Hi-Tech Arai Limited, Madurai.

Shri. Joseph Zachariah, Director, Vikaasa School, Madurai.

Dr. R. Kannan, Prof. & Head, Department of Sociology, Madurai Kamaraj University, Madurai

Mr. Nagaraj. K, MD, Aparajitha Corporate Services, Madurai.

Mr. Srinivasa Varadhan, President, TVS Tyres, Madurai.

Prof. A. Uma Rani, Chief Executive Officer, Kalanjiam Foundation, Madurai.

Dr. N. Chandrasekaran, VP- Corporate Affairs, Take Solutions Ltd., Chennai.

Editor-in-Chief

I am happy to note that TSM Business Review has finally regained life after a temporary gap of four years due to pandemic. This issue has eight papers covering different issues in management. The first paper by Manivannan analyses and discusses the turnaround time of patients at hospitals undergoing different medical procedures. The second paper by Gaur, Suri, and Gupta studies the impacts of digital marketing platforms in eco-tourism. Sachan, Chauhan, and Agarwal, in the third paper, identify the impediments faced by the smart cities in achieving sustainable development goals. Specifically, they identify 12 major impediments. Kaul and Agarwal, in the fourth paper, argue out-of-home (OOH) advertising as an alternative to digital advertising. They propose a rating system of the media based on fuzzy technique. In the fifth paper, Agarwal and Kaul have identified the challenges in implementing the (human-to-human) H2H marketing strategy by grouping the factors into cause/effect clusters. Kumar, Suman, and Rajak, in the sixth paper, have analyzed the factors that influence the sustainable development of electric vehicles. In the seventh paper, Agarwal and Malhotra discuss in detail about the challenges that dominate the implementation of Society 5.0. Specifically, they identify 18 challenges that are likely to be faced during implementation. The final paper by Dwivedi, Verma, Kumar, and Prasad helps to identify the factors that are critical in evaluating the effectiveness of the mutual funds from the customers' point of view.



I sincerely hope that the readers will benefit from these papers and continue to support TSM Business Review!!!!!!!

Associate Editor

It is my pleasure to announce the forthcoming publication of our journal's latest volume, which features a compilation of the most cutting-edge research and developments in our field. As the associate editor of this publication, I am excited to share this valuable resource with our community.

The authors have provided unique insights and findings through their research, which we believe will be of great interest to academics, researchers, professionals, and students alike.

The publication would not have been possible without the contributions of the authors, whose rigorous and innovative work has made this volume possible. We are grateful to them for their hard work and dedication.

We would also like to express our sincere appreciation to the reviewers who have provided invaluable feedback and critique on the submitted manuscripts. Your contributions have been instrumental in maintaining the high standards of our publication and ensuring the quality of the articles published.

Our journal's latest volume is a reflection of our commitment to promoting the advancement of knowledge and providing a platform for the dissemination of groundbreaking research. We believe it will make a valuable contribution to the field and encourage further research in this area.

We hope that the publication will be of interest and use to you and that it will inspire new and exciting research in the years to come. We look forward to your support and continued engagement with our community.



CONTENTS

Articles....

Purchase Intention of IoT Enabled Smart Hotels Rooms among Young Adults-Insights from Machine Learning Algorithm and Sentiment Analysis	1
Nataraj Balasubramanian, Nachiketas Nandakumar and Gouthamraj. M.P	
Spillover Effects of COVID-19 on Global Financial Markets.....	13
Md Zeeshan and Nausherwan Raunaque	
Durga Puja as a Driver for Promoting Tourism in Villages of West Bengal.....	21
Swati Basu Ghose	
Visitors' Intention to Switch from Tactile Experience to Phygital Experience Amid Pandemic in Tourism Industry.....	34
Pragha and Krantiraditya Dhalmahapatra	
Promoting Happiness in Organisations: The Guiding Principle for Cultivating Positive Work Environments in the Current Era.....	42
Palak Verma	

Purchase Intention of IoT Enabled Smart Hotels Rooms among Young Adults-Insights from Machine Learning Algorithm and Sentiment Analysis

Nataraj Balasubramanian

Nachiketas Nandakumar

Gouthamraj M P

Abstract

Purpose

The purpose of this research is to investigate the purchase intention of IoT enabled smart hotel rooms among young adults. IoT enabled smart hotel rooms are attracting the attention of tourism and hospitality industry in recent past, hence it will be appropriate to analyze the purchase intention of such smart hotels. Such investigation will provide an overview about the customers intention towards the smart hotels.

Methodology

A questionnaire survey method was followed in this research. We followed snowball sampling method to collect responses. A questionnaire survey link was created and the responses were recorded electronically. The collected data was analyzed with the help of "sentimentr" package in R-statistical programming language. We used Classification and Regression tree and Random Forest to identify the important predictor variables for purchase intention of IoT enabled Smart Hotel rooms

Major Findings

The research study revealed that the sentiment score on "How will you share your experience with the friend" act as a major factor in determining the purchase intention of smart hotel rooms followed by sentiment score on brand image, technological familiarity and sentiment score on how well the respondents could narrate a story about the benefits of IoT enabled smart hotels.

Practical Implication

IoT enabled smart rooms are gaining attention now-a-days; hence this research will have a profound impact in tourism and hospitality industry. Since the research has addressed purchase intention of smart hotel rooms, the market potential shall be estimated by the brand managers. Policy makers shall make use of this research finding while making policy decision based on supply vs demand of IoT enabled smart rooms in hotels.

Originality/ Value

The research used random forest approach to confirm the influence of predictor variables and the dependent variable purchase intention of smart hotel rooms. To understand the contribution of various predictor variables, we used correlation plot and correlation test on between various predictor variables and the dependent variable purchase intention.

Introduction

In the modern business environment, Hotels and Accommodations play a vital role in keeping the world moving in its pace. Hotels act as temporary spots where people from various business stay, meet up and discuss various business transactions. Hotels and resorts also act as a humble abode for a family, a home away from home during holidays and planned vacations. According to Middleton and Clarke (1999), accommodation provides facilities that make travelling more convenient and with comfort. In his "Conceptual model of the tourist market system", Hall (1995), says that accommodation is one of the major component in creating demand as it decides the type of visitors who choose to stay at the property. According to Young (1973), Accommodation is a major component that decides how the destination will stand out among others in the industry. Hotels must ensure that, not only they provide the best service to the existing customers, but also to create new customers by motivating them. As a tradition, luxury hotels have the practice of providing premium accommodation and services. However, in the modern environment, the customers are inclining towards, service quality, plush facilities and more value for their investment (Presbury, R., Fitzgerald, A. and Chapman, R., 2005). Major components that the hospitality industry relies upon are, repeat customers and word of mouth communication which require increased customer satisfaction. The industry is highly competitive and the competition revolves around service quality, image of the property and the amenities provided by the hotel. To remain an active player in the competition, the requirements are to provide superior quality of service which will meet the expectations of the customers (Cooper et al. 1996).

Service quality is one of the key factors in bringing repeat customers for an accommodation. While there may be reasons that are beyond the scope of the hotel management for the initial visit of the customer, the responsibility of creating a satisfactory experience rests with the management and hotel staff. The key components of expressive services are tangibles, responsiveness, reliability, assurance and empathy (Zeithaml, Berry and Parasuraman., 1988). In the modern era of the Hospitality industry the buzzword to combine all the above factors of expressive services is "Internet of Things". Adopting IOT is one of the major game changer in the hospitality business that helps in creating a bridge between the digital and real world (Mercan, S., Cain, L., Akkaya, K., Cebe, M., Uluagac, S., Alonso, M. and Cobanoglu, C., 2020.) The hospitality industry has the major advantage in reaping the benefits of the IOT trend. Customer focus, being the key pillar of the service industry can be improved to a greater extent, by increasing the efficiency and personalization of services through IOT devices. According to Hoffman and Bateson, (2001), improved innovative services are the major components in gaining market share and bringing more new customers to the hotel. Modern era customers are demanding more personalized service experience and the focus is shifting to "experience-oriented, co-created and demand-based consumption from an always-on service typology" (Gretzel et al., 2015).

In order to understand the consumer conversion towards the IOT devices from conventional methods of hospitality industry, we need to understand the following theories which support the consumer ability to adapt for the changing environment. TAM is one of the most significant models for examining the driving forces behind an individual's intention to use a new technology. Perceived usefulness is essential if a hotel's technology is to be adopted. The belief being that users will adopt technologies that they perceive to be useful for what they want to do. Perceived ease of use is the degree of effort that the user believes required to operate a system. If a technology is difficult to use, customers may choose to avoid it. TAM suggests that a positive attitude towards technology increases the intentions to use the technology (Zhang, T., 2020).

Jones, 2008, identified five primary operation management theories that underpin hospitality IT adoption and implementation. They are,

- **Process Choice:** This theory explains about the “independent and unique processes” that are most required to produce the desired product or service for a targeted market.
- **Swift and Even flow:** It states that, the efficiency and productivity of a process depends upon the smoothness and swiftness of the service flow in the process (Schmenner and Swink, 1998).
- **Lean Manufacturing:** Reduction of waste increases the overall productivity of the process.
- **Performance Frontiers:** It is used to assess the summation of the capabilities of each processes and products to identify the peak in performance standards. (Schmenner and Swink, 1998).
- **Service Experience:** It discusses about how customers are players who respond and react to the service experience observed by them.

Literature Review

The term Technology Acceptance Model was first coined by Davis in 1989 (F.D. Davis., 1989), which explains the behavioral intention of a user to try new technological innovations. It is based upon the “Theory of Reasoned Action” (M. Fishbein, I. Ajzen.,1975) a psychological theory that explains human behavior. TAM uses two primary variables, perceived ease of use and perceived usefulness and one dependent variable which is behavioral intention and all the variables are closely related to the fact behavioral intention. The technology acceptance model is proved to be a powerful and robust model and is shown to be a “complete mediating” model (King, W.R. and He, J., 2006).Basis many tests conducted, it is a proven fact that perceived usefulness has been a major factor in deciding the usage intentions. The other primary variable, “perceived ease of use” has shown to have a less significant effect on purchase intentions basis the studies conducted. Further studies on this variable will provide us with better understanding that will give a positive effect on the acceptance and usage of new technologies (Davis, F.D. and Venkatesh. V, 1996).

An extension to the original TAM model is proposed as the existing model with two primary variables has a shortfall in explaining the behaviour of the users towards emerging new traits in technology. Therefore the user perception towards additional variables like, service cost, accessibility of service and demographic variables like marital status are considered in the extended TAM model. Other variables like perception towards, connectivity, security, trust, reliability are also considered in the extended TAM model (Fonchamnyo, D.C., 2013). The "Theory of Reasoned Action" is used to understand their relationship between a user's behaviour based on already existing attitude and intentions. It provides a relationship between human behaviour and human attitude (Fishbein and Ajzen, 1967). TRA states that "a person's intention to perform behaviour is the main predictor of whether or not they actually perform that behaviour. The intention to perform behaviour precedes the actual behaviour". TRA states that intentions and effort and directly proportional and increased intentions increase the odds of the behaviour to be performed (I. Ajzen and M. Fishbein., 1980). The "Theory of Planned Behaviour" is further advancement to the theory of reasoned action (Ajzen & Fishbein, 1980; Fishbein & Ajzen, 1975). Basis this theory, performance behaviour is a union of intentions and perceived behaviour control. It speaks about three independent factors of intention. The first is "behavioural attitude", the second is "subjective norm" which is a social factor and the third is "degree of perceived behavioural control" which is basis past experiences (I. Ajzen and M. Fishbein., 1980).

The term "Internet of Things" refers to the process of networking regularly used objects to make them capable of mind reading and being traceable on the internet (Butler, D. 2020, Biddlecombe, E., 2009, Dodson, S., 2008, Gershenfeld, N., Krikorian, R. and Cohen, D., 2004, Lombreglia, R., 2010, Reinhardt, A., 2004). Most existing content in the IOT is basis programmed RFID tags and internet protocol addresses that are linked into an "Electronic product code network" (Graham, M. and Haarstad, H., 2011). Usage of IOT devices is already growing at a faster pace and will continue to grow on an even faster magnitude. The total number of networked devices is expected to grow from 10 billion in 2013 to a range from 19 billion to 40 billion devices in 2019. The economic impact of these devices generate around 2.7 trillion to 14.4 trillion in business value by the year 2025 (Thierer, A. and Castillo, A., 2015).

- A study by CISCO predicts that the number of devices that are connected and communicating will be around 40 billion devices
- It is estimated by ABI research that around 35 billion devices will be networked and working by 2019
- IDC projects that 212 billion devices will be networked and working by 2020 and 15% of the devices will be in operating condition by the beginning of 2021
- An estimate by Business Insider Intelligence says that 23.4 billion devices will be operational by 2019 and most of the adaptation will be in manufacturing industry

- Research by Gartner indicates that 19billion devices will be in operation by 2019 and 25billion operable devices in 2020.

Basis a study conducted by Market Research Future “Global connected IOT devices market information by components, Deployment, Application and Region – forecast to 2027, the market is predicted to grow at a CAGR of 19% in the forecast period 2020- 2027” (MRFR/SEM/3350-HCR / 2021)

IOT devices are used for various different applications in the hospitality industry. It is mainly due to the fact that it helps in improved customer experience (Bilgihan et al., 2011), helps in property and facility management (Sklyar and Kharchenko, 2018), increases the aspects of security (Rigoli, 2017) and real time decision making enabled through data analysis (Aluri, 2015), all of which giving a competitive advantage with high revenue and low cost for the property (Bilgihan et al., 2011).Hotels mainly rely on IT to cope up with the demands of customers who demand improved technologies to keep up with the fast lifestyle but having a home style stay. Hotels are ready to adopt IOT devices to cater to various needs of the customers and also with the day to day activities of managing the property. An assortment of devices like the TV, curtains, thermostat, coffeemaker, phones and lights can be controlled by a tablet by the room guest. Food and beverages – dining industry can also have positive benefits from IOt devices basis the model, location, size and turnover (Sharma, 2019). A well networked restaurant management system can connect all the nodes like, customers, kitchen staff and managers and also can provide real time data about the efficiency of service (Mercan, S., Cain, L., Akkaya, K., Cebe, M., Uluagac, S., Alonso, M. and Cobanoglu, C., 2020.).

Based on extant literature review we propose following Hypothesis:

Table 1 Table Showing Proposed Hypothesis

H.#	Proposed Hypothesis
H1	Sentiment Score of positive word of mouth has a direct positive influence on Purchase intention of IoT enabled hotel rooms
H2	Sentiment Score of brand image has a direct positive influence on Purchase intention of IoT enabled hotel rooms
H3	Sentiment score of scenario explanation about IoT hotels has a direct positive influence on purchase intention of IoT enabled hotels.
H4	Technological familiarity is having a direct positive influence on Purchase intention of IoT enabled hotel rooms
H5	Perceived Importance of IoT Enabled devices will have a positive influence on Purchase intention of IoT enabled hotel rooms
H6	Trust has a positive influence on Purchase intention of IoT enabled hotel rooms.

Also the drivers of purchase like, experience sharing, top of the mind awareness, personal story, trust, sense of premium ness, brand advocacy, familiarity with the technical aspects and trust are used to derive the results of the hypothesis in this article.

Research Methodology

Research Design

A questionnaire survey method was followed in this research. We followed snowball sampling method to collect responses. A questionnaire survey link was created and the responses were recorded electronically. The collected data was analyzed with the help of “sentimentr” package in R-statistical programming language. We used Classification and Regression tree and Random Forest to identify the important predictor variables for purchase intention of IoT enabled Smart Hotel rooms

Table 2 Table Explaining Research Methodology

Type of research/study	Exploratory
Sample size	60
Sampling method	Snowball sampling method
Data collection method	Questionnaire interview method
Type of data	Primary data
Survey instrument	Questionnaire
Data analysis method	Correlation, word cloud analysis , simple graphical representation, sentiment analysis
Tool used for data analytics	Cart,

Results

What is the First Word that Comes to your Mind when you Hear the Word "5 Star Hotel "

luxury	8%
hotel	3%
costly	3%
service	3%
stay	3%
expensive	2%
good	2%

When the young adults were asked about the words that come to the top of the mind of the potential consumers when they think about a “5 Star Accommodation”. In general, an accommodation that provides flawless guest service in a top class state-of-the art facility. It provides premium dining options and personalized services to its guests. There are certain traits that are pre-determined and are put forth to the consumers, which are much associated with the five star accommodations. Words such as, luxury, property value, cost of stay, service

How would you Describe the Hotel Brand to a Friend?

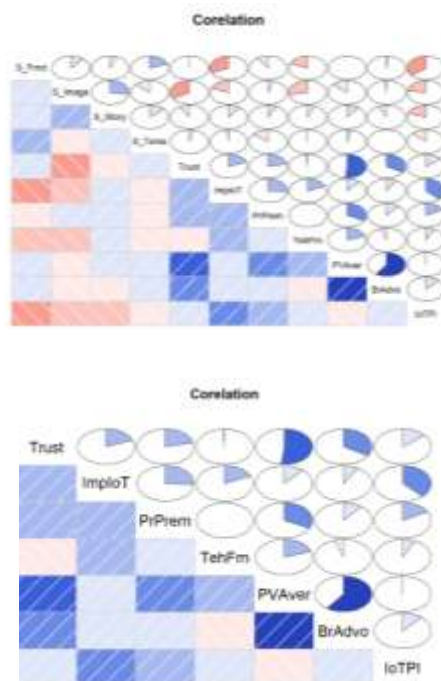


Scenario

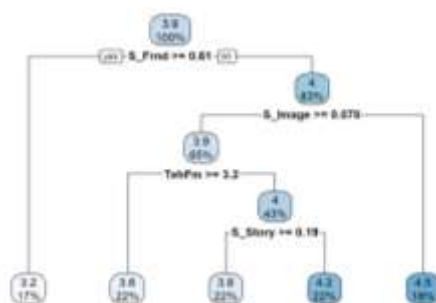
TSM Business Review, Vol. 8, No. 1, June 2022

TSM Business Review, Vol. 8, No. 1, June 2022

Correlation



A correlation analysis is done among the major indices of the study basis their sentiment scores and the latent variables in the study. The major sentiments analyzed are communication from friend, Image associated with the property, Experience story from peers and Top of the Mind Awareness score. Latent variables that are correlated are, Trust, Importance of IOT, Price premium, Familiarity with technology, Perceived Value average, Brand advocacy among friends and Intention to purchase IOT devices or related services. The results of correlation analysis indicated a positive correlation among the indicators like perceived value average and trust. Also, there is another positive correlation between perceived value average and the intention to purchase IOT devices and related services. The overall correlation brought up a weak positive correlation among the traits so that a nonlinear test method, CART – Classification and Regression Tree analysis is created.



Based on CART analysis, the sentiment score for communication from a friend has the highest priority. The next important trait in the tree with high sentiment score is Image associated with the property. The other variables are familiarity with technology and experience story from peers.

Discussion

The findings of this study suggest that intention to purchase IoT Enabled Smart Hotel Rooms was dependent on positive word of mouth, Brand image,

Table 3 Table Showing Results of CART Analysis

H.#	Proposed Hypothesis	Supported/ Not Supported
H1	Sentiment Score of positive word of mouth has a direct positive influence on Purchase intention of IoT enabled hotel rooms	Supported
H2	Sentiment Score of brand image has a direct positive influence on Purchase intention of IoT enabled hotel rooms	Supported
H3	Sentiment score of scenario explanation about IoT hotels has a direct positive influence on purchase intention of IoT enabled hotels.	Supported
H4	Technological familiarity is having a direct positive influence on Purchase intention of IoT enabled hotel rooms	Supported
H5	Perceived Importance of IoT Enabled devices will have a positive influence on Purchase intention of IoT enabled hotel rooms	Not Supported
H6	Trust has a positive influence on Purchase intention of IoT enabled hotel rooms.	Not Supported

These findings suggest that customers consider familiarity towards technology when making purchase decisions.

Hence, to enhance purchase intentions of smart hotel rooms the hotel brands should create and ways in which such IoT enabled experience will enhance the user experience in a smart hotel room. The brand managers of the hotel rooms shall make a short video on how IoT enabled devices are used in the hotel and testimonials of the people who experienced such technology in smart hotel room. This in turn will enhance the technological awareness and will improvise the purchase intention of the smart hotel rooms. The hospitality industry is a stupendous choice for implementing several smart technologies like IoT devises, Face Recognition, Live Video Call with front desk representatives, smart applications etc., These technologies shall be tested on a trial basis in the hotel rooms and experience of the patrons staying in the hotel rooms shall be analyzed. The technology that is gathering the attention of the patrons should be used for branding and advertising of the smart hotel rooms in the future

and this in turn will attract more business to the hotels. Alternatively, the managers of the Hotel rooms shall provide the smart devices as an add on feature in the hotel rooms and charge a premium price for such innovative technology. During initial days, the managers shall target the business class travelers and executives who are visiting their hotels for business trip. The managers shall also provide such smart hotel rooms for their loyal customers for the loyalty points. Once the existing customers uses the IoT enabled smart hotel rooms then there are high chances for a repeat purchase.

Scope for Further Research, Limitation and Conclusion

The present study was conducted as questionnaire survey method, in future the researchers shall conduct a field experiment by physically visiting the smart hotel rooms and conducting such field experiments in the hotel rooms itself. This field experiment will reveal some other hidden factors that influence purchase intention of the smart hotel rooms. Lastly, this research was conducted in India and different results could be obtained in other countries due to market, social, and cultural differences (Flight et al., 2003). Future studies should further explore the interaction effect of other variables in the proposed path model and how diverse types of marketing communications for smart hotel rooms might influence consumers' purchase intention. The research study helped in theory building and connected the existing marketing theory with the current practices. As the hotel industry is shifting from traditional methods to IoT enabled smart hotel rooms it is the right time to investigate the consumer behavior and purchase decisions. This research made an attempt to understand the factors that influence the consumers purchase intention towards IoT enabled smart hotel rooms.

References

- Ajzen, I., 1991. *The theory of planned behavior. Organizational behavior and human decision processes*, 50(2), pp.179-211.
- Conner, M. and Armitage, C.J., 1998. *Extending the theory of planned behavior: A review and avenues for further research. Journal of applied social psychology*, 28(15), pp.1429-1464.
- Davis, F.D. and Venkatesh, V., 1996. *A critical assessment of potential measurement biases in the technology acceptance model: three experiments. International Journal of Human-Computer Studies*, 45(1), pp.19-45.
- F.D. Davis, *Perceived usefulness, perceived ease of use, and user acceptance of information technology*, MIS Quarterly 13(3), 1989, pp. 318–340.
- Fonchamnyo, D.C., 2013. *Customers' perception of e-banking adoption in Cameroon: an empirical assessment of an extended TAM. International Journal of Economics and Finance*, 5(1), pp.166-176
- Hamid, R, Ong, M.H.A., Razak, I.R.A., Ismail, T.A.T., Ramli, N. and Nawawi, Z.M.W.N.W., 2020. *User acceptance of smart housekeeping: A Study of TAM Model Prototype in Hotel Industry. Int. J Sup*

- Han, H., Hsu, L.T.J. and Sheu, C., 2010. Application of the theory of planned behavior to green hotel choice: Testing the effect of environmental friendly activities. *Tourism Management*, 31(3), pp. 325-334. [https://www. market research future.com/ reports/ connected-iot-devices-market-4776](https://www.marketresearchfuture.com/reports/connected-iot-devices-market-4776)
- I. Ajzen and M. Fishbein's (1980) theory of reasoned action as applied to the realm of moral behaviour
- King, W.R. and He, J., 2006. A meta-analysis of the technology acceptance model. *Information & Management*, 43(6), pp.740-755.
- Lancet, T., 2020. India under COVID-19 lockdown. *Lancet* (London, England), 395(10233), P. 1315.
- M. Fishbein, I. Ajzen, *Belief, Attitude, Intention and Behavior: An Introduction to Theory and Research*, Addison-Wesley, California, 1975.
- Madakam, S., Lake, V., Lake, V. and Lake, V., 2015. Internet of Things (IoT): A literature review. *Journal of Computer and Communications*, 3(05), p.164.
- Madden, T.J., Ellen, P.S. and Ajzen, I., 1992. A comparison of the theory of planned behavior and the theory of reasoned action. *Personality and Social Psychology Bulletin*, 18(1), pp.3-9.
- Mercan, S., Cain, L., Akkaya, K., Cebe, M., Uluagac, S., Alonso, M. and Cobanoglu, C., 2020. Improving the service industry with hyper-connectivity: IoT in hospitality. *International Journal of Contemporary Hospitality Management*.
- Presbury, R., Fitzgerald, A. and Chapman, R., 2005. Impediments to improvements in service quality in luxury hotels. *Managing Service Quality: An International Journal*.
- Saleh, F. and Ryan, C., 1991. Analysing service quality in the hospitality industry using the SERVQUAL model. *Service Industries Journal*, 11(3), pp.324-345.
- San Martín, H. and Herrero, Á., 2012. Influence of the user's psychological factors on the online purchase intention in rural tourism: Integrating innovativeness to the UTAUT framework. *Tourism Management*, 33(2), pp.341-350.
- Shafique, K., Khawaja, B.A., Sabir, F., Qazi, S. and Mustaqim, M., 2020. Internet of things (IoT) for next-generation smart systems: A review of current challenges, future trends and prospects for emerging 5G-IoT scenarios. *Ieee Access*, 8, pp.23022-23040.
- Thierer, A. and Castillo, A., 2015. Projecting the growth and economic impact of the internet of things. *George Mason University, Mercatus Center*, June, 15.
- Venkatesh, V., Thong, J.Y. and Xu, X., 2016. Unified theory of acceptance and use of technology: A synthesis and the road ahead. *Journal of the Association for Information Systems*, 17(5), pp. 328-376.
- Viswanath Venkatesh, Fred D. Davis, (2000) A Theoretical Extension of the Technology Acceptance Model: Four Longitudinal Field Studies. *Management Science* 46(2):186-204. <http://dx.doi.org/10.1287/mnsc.46.2.186.11926>
- Zhang, T., 2020. Why Hotel Guests Go Mobile. *Rosen Research Review*, 2(1), p.14.

Spillover Effects of COVID-19 on Global Financial Markets

Md Zeeshan

Nausherwan Raunaque

Abstract

This paper aims to explore the impact of COVID-19 pandemic on the returns of global stock market. We empirically analyze the stock markets returns of selected countries. Additionally, we analyzed the influence of daily cases and deaths due to COVID-19. Our empirical results show (I) the impact of COVID-19 on the global stock market has a spill-over effect of Asian countries (II) COVID-19 deaths affected returns on the stock market as the pandemic spread.

Keywords: COVID-19, Spill-Over Effects, Stock Market Correlation, Stock Market Indices

Introduction

In this paper we study the impact of COVID-19 pandemic on the global stock market. On December 31, 2019, Chinese officials reported pneumonia cases in Wuhan City, Hubei Province, China, with an unknown aetiology to the World Health Organization (WHO) (WHO, 2020). On 30 January 2020, the WHO declared the COVID-19 outbreak a public health emergency of international concern (PHEIC), and on 11 March 2020, it was declared a pandemic (WHO, 2020). The outbreak is a major threat to destabilise the global economy. The stock markets fell globally on 24 February, 2020 due to a significant rise in the number of COVID-19 cases outside China. On 27 February, 2020 the U.S. stock indexes posted their sharpest drop since 2008, with the Dow falling 1,191 points (the largest single-day drop since the global financial crisis of 2007–08) and all three major indexes falling the week down more than 10 percent due to the full-blown crisis of the corona virus outbreak (WSJ, 2020). Globally stock market plunged again due to aggravating COVID-19 crisis, the sharpest decline being on 16 March. Many opined for a global economic recession likely to follow (BBC, 2020). In the case of COVID-19, the excessive use of precaution methods like travel ban discourages people from going to commercial spaces or public places and contributes to economic depression (Robert et al., 2020). The impact of lock down on economic activities' can be annihilated into two parts. The spread of COVID-19 and frequent lock down by the government local COVID -19 infections led to working abstaining due to home isolation or caring sick family members. The systematic lock down during the initial days of disease spread brought a behavioral change in the population, and people started to refrain from going to commercial space and bunting their movement. The later had derided the economic activity. (Oliver et al., 2020). The impact on returns can be attributed to the disruptions of the international supply chain.

The impact of disruption in the supply chain was a leading contributor in the economic contraction, but it ceased to be the leading cause since late February (Scott et al., 2020). The availability of the information on the 2008 crises guided the investor's portfolio structure, shifting from losing stocks to winning stocks (Azimli, 2020).

Interestingly, the Chinese stock markets were not impacted as expected as the COVID-19 outbreak started in China. The stock market across the American and European nations witnessed crashes at the stage when the pandemic did not spread in those countries. It can be implied that the American and European stock exchanges dropped due to spillover from the Asian countries (He et al., 2020). An increase in the cases played a crucial role in impacting the returns of the stock market. Negative sentiments in the investors facilitated the spillover of the corona pandemic across the stock markets (Liu et al., 2020). The announcement of social distancing followed by the closure of public places and travel can hurt the stock market; economic relief packages to households had a weak positive impact on stock market returns. The government's swift actions to contain the pandemic had a positive impact on the stock market returns (Ashraf, 2020).

Hypothesis 1: There is a negative impact on the stock indices of the seriously affected countries.

Hypothesis 2: The Asian countries' spillover effects have dragged the returns on global stock indices during the initial spread of COVID-19.

Data and methodology

A. Data Description

To study the impact of the COVID-19 on returns of stock markets, we have compiled the data-set of the returns of selected global indices for the top ten countries affected by the COVID-19 Pandemic, namely China, the United States of America, the United Kingdom, India, Italy, Spain, France, South Korea, and Germany along with Japan. We took the sample period from 1 January 2015 till 20 August 2020 for the benchmark indices. For data related to the COVID-19 daily cases and daily deaths, we took the sample period from 31 January 2020 till 20 August 2020. We have 19509 observations for this study. For the data regarding the daily returns on global indices, we used the data provided by Yahoo Finance. For data regarding the COVID-19 spread, we use the Our World in Data (<https://ourworldindata.org/corona-virus>).

A.I Methodology

Considering the variations in time difference between the outbreak and mitigation process in China and that in the world, it is unlikely to segregate the stages into a uniform time line and distinguish its actual impact on other stock markets. Since the pandemic is still spreading, we can only base our empirical research on the assigned time line's outbreak stage. The entire period of study is divided into several sub-periods to examine the

impact of COVID-19. This duration of these phases varies across the countries, Table 1. We studied the correlations between the returns on the SP 500 and the other nine stock indices in the study. We compared the historical correlation with the correlation for six months, succeeding in detecting the first corona case in the respective countries. We have also run bi variate regression between returns on indices and COVID-19 daily cases and daily deaths. The model has the following specification:

$$Return_t = \alpha + \beta(COVID_{cases})_t + \varepsilon_t \quad (1)$$

$$Return_t = \alpha + \beta(COVID_{deaths})_t + \varepsilon_t \quad (2)$$

In the model, $Return_t$ is the daily return on the global market indices; α is the co-efficient, $COVID_{cases}$ and $COVID_{deaths}$ is the independent variable, and ε_t is the error term.

Results and Discussions

As of now, we can study the impact of the COVID-19 pandemic on very short terms and the short term. The very short-term impact is assessed by studying stock index returns for one month since the day of the first COVID-19 case detection. Contrarily, we assessed the stock market index returns for up to six months since the first case of corona infection for studying the short-term impact. Figure 1 shows the volatility in returns on the respective global indices during 31 December 2019 to 20 August 2020.

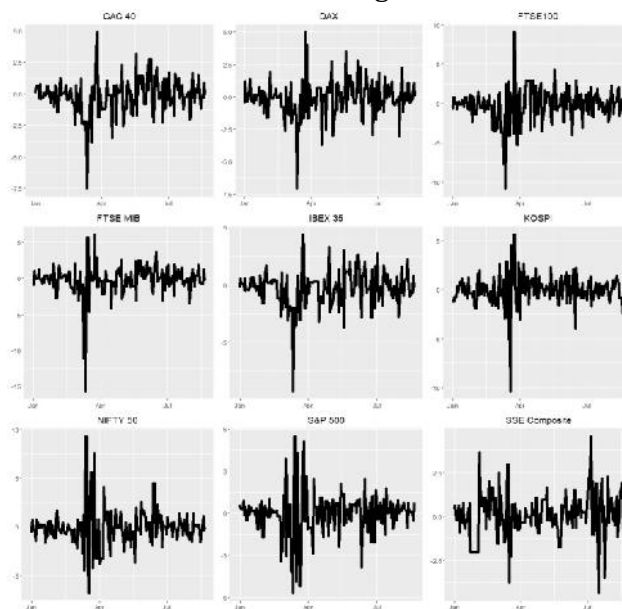


Figure 1 Returns (%) on global indices in study

This section will explain the statistical results obtained by the correlation of returns between the SP 500 and the selected market index. We have also done the bi variate regression to analyze COVID-19 deaths and cases on the stock market index returns. Table 1 Panel B shows that historically, the correlation between the SP 500 and the selected

global index in the study was weak to moderate. Within one month of corona case detection, we observe that the correlation between the SP 500 and the selected global index in the study increased from their historical measures. The returns on CAC40 and DAX were moderately correlated with the SP 500. Nevertheless, within the months of detection of the COVID-19 case, the correlation increased and became strongly correlated with the SP 500. The correlation dropped significantly in the second month from strong to weak. From third months onward, the correlations restored to near about its historic value suggesting the impact on return was of very short terms because, within three months, the correlations of returns have started receding the previous level. The returns on KOSPI and SSE composite were weakly correlated with the SP 500. However, within the months of detection of the COVID-19 case, the correlation increased and became moderately correlated with the SP 500. The correlation of returns on KOSPI continued to be moderate until the second month. From third months onward, the correlation restored to near about its historic value suggesting the impact on return was of very short terms because, after two months, the correlations of returns have started receding the previous level. However, for the SSE composite, the uncertainty in correlation still suggests the returns on SSE composite have been impacted in the short term. The returns on NIFTY 50 and Nikkei 225 were weakly correlated with the SP 500. Never the less, within a month of detection of COVID-19 cases, the correlation decreased, and weakly correlated with the SP 500. The correlation of returns on NIFTY 50 and Nikkei 225 continued to be weak throughout the study. One crucial and unique observation is that the correlation between the Nikkei 225 and SP 500 changed from the weak positive to weak negative in the very short term. An impact on both very short term and short term is observed on the NIFTY 50 and Nikkei 225. Returns on FTSE 100/FTSEMIB were weakly correlated with the returns on SP500. The impact was very short term impact led to a decrease in correlation. However, from second months onward, the correlation has increased significantly, and now the correlation has changed to moderate from weak in the short term. IBEX35 was moderately correlated with the returns on SP500. The correlation increased for the very short term and became strongly correlated with in two months from then onwards. The correlation is decreasing gradually and receding to its previous level, suggesting an impact very short term.

To Support our Statistical analysis, we ran two bi-variate regressions to visualize the impact of COVID-19 deaths and cases on different global indices. The results are recorded in Tables 2 and 3. Table 2 shows bi variate regressions between returns of global indices and COVID-19 deaths in the respective country. We find that most indices' returns are positively and significantly related to COVID-19 deaths in their country. For IBEX35, the returns were negatively and significantly related to the COVID-19 deaths in Spain. In Germany, Italy, Japan, UK, and the USA, zero death was reported during the first month of COVID-19 Spread. The returns on SSE composite, and NIFTY 50, were negatively related to the COVID-19 deaths in the respective countries on the very

short term. In the short-term, the returns on the SSE composite and NIFTY 50 are positively related. Table 3 shows the bi variate regression results between global index returns and COVID-19 cases in respective countries. We find that the indices' returns are positively and negatively related to the number of COVID-19 cases at different Stages of study. For the returns on SSE composite, FISE MIB, Nikkei225, and FTSE 100, the COVID-19 cases have significant relation during the early or late phase of COVID-19 Spread. The return on DAX is positively related to the number of COVID-19 cases in Germany.

Conclusion

This paper presents a statistical analysis of the COVID-19 pandemic impact on the stock market. The financial markets have seen a melodramatic movement on an unprecedented scale. The risks in the global financial market have increased extensively in response to the pandemic. During the early phase of the COVID-19 outbreak, the Asian countries' spillover effects significantly impacted European and American indices' returns. The casualties in the respective countries significantly impact individual stock market reactions. The pandemic's great uncertainty and its associated economic losses have caused markets to become highly volatile and unpredictable. The future work should focus on identifying the assets classes or stocks or financial markets which showed comparative resilience to the COVID19 crisis.

References

- Azimli, A. *The impact of covid-19 on the degree of dependence and structure of risk-return relationship: A quantile regression approach*, *Finance Research Letters* (102020). doi:10.1016/j.frl.2020.101648.
- Ashraf, B. N. *Economic impact of government interventions during the covid-19 pandemic: International evidence from financial markets*, *Journal of Behavioral and Experimental Finance* 27 (2020). doi:10.1016/j.jbef.2020.100371.
- BBC, *Global stock markets plunge on corona virus fears (feb2020)*. URL <https://www.bbc.com/news/business-51612520>
- Cepoi, C.O. *A symmetric dependence between stock market returns and news during covid-19 financial turmoil*, *Finance Research Letters* (102020). doi:10.1016/j.frl.2020.101658.
- CNBC, *6 charts show the corona virus impact on the global economy and markets so far (mar 2020)*. URL <https://www.cnbc.com/2020/03/12/coronavirus-impact-on-global-economy-financial-markets-in-6-chhtml>
- Zhang, D. Hu, M. & Ji, Q. *Financial markets under the global pandemic of covid-19*, *Finance Research Letters* (102020). doi:10.1016/j.frl.2020.101528.
- Max Roser, E. O.-O. Hannah Ritchie, J. Hasell, *Corona virus pandemic (covid-19), Our World in Data* [https://ourworldindata.org/coronavirus\(2020\)](https://ourworldindata.org/coronavirus(2020)).
- Liu, H. Manzoor, A. Wang, C. Zhang, L. Manzoor, Z. *The covid-19 outbreak and affected countries stock markets response*, *International Journal of Environmental Research and Public Health* 17(42020). doi:10.3390/ijerph17082800.

- Morgan, J.P. *Assessing the fallout from the corona virus pandemic (mar 2020)*. URL <https://www.jpmorgan.com/global/research/coronavirus-impact>
- Goodell, J.W. *Covid-19 and finance: Agendas for future research*, *Finance Research Letters* 35(72020).doi:10.1016/j.frl.2020.101512.
- Robert J.W. Barro, J. José Ursua, F. The corona virus and the great influenza epidemic, *CE Sifo Working Papers* (2020).
- Amadeo, K. *How does the 2020 stock market crash compare with others?(apr2020)*.
- Ali, M. Alam, N. Rizvi, S. A.R. *Corona virus (covid-19)—an epidemic or pandemic for financial markets*, *Journal of Behavioral and Experimental Finance* 27 (92020). doi:10.1016/j.jbef.2020.100341.
- Morning star, *The impact of corona virus on the economy (Mar102020)*.
- Sansa, N. Hasan, A. *The impact of the covid-19 on the financial markets: Evidence from china and us a*. URL www.eresearchjournal.com
- He, Q. Liu, J. Wang, S. Yu, J. *The impact of covid-19 on stock markets*, *Economic and Political Studies* (2020)1–14doi:10.1080/20954816.2020.1757570.
- Corbet, S. Hou, Y. Hu, Y. Lucey, B. Oxley, L. *Aye corona! the contagion effects of being named corona during the covid-19 pandemic*, *Finance Research Letters* (2020). doi:10.1016/j.frl.2020.101591.
- Scott S.J.D.K.J.K.M.C.S. Baker, R. Nicholas Bloom, Viratyos T. in, *The unprecedented stock market impact of covid-19*, *NBER Working Paper No. 26945 (jun2020)*.
- Guardian, T. *Wall street and ftse 100 plunge on worst day since1987—a sit happened (jul2020)*.
URL: <https://www.theguardian.com/business/live/2020/mar/12/stock-markets-tumble-trump-europe-travel>
- Olivier Coibi Y. G. on, M. Weber, *The cost of the covid-19 crisis: Lockdowns, macroeconomic expectations, and consumer spending*, *NBER Working Paper No. 27141(2020)*.
URL:<https://www.who.int/news-room/detail/27-04-2020-who-timeline---covid-19>
- URL: <https://www.thebalance.com/fundamentals-of-the-2020-market-crash-4799950>
- URL: <https://www.morningstar.com/articles/971254/morning-stars-view-the-impact-of-corona-virus-on-the>
- WHO, *Archived: Who time line-covid-19 (apr2020)*.
- Wikipedia, *2020 stock market crash (sep 2020)*. URL https://en.wikipedia.org/wiki/2020_stock_market_crash
- WSJ, *Dow industrials close 1,000 points lower as corona virus cases mount (feb2020)*. URL <https://www.wsj.com/articles/stocks-fall-as-coronavirus-spread-accelerates-outside-china-11582>

Appendix

Table 1 Summary Statistics and Correlations among Returns on Global Indices During Pre COVID-19 Period and During COVID-19

Panel A: Summary statistics of return on global indices pre-COVID19 and during COVID-19									
vars	31 Dec 2019 - 20 Aug 2020				02 Jan 2015 - 30 Dec 2019				
	N	mean	sd	median	N	mean	sd	median	
CAC40	217	-0.18	1.36	-0.1	1257	0.01	0.81	0.04	
DAX	217	-0.11	1.32	-0.05	1257	-0.07	0.75	0	
FTSE100	217	-0.13	2.16	0.06	1257	0.02	0.87	0.04	
FTSE MIB	217	-0.18	2.13	-0.05	1257	-0.03	1.15	0.01	
IBEX35	217	-0.3	1.48	-0.18	1257	-0.05	0.91	-0.01	
KOSPI	217	-0.02	1.6	-0.13	1257	-0.04	0.63	-0.05	
NIFTY50	217	-0.04	2.06	-0.12	1257	-0.08	0.73	-0.07	
Nikkei225	217	-0.16	1.31	-0.16	1257	-0.01	0.85	0	
SP500	217	-0.06	1.63	0.12	1257	0.01	0.74	0.03	
SSE compc	217	0.06	1.19	0.1	1257	0.13	1.29	0.14	

Panel B: Correlation between S&P 500 and global indices.									
	CAC 40	DAX	FTSE 100	FTSE MIB	IBEX 35	KOSPI	NIFTY 50	Nikkei 225	SSE compo
5- years pr	0.391	0.444	0.245	0.027	0.366	0.154	0.152	0.173	0.117
During COVID-19									
1-Month	0.642	0.757	0.191	0.224	0.354	0.495	0.082	-0.116	0.385
2-Month	0.233	0.303	0.553	0.648	0.542	0.445	0.301	0.11	0.148
3-Month	0.354	0.326	0.5	0.632	0.47	0.203	0.281	0.223	0.384
4-Month	0.345	0.316	0.477	0.599	0.419	0.183	0.249	0.236	0.365
5-Month	0.356	0.355	0.461	0.595	0.449	0.151	0.217	0.237	0.32
6-Month	0.363	0.362	0.449	0.591	0.43	0.14	0.205	0.198	0.274

Table 2 Bi-variate Regression (Independent Variable: COVID-19 Deaths)

This table shows the bi-variate relationship between returns of different global indices and COVID-19 deaths.

Panel A: Summary statistics of return on global indices pre-COVID19 and during COVID-19									
vars	31 Dec 2019 - 20 Aug 2020				02 Jan 2015 - 30 Dec 2019				
	N	mean	sd	median	N	mean	sd	median	
CAC40	217	-0.18	1.36	-0.1	1257	0.01	0.81	0.04	
DAX	217	-0.11	1.32	-0.05	1257	-0.07	0.75	0	
FTSE100	217	-0.13	2.16	0.06	1257	0.02	0.87	0.04	
FTSE MIB	217	-0.18	2.13	-0.05	1257	-0.03	1.15	0.01	
IBEX35	217	-0.3	1.48	-0.18	1257	-0.05	0.91	-0.01	
KOSPI	217	-0.02	1.6	-0.13	1257	-0.04	0.63	-0.05	
NIFTY50	217	-0.04	2.06	-0.12	1257	-0.08	0.73	-0.07	
Nikkei225	217	-0.16	1.31	-0.16	1257	-0.01	0.85	0	
SP500	217	-0.06	1.63	0.12	1257	0.01	0.74	0.03	
SSE compc	217	0.06	1.19	0.1	1257	0.13	1.29	0.14	

Panel B: Correlation between S&P 500 and global indices.									
	CAC 40	DAX	FTSE 100	FTSE MIB	IBEX 35	KOSPI	NIFTY 50	Nikkei 225	SSE compo
5- years pr	0.391	0.444	0.245	0.027	0.366	0.154	0.152	0.173	0.117
During COVID-19									
1-Month	0.642	0.757	0.191	0.224	0.354	0.495	0.082	-0.116	0.385
2-Month	0.233	0.303	0.553	0.648	0.542	0.445	0.301	0.11	0.148
3-Month	0.354	0.326	0.5	0.632	0.47	0.203	0.281	0.223	0.384
4-Month	0.345	0.316	0.477	0.599	0.419	0.183	0.249	0.236	0.365
5-Month	0.356	0.355	0.461	0.595	0.449	0.151	0.217	0.237	0.32
6-Month	0.363	0.362	0.449	0.591	0.43	0.14	0.205	0.198	0.274

Table 3 Bi-variate Regression (Independent Variable: COVID-19 Cases)

This table shows the bi variate relationship between returns of different global indices and COVID-19 cases.

Bivariate regression (Independent variable: COVID-19 cases)					
Dependent variable	Returns		Dependent variable	Returns	
	Coef.	t-values		Coef.	t-values
SSE 1M	-0.001***	-5.129	Nikkei225 1M	-0.048	-0.849
SSE 2M	0.0004	0.635	Nikkei225 2M	-0.043***	-6.195
SSE 3M	0.0004	0.526	Nikkei225 3M	0.0002	0.206
SSE 4M	0.0004	0.587	Nikkei225 4M	0.001	1.593
SSE 5M	0.0004	0.656	Nikkei225 5M	0.001	1.278
SSE 6M	0.0002	0.389	Nikkei225 6M	0.001	1.284
CAC40 1M	0.044	0.347	KOSPI 1M	-0.037	-1.337
CAC40 2M	0.0003	1.107	KOSPI 2M	-0.001	-0.708
CAC40 3M	0.0002	0.178	KOSPI 3M	-0.001	-1.089
CAC40 4M	-0.0001	-0.146	KOSPI 4M	-0.001	-1.201
CAC40 5M	-0.0001	-0.797	KOSPI 5M	-0.001	-1.34
CAC40 6M	-0.0001	-1.026	KOSPI 6M	-0.001	-1.376
DAX 1M	0.009	0.244	IBEX35 1M	-0.017	-1.335
DAX 2M	0.0002	1.298	IBEX35 2M	0.0004	0.427
DAX 3M	0.0001	1.48	IBEX35 3M	0.001	0.88
DAX 4M	0.0001	0.888	IBEX35 4M	0.0002	0.366
DAX 5M	0.0003	0.507	IBEX35 5M	-0.0001	-0.193
DAX 6M	0.0003	0.436	IBEX35 6M	-0.0002	-0.291
NIFTY50 1M	0.347	0.794	FTSE100 1M	-0.045	-0.817
NIFTY50 2M	-0.0003	-0.262	FTSE100 2M	0.0002	0.486
NIFTY50 3M	-0.0001	-0.181	FTSE100 3M	0.0002	1.991
NIFTY50 4M	-0.0001	-0.066	FTSE100 4M	0.0003**	2.661
NIFTY50 5M	0.0001	1.1	FTSE100 5M	0.0002*	2.553
NIFTY50 6M	0.0001	0.736	FTSE100 6M	0.0002*	2.588
FTSE MIB 1M	-0.004*	-1.884	SP500 1M	-0.133	-0.839
FTSE MIB 2M	0.0002	0.792	SP500 2M	-0.001	-1.311
FTSE MIB 3M	0.0001	0.691	SP500 3M	0.0001	0.324
FTSE MIB 4M	0.0003	0.24	SP500 4M	0.0001	0.77
FTSE MIB 5M	-0.0003	-0.266	SP500 5M	0.0001	0.906
FTSE MIB 6M	-0.0004	-0.384	SP500 6M	0.0001	0.733

Note:

$p < 0.1$; ** $p < 0.05$; *** $p < 0.01$

Dependent variable nomenclature - name of index month.

Durga Puja as a Driver for Promoting Tourism in Villages of West Bengal

Swati Basu Ghose

Abstract

Indian festivals are mostly based on culture, religion and season. Durga Puja is celebrated in West Bengal, and many other north-eastern states during autumn. It is also celebrated all over India mainly by the migrant population from these states. This auspicious festival has several dimensions. Besides worshipping mother Durga for prosperity and well being, people of West Bengal like to be with their families and friends for ten days of this grand festival. Not only in Kolkata and big cities but this festival is celebrated in rural Bengal with all the traditional values and rituals. However, there is something unique about many of these village Durga puja festivals. Many of them are traditional and have been celebrated for many hundred years and have become family traditions over the centuries. These pujas often pre-date their city counterparts by decades and have enormous historical, cultural, and ethnic value as they are celebrated with close adherence with traditional rituals. They evoke feelings and emotions that are closely tied to our cultural ethos. In recent years, people from the cities and other states are observed to make special effort to visit these village pujas and take part in them. This is being exploited by West Bengal Tourism and other private operators who try to fulfil their dream by offering various tour plans to take them to centuries old family Durga pujas in Bengal. This paper tries to explore different packages, services offered, and prices charged for such tour services. The main objective of this research is to understand how these tour plans can help the tourism industry to penetrate into rural West Bengal. A case study of a traditional family Durga puja in Dasghara village of Hoogly district in West Bengal, celebrating Durga puja over more than four hundred years will be used to highlight points which can help to develop tour plans and encourage tourists from urban India to visit rural Bengal.

Keywords: Durga Puja, Festival, Tourism and Tour Plans

Introduction

Durga Puja is the biggest and the most important grand festival of art, culture, and religion in West Bengal, celebrated every year during autumn. As per British Council report, published in the Hindu (Singh, 2021) based on a survey, the festival contributes 2.58% of West Bengal's GDP and creative activities involved in Durga puja and creates income of about Rs.32,377 crore. It is believed that Mother Durga comes back to her father's house with her children only during this period every year. Arrival of the Mother carries messages like ending all negative energies and bringing prosperity, happiness, and peace on earth. People of Bengal eagerly wait for the whole year for this festival. Irrespective of their economic conditions, people of Bengal buy and wear new clothes, visit puja mandap (pandal), offer anjali (prayer), and spend time with

family and friends during Durga puja. This ten-days festival starts on Mahalaya (1st day), the day all forefathers are remembered and given respect. Actual celebration starts on Sashti (6th day) and continues till Dashami (10th day). Whether in urban or rural Bengal, almost everybody gets involved in the puja for these five days irrespective of their cast, religion or economic status. Not only do pujas in Kolkata and urban Bengal attract a huge number of visitors from outside cities and state, but distinguishing features of rural pujas attract visitors too. People living in cities and towns often prefer to enjoy different ambience amid nature and enjoy traditional rituals followed by families while celebrating Durga Puja in their native villages. Many such people would like to spend these days of festivities in villages given an opportunity to do so. However, not all of them have direct contacts with families celebrating Durga puja in rural Bengal. They need to depend on state or private tour operators.

This paper tries to explore different packages, services offered, and prices charged for such tour services. The main objective of this research is to understand how these tour plans can help the tourism industry to penetrate into rural West Bengal. A case study of a traditional family Durga puja in Dasghara village of Hoogly district in West Bengal, celebrating Durga puja over more than four hundred years, will be used to highlight points which can help to develop tour plans and encourage tourists from urban India to visit rural Bengal, which lacks enough tourists from urban and foreign lands.

Literature Review

This study has reviewed the following research works and tried to find out gaps and indicate areas where relevant research can be carried in near future.

McDaniel (2004), focuses on three major forms of Bengali goddess worship and shakti and assesses each shakti through a few parameters in a field work based research and finally draws a picture of this religious tradition.

Bhattacharya (2007), in his paper, focuses on the changes in the rituals of worship of the goddess Durga over long periods and focusses on need for assessing these changes based on new parameters.

Basu et al. (2013) identifies the challenges and achievements of The Kolkata Police Force (KPF) to manage situation safely during the Durga Puja festival. The paper assesses the various strategies adopted by the KPF to work on challenges successfully.

Dala singh et al. (2018) in their paper listed out the different plant species and plant parts that are used in Durga puja for worshipping of the goddess Durga in Odisha, India.

Borah (2011) in her article has focussed on power of Mother Durga (female shakti) who kills asur as (power-seeking deities) and brings back peace to earth.

Ghosh (2000), focuses on transformation of Durga puja from a family rituals to urban secular one over last 200 years and from a family festival to a public festival.

Biswas (2017) focuses on five villages that visitors can go to during Durga puja. These villages with peaceful environment and are all located within a distance of 300 kilometers from Kolkata.

Hussain, P. (2022) focuses on the sacred and secular aspects of rituals and cultural performances in Durga Puja and describes her childhood memory before and during Durga Puja days.

Singh et al. (2016), in their paper have focussed on development of rural tourism for bringing a positive change in socio-economic condition in rural India. Marketers and entrepreneurs who have already entered into rural tourism are facing several issues while promoting the same. This paper focused on need, scope and marketing strategies for rural tourism in rural context and finally suggested some solutions.

Review of literature reveals that though research has been done on Durga puja festivals from different aspects but work on tourism related to Durga puja is rare and has not been addressed in the literature.

Research Design and Methodology

Statement of Problem

People of Bengal and outside the state usually like to enjoy puja by visiting pandals with friends and families. It's easy to move around in Kolkata and other cities using their own vehicles or using services of local tour operators. It indicates that celebration of Durga Puja is connected to local tour operators. These tour services are mostly available in Kolkata and urban cities. Though a few operators have started their operations in rural Bengal to bring visitors to village pujas but they are not very successful in their business. There is a huge untapped market, which can be penetrated by introducing proper tour plans by the tourism industry.

Objectives of the Study

- To study existing tour plans and services offered by government and private operators.
- To understand factors influencing existing and potential visitors to visit and enjoy Durga puja in rural villages with tour operators.
- To help tour operators to formulate strategies to penetrate into rural West Bengal to facilitate more people to visit rural pujas, thus bringing about the development of tourism industry.

Scope of the Study

This study has considered existing and potential visitors who visit and enjoy Durga Puja in rural villages, with reference to a case study and the tour operators operating in rural Bengal. Time period considered for this study is October - December 2021.

Methodology

This study has explored existing tour packages offered by West Bengal Tourism Development Corporation and private tour operators. Data was collected from internet sources and through telephonic conversation with few existing tour operators to understand services offered and challenges faced by them.

An online survey was also conducted to identify factors influencing the Preference for Village Durga Pujas (PVDP) of rural Bengal and to understand the causal relationship between Preference for Village Durga Pujas and development of tourism industry (DTI). A total of 140 people were considered for this survey. A case study of a traditional Basu family's Durga puja in Dasghara village of Hoogly district in West Bengal, celebrating Durga puja over more than four hundred years have been discussed and views and suggestions have been collected from visitors and devotees who visited during the 2021 Durga puja in Dasghara village. Information has been collected from prospective visitors and host who are involved in celebration of this mega festival. Collected data has been analysed using statistical tools.

Limitations of Study

The study has been conducted in during 2021 for a short period among only 140 visitors and only one case study has been considered. Moreover, this is time which was between two waves of the COVID pandemic.

Results and Findings

This study explored different tour packages offered by West Bengal Tourism and private operators during Durga Puja. Popular packages are found for puja parikrama (visit) in Kolkata and nearby areas. They take visitors to reputed pandals, pujas with highly appreciated themes, and *family* pujas (with puja of erstwhile aristocrat *families* known as *Bonedi* puja), and community pujas (known as Barowari pujas). Besides visit to Pujas in Kolkata, it was found that only a few tour operators have tour plans for taking visitors to famous Durga pujas in rural areas.

- i) **West Bengal Tourism Development Corporation (WBTDC):** A government of West Bengal undertaking, arranges tours named Sarodot sav (2015) to outskirts of Kolkata and take devotees to Hoogly, Burdwan, Birbhum, Bishnupur, Murshidabad and other districts.

- ii) **West Bengal Transport Corporations (WBTC):** WB Transport Department arranges tours named Puja Parikrama (2019) for taking people away from cities to pujas of some special and aristocratic houses in rural Bengal. During Durga puja AC buses start their journey usually at 07:30 AM from Esplanade Tram Terminus in Kolkata and comes back on the same day in late evening time. They take care of food and travelling for the whole day. Tickets need to be bought in advance to reserve seats in the tour bus.
- iii) **Mercury Travels:** One of the well-known operators in West Bengal is Mercury Travels. They organize tours named Gram Banglar(Rural Bengal)Durga Puja Parikrama. It is observed that packages offered by them usually include tour by AC coach, guides, food, lodging in villages, visit to royal families Durga Puja in different districts and historical places in and around pujas of royal zamindar houses.
- iv) **Tour Travel World. Com:** Special trip to visit rural Bengal Durga puja with jungle safari at Sundarban mangrove forests was also offered in a package, which is offered by TourTravelWorld.Com a tour operator from Kolkata. Packages with different price ranges are available, rates vary based on quality of services and other factors. Visitors can choose as per their affordability. Usually, 50% of the cost needs to be paid at the time of booking and the balance 50% before starting the journey. Cancellation policies and all terms and conditions are clearly mentioned.

The following analysis has been done based on data collected from existing and potential visitors to rural Durga Puja in West Bengal. Data was collected from 140 respondents. Respondents have expressed their views and include existing and potential visitors.

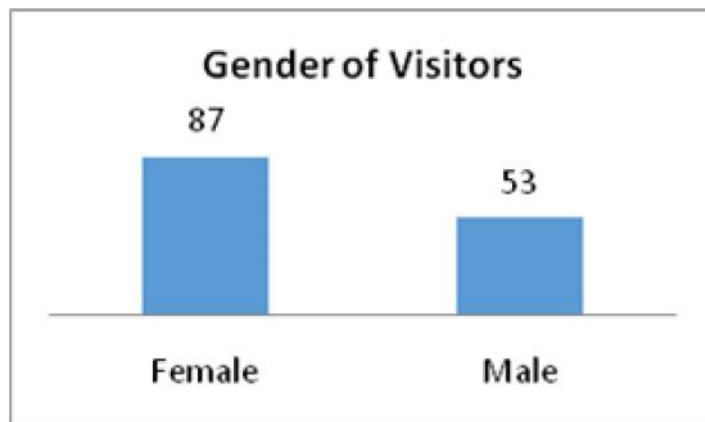


Figure 1 Gender of Visitors

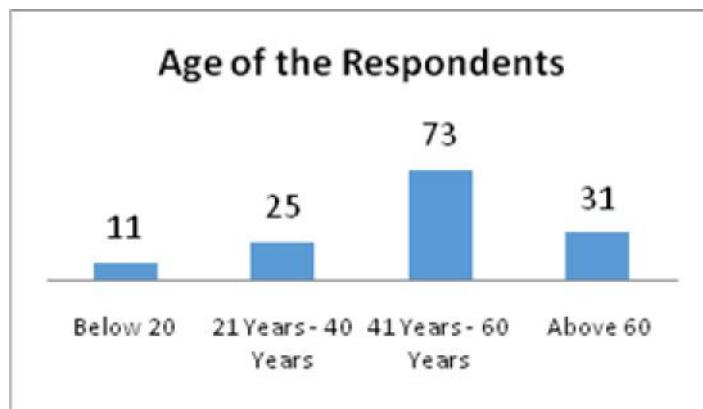


Figure 2 Age of Respondents

Figures 1 and 2 above indicate that out of 140 respondents, female respondents are more than males and maximum respondents are in the age group of 41 years and 60 years.

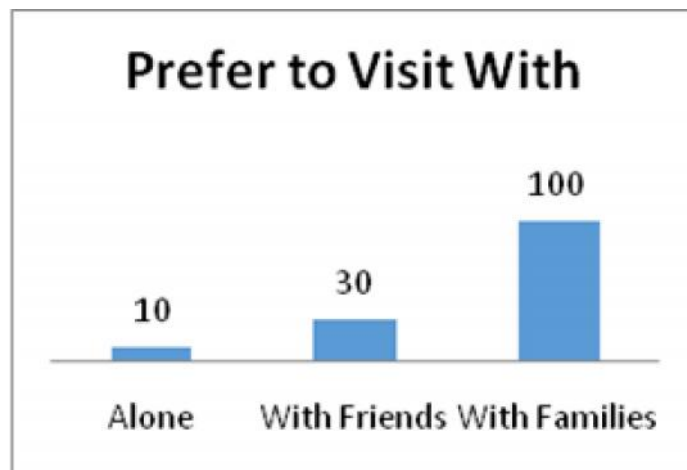


Figure 3 Preference for Company

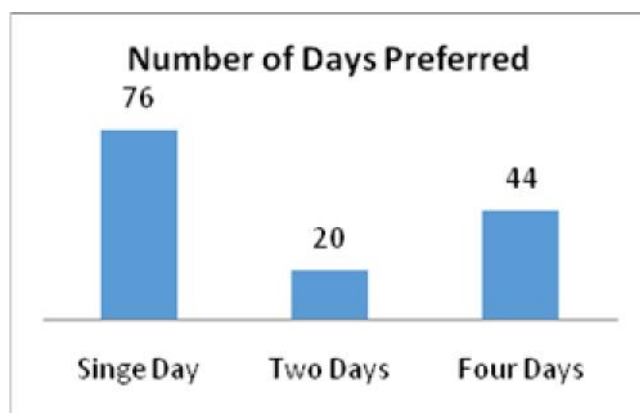


Figure 4 Days Preferred

Figures 3 and 4 above indicate that maximum (100) respondents have shown interest to go to rural puja with their families and again a large number (76) respondents preferred to visit for only one day.

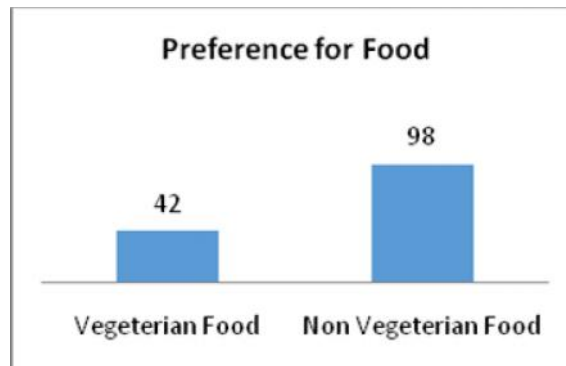


Figure 5 Preference for Food

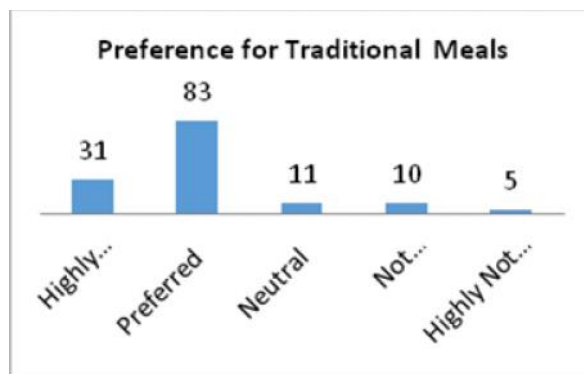


Figure 6 Preference for Traditional Meal

Figures 5 and 6 above indicate that 98 respondents preferred to have non-vegetarian food and 83 people preferred traditional meal on puja days, which could be non-vegetarian too. It would be appropriate to point out that in Bengal, visitors and participants do eat non-vegetarian food during some days of the puja.

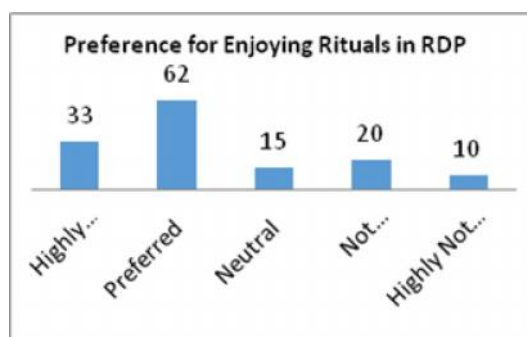


Figure 7 Preference for Rituals

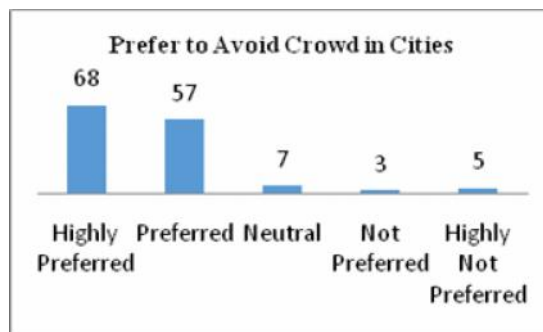


Figure 8 Preference to Avoid City Crowd

Figures 7 and 8 show that more than 90 people preferred to be in rural Bengal to enjoy rituals in rural durga puja and more than 100 people prefer to avoid crowded puja pandals in Kolkata and other cities.

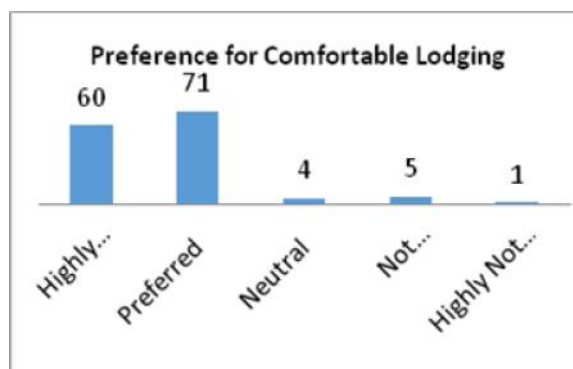


Figure 9 Preference for Comfortable Lodging

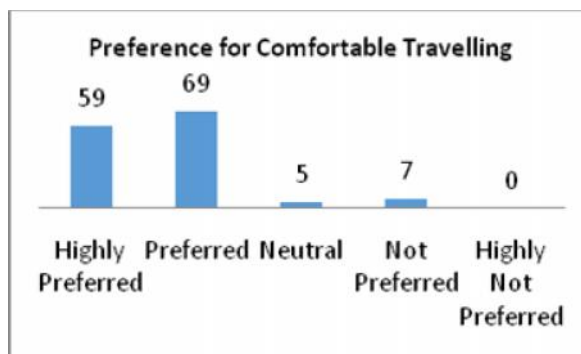


Figure 10 Preference for Comfortable Travelling

Figures 9 and 10 show majority of respondents prefer to have comfortable travelling and lodging.

Case Study

Basu family of Dasghara village at Hoogly district in West Bengal has been celebrating Durga Puja for the last 420 years. Dasghara was a combination of ten villages and was ruled by Pal Chowdhuri Family (Bar Duari Raja or king). Mathuranath Basu from Jessore (Bangladesh) came to this village and married Raj lakshmi, who was the youngest daughter of Ram Narayan Pal Chowdhuri, and settled in Dasghara permanently. He came with his first wife and eight children and also brought his family deity Damodar Jiu with him. Paramananda Basu, forefather of Mathuranath started a Durgapuja in their Jessore house in 1601. In 1697 the same puja was shifted to Dasghara and has continued till date.



Figure 9 Idol in Dasghara (2021)



Figure 10 Location of Dasghara

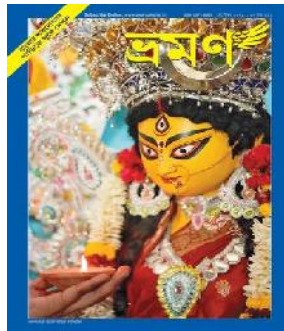


Figure 11 Bhraman Magazine

Every year family members of this family come to village of Dasghara to organise and enjoy their family puja in the Puja dalan (hall) like their forefathers. Basu family has its own set of rural people who get involved in this puja as priest, helper, and dhakis (drum players). These people help to prepare and carry on the festival following traditional rituals. Durga idol, ek chalarthakur (single frame idols), solar saaj (decorated with thermocol) is made in Durga dalan by artists from Chandan Nagar, which takes almost three months. Family members contribute and create a common fund every year for bearing all puja related expenses. They welcome local residents from Dasghara and nearby villages to enjoy puja, offer Anjali (prayer) and take prasada. Durga dalan gate is open for the general public for all five days. Durga puja gets inaugurated on Sasthi with Kalpambha, followed by *kala bousnan* (bathing the banana

sapling) on Saptami, Mahaastami on Astami, Mahanavamion Navami puja. Special lunch is offered to Devi Durga and others and puja is done following Vaishnav culture. On Dashami, family members greet each other, write Durga naam, exchanged sweets after immersion of idols in the nearby pond named Chnada.

Puja committee of Basu family organise cultural functions and social activities which draw attention of visitors who are encouraged to participate. Musical programmes, debate, dramas, drawing competition, and blood donation camps are arranged every year. They receive visitors from Kolkata, other districts of Bengal, and from abroad. The number of visitors are increasing every year. Basu family usually arranges breakfast and lunch for their visitors. Keeping in mind the increased number, committee has decided to give contract for food to local caterer and to tie up with local transport agencies to facilitate visitors to go and see historical places in and around Dasghara village. A Bengali magazine on tourism named *Bhromon*(2021) had published an article on history and the current scenario of Basu family's Durga Puja, which was originally written by one of the senior members of Puja committee of Basu family. This article drew attention of many people who visited Dasghara village and enjoyed this puja. They were happy and wanted to come back again for longer period during Durga Puja. Most of them went back withing the single day as proper accommodation was not available. They also expressed that their families and friends are interested to visit if proper transport, food, stay, and other facilities are available at fair prices.

This case narrates a picture of a traditional family's Durga Puja in rural Bengal and gives an idea to link Bengal tourism with Durga puja involving tour operators and local people.

Now, several major points which emerged from this case study will be analysed below to provide inputs for formulation of strategies and developing business model for Bengal's rural tourism related to Durga puja.

1. Dependence on local people for preparation and conducting puja is common. These people have a specific role to play like priest, helpers and Dhakis. But a good number of needy and poor people can be engaged for supporting tour operators. Tour operators need to contact local caterers and hotels/owner of independent houses for arranging food and accommodation. This can bring good business to villages and give an opportunity to local people to earn some extra income.
2. Cultural programme during evening after *sandhyaarati* (evening worship with lighted lamps) is another attraction for tourists in villages. Durga puja being a socio-cultural annual event provides platforms for local artist to showcase their talents and nurture the art and culture of rural Bengal.
3. Arranging for local tours for tourists to enjoy the countryside, places with historical values, temples, bank of rivers, small hills and paddy fields will attract more people to villages. Tour operators can tie up with local rickshaw, autos, to sand buses to plan for the same.

4. Lodging through home stay facility or in hotel with some amenities will add a good human touch and feeling of security to visitors. Tour operators need to collect data through research for understanding customer's demand for rooms, wash rooms and dining places and the same should be conveyed to the owner of hotels and homes. Different prices can be charged as per requirement and facilities provided.
5. Food plays an important role for any Indian festival. *Bhogs* (Special traditional lunch) are prepared during Durga Pujas in all these family pujas. Tour operators can contact puja committee and request them to extend this facility to visitors on a payment basis.
6. Enjoying rituals in Durga puja in a family environment is one of the most important attractions for people preferring to spend Shasthi to Dashami in rural Bengal. *Bodhon*(invocation)on Shasti, *Nabapatrika Snan* (bath of new leaf) on Saptami, *Kumari Puja*(worship of girl child)on Astami *lighting of 108 lamps* at the end of Astami, *aratis* followed by *dhunuchi* (clay pot burning dance)on Astami and Navami, *Sindurkhela* and *Visharjan* followed by greeting with sweets are performed in traditional ways.
7. Breaking monotony of city life, it is observed in this research that people aged above 40 years have shown more interest to go for rural puja with their families and for longer period of time. They want to spend their puja and enjoy holidays in less crowded and homely environment.

Discussion and Implications

It is observed from the primary and secondary data analysis and above case study that the preference for rural Durga puja has been on the rise for several reasons. This preference can help tourism industry to grow in West Bengal, if nurtured properly. Existing tour operators have opportunities to expand their business and new entrants can explore to penetrate in rural market. Tour operators or travel agencies need to understand first their target customer and what they like and dislike. They need to work on feedback or research findings to improve their services. There are various elements they need to factor in to make their brand a popular one. Findings of this research will be useful to take decision on different parameters, formulate strategy and arrange hassle free tours for tourists. Expansion of tourism industry in rural Bengal during Durga puja expected to have a positive implication on socio and economic condition of local people. This will help indirectly creating more job opportunities to people in the tourism sector and indirectly to people in villages by involving them in different supporting activities to make full fledged tour packages for tourists. Local vendors can have better business, if their products are promoted properly. Communication between rural puja organisers and tour operators can create better opportunities and bring a positive impact on tourism industry. Though tourism was badly hit during pandemic but as spread of virus was more in cities, people preferred to visit villages during festival. This gives an opportunity for this service sector to be more vibrant and dynamic by offering a set of activities to serve the needs of visitors for rural Bengal during Durga puja. Travel agencies need to create awareness among potential visitors about special features of their packages through social media

advertisement and websites. Email marketing could be a good option as apart of direct marketing effort, if a proper database is gathered.

Conclusion

West Bengal has a large tourism potential to develop Durga puja-based tourism. Besides the traditional and cultural attractions which form the main part of attracting reasons of rural Durga puja, several other attractions play important roles to encourage people to spend their Durga puja holidays in rural Bengal. This festival is not limited to Bengalis but is celebrated by all communities in West Bengal. Rural Durga Puja can have more tourists from urban India and other countries. Prosperity to West Bengal tourism can be brought through proper promotional activities, tourist friendly infrastructure, usage of digital platforms, coordination between public and private organisations, infusing lot of holiday elements and following all protocol related to hygiene and safety while taking tourist to rural puja venues. Finally, dynamism of tourism industry focussing on this grand annual festival can create better opportunities for rural people to live in their own place with better economic condition. This will boost the state's economy and influence to promote Durga puja based rural tourism.

References

- Basu, S., Bose, I. & Ghosh, S. (2013), Lessons in risk management, resource allocation, operations planning, and stakeholder engagement: the case of the Kolkata Police Force and Durga Puja. *Decision* 40, 249–266 (2013). <https://doi.org/10.1007/s40622-013-0022-0>
- Bhattacharya, T. (2007), Tracking the Goddess: Religion, Community and Identity in the Durga Puja Ceremonies of Nineteenth-Century Calcutta. *The Journal of Asian Studies*. Vol. 66. No. 4 (Nov. 2007) Pp. 916-965.
- Biswas, J.(2017), Uncommon destinations to visit this puja [http://times of india. india times.com/article show/60290940. cms? utm_source=content of interest & utm_medium=text & utm_campaign=cppst](http://timesofindia.com/article/show/60290940.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst)
- Bose, S K., (2021), Bhraman, <https://www.magzter.com/IN/Swarnakshar-Prakasani-Private-Limited/Bhraman/Travel/742578>
- Dalasingh, B. K., Mahalik, G., & Parida, S. (2018). Study on the use of Plants and Plant parts in Durga Puja for Worshipping of the Goddess Durga in Odisha, India. *International Journal of Management Technology and Engineering*, 8, 2911-2918.
- Ghosh, A. (2000). Spaces of Recognition: Puja and Power in Contemporary Calcutta. *Journal of Southern African Studies*, 26(2), 289–299. <http://www.jstor.org/stable/2637495>
- Hussain, P. (2022), Durga puja: the sacred and secular aspects of ritual & perform ativity, Working Paper, Downloaded from academia.edu on 1 March, 2022. <https://www.academia.edu/25702968/>
- McDaniel, J. (2004). Offering Flowers, Feeding Skulls: Popular Goddess Worship in West Bengal. Oxford University Press. ISBN 0-19-516791-0 Pp. 214.

- Mercury Tour Operator(2021), Durga Puja Parikrama, [https://www.mercurytouroperator.com/durga-puja-parikrama/Durga Puja of Rural Bengal with Jungle Safari Tour](https://www.mercurytouroperator.com/durga-puja-parikrama/DurgaPujaofRuralBengalwithJungleSafariTour), [https://www.tourtravelworld.com/packages/durga-puja of-rural-bengal-with-jungle-safari-tour-104076.html](https://www.tourtravelworld.com/packages/durga-puja-of-rural-bengal-with-jungle-safari-tour-104076.html)
- P. Borah (2011). Durga Puja-A celebration of Female Supremacy. EF News International. Retrieved 22 September 2014.
- Singh Sahay S., (2021), Creative Economy of Durga Puja over 32,000 crore, [https://www. The hindu.com/news/national/other-states/creative-economy-of-durga-puja-over-32000-crore-says-study/article36917326.ece](https://www.hindu.com/news/national/other-states/creative-economy-of-durga-puja-over-32000-crore-says-study/article36917326.ece),
- Singh, K., Gantait, A., Puri, G., Swamy, A. (2016), Rural Tourism: Need, Scope and Challenges in Indian Context. Hospitality and Tourism: Challenges, Innovation, Practices and Product Development. (Ed), Dr. Alok Kumar, Adhyayan Publishers and Distributors, New Delhi. (ISBN: 978-81-8435-490-4)
- West Bengal Tourism (2015), Shara dot sav Packages, <https://www.indiamike.com/india/kolkata-calcutta-f21/puja-tour-packages-wb-tourism-t239061/#post1906633>
- West Bengal Transport Corporation(2019). Pujo Parikrama, <https://wbtc.co.in/puja-parikrama/>

Visitors' Intention to Switch from Tactile Experience to Phygital Experience Amid Pandemic in Tourism Industry

Pragha

Krantiraditya Dhalmahapatra

Abstract

The tourism industry is continuously evolving due to the emergence of new technologies. The recent updatation of the decade is the integration of physical and digital space which is referred as phygital. The pandemic seems to have shifted the desires of the tourists from wanting to experience physically and to experience digitally due to the closure of the boundaries and other tourist destinations. This paper highlights the major contribution of technology which enhances the phygital experience of the tourist and makes the tourism industry flourish all through the year without the seasons affecting them. The factors affecting the switching intention and the stages of behavioural change are also highlighted, which helps the service providers to analyse their customer behaviour.

Keywords: *Tactile Experience, Phygital Experience, Virtual Experience, Status Quo Bias, Innovation Diffusion Theory*

Introduction

The development in technologies is not only impacting changes in manufacturing, healthcare, agriculture, textile, and construction but also in the tourism industry. The inquisitiveness to explore places from the age-old period of using maps and magnetic direction scales to google maps has not changed. Tourism is a vital service sector for the growth and development of a country. It is an important commercial activity that supports growth and demand for other industries by generating revenue and employment.

Tourist destination and commuting are interdependent factors, whereby only when the visitors travel to the destination, they can experience the service. But now, with the development of technology, individuals can experience the place from anywhere at any time. Technology plays a major role in tourism, especially during the COVID pandemic. The pandemic has created a lot of stress in the lives of the people where they are compelled to stay inside the house amid the restrictions without allowing them to visit the tourist destinations in the country. Considering the impact of pandemic on tourism sector, covid has brought unprecedented emergencies in the world especially in tourism sector. Tourism had grown 4

Pragha, Branding & Public Relation Executive , Thiagarajar School of Management (TSM) Madurai, Madurai- 625015, Tamil Nadu, India, Email: praghi.praghu@gmail.com, Ph-+91-9655209266

Krantiraditya Dhalmahapatra, Assistant Professor, Thiagarajar School of Management (TSM) Madurai, Madurai- 625015, Tamil Nadu, India, Email: kranti.dhalmahapatra@gmail.com, kranti.dhalmahapatra@tsm.ac.in Ph-+91- 9609747659

percent in 2021, yet well below pre-pandemic levels 4 (World Tourism Organization, 2022). The United Nations World Tourism Organization (UNWTO) reported by April 20, 2020, all major tourist destination will remain closed and travel restrictions will be in place for these places owing to the pandemic situation (World Tourism Organization, 2020). Compared to the same period in 2019, these restrictions amounted to a loss of nearly US\$80 billion in tourism revenue. Tourism contributes to 10% of global GDP and more than 320 million jobs worldwide pre-pandemic. Post pandemic this has been hugely affected. But the implementation of smart technologies in tourism has made the service providers survive in the industry.

Smart tourism which uses ICT-based (Information and Communications Technology) solutions makes tourism services, venues, and experiences more accessible. The focus of the Smart tourism is to blur the lines between the physical and the digital world using technologies (Gretzel et al., 2015). The technology advancement in tourism had made their plans alive by introducing phygital mode of experience in tourism. Current study discusses phygital experience which includes Artificial Intelligence, Big Data Analytics, Augmented Reality (AR) and Virtual Reality (VR), is largely used in the tourism sector as a part of Industry 4.0. Phygital is a term used to express both physical and digital world of experience of an individual together. This phygital mode of experience has made the tourist place omnipresent. This phygital has made interaction viable between the tourist and their digital space. These technologies make the users interact with the virtual world, making their tourists experience the tourist places through immersive platforms from the place where they are in (Neuhofer et al., 2014). This pandemic has made the travellers to revisit their tourist plan and to switch from tactile interaction to phygital experience. The study focuses on switching intention of tourists from physical experience to phygital experience explained through Status Quo Bias (SQB) and Innovation-Diffusion Theory.

The rest of the paper is organized as follows. Section 2 describes literature review and Section 3 highlights proposed approach, Section 4 highlights future research, and Section 5 presents conclusion.

Literature Review

Industry 4.0 has marked its presence in the fast moving world where automation and data exchange take place to create a smarter environment. It promises us a new and developed revolution in the industry, where advanced techniques using developed technologies are integrated. It integrates physical environment (physical production) with smart digital technologies. The industry 4.0 has influenced the tourism sector whereby the real and the virtual environments are brought together to the user's experience, whereas AR integrates virtual information to reality, VR builds a completely virtual environment. With the development of Industry 4.0, tourism has also been integrated with it and has been referred to

as tourism 4.0. Tourism 4.0 works in tandem with Industry 4.0 which interoperability, real time data collection, data validation and analysis.

Big Data Analytics

BDA techniques make it possible to record consumer preferences and analyse market trends. It provides service providers to offer customers personalised experience. Marrese-Taylor et al., (2013) discussed a new method for determining customer preferences for tourism products, especially hotels and restaurants, based on online opinions. Tourism sector has begun to acknowledge the potential of digital media over travellers' realistic atmosphere. Customers' expectations are fulfilled through services such as providing the tourists with customised experience based on the context and place (Beer et al., 2006). Also using big data analytics, the deployment of appropriate adverts for each visitor can increase "click through rates," and big data analytics can help with this (Rezola et al., 2016).

Artificial Intelligence

According to a survey conducted by Tata Consultancy Services (TCS), 85% of travel and hospitality service companies use AI in their operations. Most customers favour self-service technologies to traditional offerings, according to the findings. AI is primarily responsible for this self-service technology. The tourism industry provides with enormous amount of wide data booking for stays and travels (Guan & Du, 2016). These raw data can be converted and processed to gain information and use it in tourism industry for the betterment of the customer experience. Facial recognition, which uses AI can be used in airports. Tourists can go through airport check-ins and all other station check-ins without having their documents checked by multiple departments (Chang & Yang, 2008). The application of Artificial Intelligence in tourism sector helps service providers to customise the experience for their customers and to build chat bots.

Virtual Reality

The human mind desires to escape from the real world to travel to anywhere they desire, and virtual reality (VR) is built upon this. VR has been to the use since a decade where we can see 360-degree video content of any location using a head mounted VR device and the live content of the 360 degrees has also created hype in the market due to its technology, which enables the users to interact and navigate resulting in real time simulation. Due to the interaction of the content through VR, the virtual experiences provide more effective promotion for theme parks than brochures (Wan et al., 2007). VR environment enables user to experience features like visual, aural, and spatial remotely. Creative digital spaces have influenced the human mind to escape from the real world. Many hotels and governments of many developed countries have adopted VR in their website for the tourists to have a virtual tour of their place. The Marriott hotel has launched Virtual Reality Postcards, a virtual travel content platform that includes immersive travel stories that accompany a person travelling to a unique location such

as Beijing's streets or the Andes Mountains. For instance, Time Machine is a hand-held guide where audio and visual system are integrated where user can experience the historical places, and virtual reconstruction of any site (Guttentag, 2010).

Augmented Reality

Augmented reality (AR) components have made the user to experience the real world through the augmented content. The biggest advantage is that there is no physical limitation to experience destination sports through Augmented Reality. Computer-generated things which include 3-D objects and spatialized audio are used in AR to augment the individual's perspective of the actual world. The interaction with these entities occurs in real time to offer the individual with convincing feedback and the appearance of natural interaction. For example, standard equipment will be replaced by Personal Digital Assistants (PDAs); instead of a map, an electronic map with a reliable position sensing mechanism will be used; and guides will be replaced by online access to a data repository with rich multimedia content, spatial data, and other relevant and up-to-date content (Linaza et al., 2008). AR is used to capture geo location of the user and convert it to context-sensitive information on their surroundings. For instance, m Trip, a travel application incorporates augmented reality into city tours information which includes instructions or ratings of attractions is layered on the display using the smart phone camera viewfinder and varies depending on where the phone is pointed (Luley et al., 2012). Use of technologies like AR and VR changed the way travellers can enjoy the tourist destinations (Buhalis & Law, 2008).

Proposed Approach

There is a raising number in the number of new entrepreneurs coming up in tourism industry. This is because the service providers are finding out that there is high switching intention among the consumers. The customer switching intention from offline to online mode for various services is highlighted by customer switching behaviour. There are several theories researchers worked on to explore the importance customer switching behaviour such as migration theory (Peng et al., 2016), theory of planned behaviour (Farah, 2017), status quo bias (Polites & Karahanna, 2012). Status Quo Bias theory explains the factors inhibiting the switching intention of an individual. There are various factors that might affect the switching intention of travellers which includes satisfaction, switching cost, influence of peer group and convenience (Refer Figure 1).

If the customers perceive that switching from physical experience to experience a tourist place through phygital mode:

- Increases their satisfaction, since through phygital mode the information available is abundant and reliable about a destination, then the switching intention is higher.
- Decreases their switching cost, where they need not incur any cost on adopting to a new system, then the switching intention is higher.

- Influence of peer group increases the switching intention.
- Increases their convenience on tourism experience by virtually experiencing the destination from the place they are then the switching intention is higher.

Innovation – Diffusion Theory

We are adopting this theory to describe the stages of visitor's switching intention from the physical experience to the phygital experience. Visitors have to undergo 5 stages of customer switching behaviour under the umbrella of the proposed approach (Rogers, 1995).

Knowledge – In this stage the individual learns about the innovation that is about the phygital experience. The tourist learns about the mechanism of phygital experience.

Persuasion - In this stage the individual learns about the merits and demerits of the new phygital experience in tourism. The peer group affects the individual in switching behaviour in this stage. They continue to collect and evaluate information from various internet sources about the phygital experience. The knowledge gained about the phygital experience plays a vital role in persuasion stage.

Decision – In this stage, the individual accepts or rejects the use of phygital mode of experience. If there is a trial version on phygital experience, then individuals prefer to opt the trial version and this experience creates a higher intention to switch behaviour. The individual may also decide for active rejection, where the individual first decides to adopt but later declines or does passive rejection where the individual directly decides to reject adoption. Communication channels play an important role in deciding to adopt the phygital mode.

Implementation - In this stage, the individual adopts the phygital experience and innovation decision process ends. However, uncertainty about the new technology of phygital mode of experience in tourism may still be a case of dilemma in adopting it as a regular practice.

Confirmation – The decision to adopt as a practice can be reversed if the individual is receiving conflicting messages on the phygital experience. Thus, the attitude of an individual plays a vital role in this stage.

Future scope

Current study identified some of the potential areas where significant research and development can be taken place.

- Identifying the scope of VR there are various companies that have come up with new inventions like Google Earth VR, Oculus and others.
- The future of technology will decide how the tourism industry has to innovate themselves adapting the physical experience for their customers. The service providers had to adapt this development with thought any delay by understanding the

customer need by modifying their business model and concentrating on innovation and service co creation for a better memorable experience of their customers.

- Future generations growing up with the blending of AR and VR in the day-to-day life will perceive the world in a totally different way. Hence, ways to reduce the difference between digital and real-world experience has to be analysed and implemented.

Conclusion

This paper concludes that the implementation of Phygital mode of experience in tourism industry would benefit both the service providers and the customers and the factors that affect the switching intention. The Innovation-Diffusion Theory has been used to describe the various stages of the customer's switching behaviour. The factors significantly influencing the switching intention are satisfaction, switching cost, influence of peer group and convenience. The AR and VR devices has been implemented not merely in tourism industry but also in many factory workers for their safety in the production process (Dhal mahapatra et al., 2020).

The limitation of the current study is that most Industry 4.0 solutions were not designed with the primary goal of serving the tourism industry in mind. New technology can fascinate visitors, but some are becoming more aware of their drawbacks after extended use (Li, 2017). Indeed, as the usage and reliance on Tourism 4.0 has grown in travellers experience, significant human-technology interaction concern has been raised, (Weaver & Moyle, 2019), which includes Techno stress, information anxiety, de humanisation and depersonalization of tourist experiences, human rights violations, perceived riskiness of technology use, and eventually the value destruction of tourist experiences are all possible outcomes (Kim & Qu, 2014). Pencarelli, (2020) identifies Tourism 4.0's shortcomings, including the lack of an individual centric and a sustainability aspect, and emphasis on the effectiveness of latest innovative solutions. The COVID-19 pandemic has increased the rate of technological advancement and the frequently uncritical embrace of technology (Gretzel et al., 2020). Few of the tourism Promoters, for example, have started shifting to updated virtual solutions to please people's urge to travel, such as virtual museum tours and virtual reality concert in Helsinki which drew more than a million people. Technology have changed the travel behaviour of the tourist making the travel activities spontaneous and unplanned trips have become regularly due to updated information. Therefore, the future study should focus on diminishing the line of difference between tactile interaction and phygital mode of experience.

References

- Beer, T., Höpken, W., Zanker, M., & Rasinger, J. (2006). An Intelligent Information Push Service for the Tourist Domain. *17th European Conference on Artificial Intelligence*, 124–128.
- Buhalis, D., & Law, R. (2008). Progress in information technology and tourism management: 20 years on and 10 years after the Internet-The state of eTourism research. *Tourism Management*, 29(4), 609–623.
- Chang, H. L., & Yang, C. H. (2008). Do airline self-service check-in kiosks meet the needs of passengers? *Tourism Management*, 29(5), 980–993.
- Dhalmahapatra, K., Das, S., & Maiti, J. (2020). On accident causation models, safety training and virtual reality. *International Journal of Occupational Safety and Ergonomics*, 1–17.
- Farah, M. F. (2017). Application of the theory of planned behavior to customer switching intentions in the context of bank consolidations. *International Journal of Bank Marketing*, 35(1), 147–172.
- Gretzel, U., Fuchs, M., Baggio, R., Hoepken, W., Law, R., Neidhardt, J., Pesonen, J., Zanker, M., & Xiang, Z. (2020). e-Tourism beyond COVID-19: a call for transformative research. *Information Technology and Tourism*, 22(2), 187–203.
- Gretzel, U., Sigala, M., Xiang, Z., & Koo, C. (2015). Smart tourism: foundations and developments. *Electronic Markets*, 25(3), 179–188.
- Guan, D., & Du, J. (2016). Cross-media big data tourism perception research based on multi agent. *Proceedings of the 2015 Chinese Intelligent Systems Conference, Lecture Lecture Notes in Electrical Engineering*, 359, 353–360.
- Guttentag, D. A. (2010). Virtual reality: Applications and implications for tourism. *Tourism Management*, 31(5), 637–651.
- Kim, M., & Qu, H. (2014). Travelers' behavioral intention toward hotel self-service kiosks usage. *International Journal of Contemporary Hospitality Management*, 26(2), 225–245.
- Li, Y. (2017). Individuals' motivations to adopt smart technologies for tourism - discrepancy between initial and post adoption proceedings. *Distributed, Ambient and Pervasive Interactions: 5th International Conference, DAPI, 10291 LNCS*, 77–92.
- Linaza, M. T., García, A., Torre, I., & Torres, J. I. (2008). Interacting with augmented assets in cultural tourism. *Transactions on Edutainment I, LNCS 5080*, 107–117.
- Luley, P., Perko, R., Weinzerl, J., Paletta, L., & Almer, A. (2012). Mobile augmented reality for tourists - MARFT. In *Advances in Location-Based Services* (pp. 21–36).
- Marrese-Taylor, E., Velásquez, J. D., Bravo-Marquez, F., & Matsuo, Y. (2013). Identifying customer preferences about tourism products using an aspect-based opinion mining approach. *Procedia Computer Science*, 22, 182–191.
- Neuhofer, B., Buhalis, D., & Ladkin, A. (2014). A Typology of Technology-Enhanced Tourism Experiences. *International Journal of Tourism Research*, 16, 340–350.
- Pencarelli, T. (2020). The digital revolution in the travel and tourism industry. *Information Technology and Tourism*, 22(3), 455–476.

- Peng, X., Zhao, Y. (Chris), & Zhu, Q. (2016). Investigating user switching intention for mobile instant messaging application: Taking WeChat as an example. *Computers in Human Behavior*, 64, 206–216.
- Polites, G. L., & Karahanna, E. (2012). Shackled to the Status Quo: The Inhibiting Effects of Incumbent System Habit, Switching Costs, and Inertia on New System Acceptance. *MIS Quarterly*, 36(1), 21–42.
- Rezola, A., Gutierrez, A., & Linaza, M. T. (2016). Automatic Persistent Personalization of Ads in Tourism Websites. *Information and Communication Technologies in Tourism 2016*, 17–30.
- Rogers, E. M. (1995). *Diffusion of innovations*. New York : Free Press,.
- Wan, C.-S., Tsaur, S.-H., Chiu, Y.-L., & Chiou, W.-B. (2007). Is the Advertising Effect of Virtual Experience Always Better or Contingent on Different Travel Destinations? *Information Technology & Tourism*, 9, 45–54.
- Weaver, D. B., & Moyle, B. D. (2019). 'Tourist stupidity' as a basic characteristic of 'smart tourism': challenges for destination planning and management. *Tourism Recreation Research*, 44(3), 387–391.
- World Tourism Organization. (2020). UNWTO News release.
- World Tourism Organization. (2022). UNWTO News release.

Promoting Happiness in Organisations: The Guiding Principle for Cultivating Positive Work Environments in the Current Era

Palak Verma

Abstract

Purpose- This paper examines the concept of Happy Organizations and presents several factors that contribute to the development of Happy organizations in the context of the New Normal. This study presents a theoretical framework that delineates the various factors that contribute to the establishment of positive and fulfilling work environments within the context of the modern Digital era.

Design/Methodology/Approach- This study is entirely based on available Secondary Data. The researchers engaged in conducting a comprehensive literature review. The Database selected for undertaking this study is SCOPUS, and the chosen search engine is Google Scholar.

Findings- Research findings indicate that organizations that prioritize happiness demonstrate a greater level of success compared to those that do not allocate resources towards fostering a positive work environment. The factors that play a significant role in the formation of happy organizations include technology empowerment, the adoption of resilient organizational structures, happy employees, forgiveness training, employee engagement, and research and development practices.

Practical Implications- The suggested model exhibits potential for universal application within organizations. In the current context, as organizations resume their operations, it is imperative for top management to undertake requisite measures aimed at fostering a culture characterized by resilience and well-being within the organization. Further planning of training could be undertaken based on the model that has been proposed.

Originality/Value- This paper presents an innovative theoretical contribution by introducing a novel concept and model for constructing Happy Organisations in the context of the New Normal that has not been addressed earlier.

Keywords: Happy Organizations, Organizational Happiness, Technology Empowerment, Resilient Organizations, Pandemic, Happy Employees

Introduction

Due to the spread of coronavirus at a global level in 2019, industries and Academia have adopted new ideas and re-engineered their work processes from offline to online modes to rapidly catchup with the Tech-environment and continue their work efficiently. Technology infusion in all jobs at the workplace is one of the key developments in every Organization nowadays.(Dey et al., 2020). Work from home led to narrowed margins between Personal life and professional space, which integrated with high levels of organizational expectations, which ultimately made it impossible for the employees to unplug from technologically upgrading themselves.(Savić, 2020). The new work patterns have led to many changes in organisations' working practices.

Further, Happiness in the workplace is one of the most researched constructs in the field of Organizational Belongingness. Past researchers never considered Happiness a construct to be studied in the Organizational context. Still, Happiness has cropped up as one of the most researched topics in almost every field related to employee and organizational growth.(Fisher, 2010a) According to Fisher, an individual's Happiness is generally associated with his/her own pleasant emotions, well-being and positive attitudes towards certain and uncertain situations. This interest in Happiness has recently started spreading to businesses, organizations, institutions etc.(Fisher, 2010b). Happy Employees contribute to organizational success with higher levels of efficiency and welfare (Arslan & Polat, 2018). Happiness at work is a broad concept that includes many constructs ranging from employees personal behaviour towards Happiness to an overall level of Happiness at a departmental level and organizational level. (Fisher, 2010a)

The pandemic created a huge level of chaos for organizations, thus leading to higher levels of stress and health issues among employees. (Elsafy & Ragheb, 2020). Organizations suffered during the VUCA times. Due to the uncertainty organisations face, they adapted tech-based working patterns that drastically changed and digitalized the work environment. (Kaushik, 2020). Due to the recent uncertainties faced by the world, Organizations need to develop and build strong, Happy workplaces to support and satisfy employees and managers as Happy Employees build happy Organizations.(Sciences, 2020)

Building a Happy organization is not just a fancy notion for organizations nowadays. It has been considered an important aspect that is required to be integrated in almost all the strategies and goals being framed daily for managerial levels by the Top management and the human resource management department. Many factors positively enhancing and building Happy organizations have already been studied in past research. But many old factors have extended their scope, and many new factors emerged after the coronavirus spread. As the working patterns changed, new factors impacting organizational Happiness cropped up, which might not have been of great relevance earlier. Still, in today's time, the elements significantly

impact building Happy organizations. These extended and enriched factors have not yet been studied.

In this paper, we propose to take the construct of Building Happy organizations a little further by offering enhanced and emerging factors impacting organizational Happiness. We base our premise on the present pandemic situation and how this has expanded the scope of Organizational Happiness. Further, we propose a model strengthening the basis for building happy organizations in the New Normal.

Literature Review

In this section, we undertake an extensive literature review on Happy organizations as the primary construct and various factors impacting its building process. We also review recent literature on how organisations coped with the pandemic and how this requires an urgent need to act towards achieving a higher level of organizational Happiness.

Theoretical Background

The pandemic forced organizations to adopt new technologies (Software applications and hardware devices) to seamlessly run their businesses and industries. (De' et al., 2020) due to the implementation of the social distancing norms. Due to the recent uncertainties faced by the world, Organizations had to develop and build positive and Happy workplaces to support and satisfy employees and the management. (Sciences, 2020). All these require an exploration of various factors that contribute towards strengthening organizational happiness levels during uncertainty.

Happy Organization

Zappos is about delivering Happiness to the world. — Tony Hsieh, Chief Executive Officer, Zappos
Happiness is a word connected with almost every possible outcome related to employees, organisations, departments, or workplaces. (Simon-thomas, 2018). Happiness is a broad umbrella term that cannot be defined precisely. Happiness is affected by all kinds of big or small events that happen in the workplace in an organization. It is also impacted by Employees' attitudes, characteristics, behaviours and responses toward the expectations and needs of the Organization. (Fisher, 2010a) Clashes between team members or disagreements between employees and top management are shared in an organization that might deteriorate workers' well-being, innovation and productivity. (Toussaint et al., 2019) According to a Happiness case study based on Zappos's experience and work culture, Happy organizations create a culture for their employees where personal well-being and Happiness are emphasized at all jobs. (Swinmurn, 2016). Happy organizations are based on plans framed at the organizational level focusing on building joyful employees with a goal to maximise the productivity levels, innovation mindsets and a profitable growth patterns. (Sciences, 2020) Happy organizations design their companies' organizational structures based on High Purpose, Autonomy, Meaningful Relations and Impacting lives by working differently. (Business & For, 2012) .

Exploring various factors impacting the basis for building Happy Organizations due to the pandemic is at a very early stage right now. But according to past Literature, Organizational Happiness is one of the most influential constructs helping organizations to gain a competitive advantage in their respective sector. (Simmons, 2013) The employees being hired in the Organization and the managers' personalities firmly hold a vibe influencing the team energies at the workplace (Sciences, 2020). Happy organizations are those which Hire Happy employees, have an urge to work for the community, understand employees' needs, surprise their employees with sudden fun activities and outings, and adapt thoughtful actions to create a happy work environment. (Stein, 2021) Organizational Happiness is of great relevance for business growth, thus enhancing the decision-making potential of the management. The Happiness of an organization is embedded in its DNA, i.e. a resilient organizational Structure. (Köse & Kahveci, 2021)

Creating Happiness at work does not necessarily need money. Still, executives and employees must be determined to create a friendly atmosphere that increases creative thinking and freedom for new ideas. It is said, "Quality organization starts with quality personnel, not a quality machine or quality office. Quality personnel are personnel with knowledge, competence, creativity, virtue, and happiness" (Chaiprasit & Santidhiraku, 2011). Happy mindsets lead to improved workplace Happiness, greater Job satisfaction and accelerated Employee Retention. (Pelosi & Specialist, 2015) Organizational Happiness increases productivity, financial performance, creativity, cognitive flexibility, cooperativeness, wage, and organizational performance, and it decreases employee absenteeism (Arslan & Polat, 2018)

Organizational Happiness refers to the Happiness of an employee within his/her Organization as an individual, and it means how happy the individual is in his/her workplace and life. (Tosten et al., 2018) Happiness in the workplace is positively related to the Productivity of an organization (Wesarat et al., 2015). According to past research, factors like leadership, Work life Quality, and Job Satisfaction of employees positively impact Organizational Happiness. (Algan & Ummanel, 2019). A lot of factors influence Happiness at the workplace. Finally, any organization utterly committed to managing Happiness as a part of its responsibility builds positive environments and Healthy & happy relationships, which ultimately enables the Organization to achieve its goals efficiently.

Impact of COVID-19 on Organizations

Covid-19, one of the most disastrous global pandemics, heightened the need for improving public Health and Social measures to reduce the mortality and Morbidity caused by the outbreak of this virus. These health and social measures include personal safety, environmental supervision, and travel restrictions nationally and internationally. **(Who, 2020)** . The most significant change implemented due to this crisis was the Global lockdown. The spread of Covid-19 has come up with many trend-setting developments at every level in

the country. The recent pandemic locked up people in their homes. Technology was the only means of communicating and connecting with their social circles. Big boardroom or conference meetings concentrated to a small screen in remote areas. (Kaushik, 2020).

According to a recent study, Organizations which planned to support their employees with complete access and updates regarding the pandemic and Financial stability gained higher levels of Employee retention (Elsafy & Ragheb, 2020). The current VUCA environment has broadened the scope of responsibility on employers and HR managers, as, they are required to switch towards an active approach bringing forth best practices favouring the employee and organizational needs. (Kaushik, 2020) One of the most visible changes that occurred due to the spread of the Corona virus was the accelerated dependence of work and life on Technology. (De' et al., 2020)

India has faced many natural and manmade disasters in the past, but it's a rare situation that limited social lives to such a great extent. Past research highlights that Enhancing employees' level of Happiness ultimately enhances the attractiveness of the Organization to the employees as well as the external world **(de Waal, 2018)**. But recent works of literature have pointed out various factors new to this field of study inexploring the factors contributing to building happy Organizations. Some old factors have also contributed towards building happy organizations, but the pandemic has expanded the scope of those factors. This paper proposes various components that significantly contribute toward building happy Organizations.

Discussions and Developing Propositions

Discussion 1: Happiness is not an end result. Happy organizations design their companies' organizational structures based on High Purpose, Autonomy, Meaningful Relations and Impacting lives by working differently. (Business & For, 2012). Every Organization has a different culture which defines its DNA. Organizational DNA showcases the levels of resilient organizational structures that are strong enough to handle certain uncertain situations (Köse & Kahveci, 2021). Kaptein described corporate DNA as the code that expresses the identity and heritage of an organization (Kaptein, 2015). In uncertain times, Resilient Organizational Culture plays a unique role in building and implementing strong comebacks and adapting resilient mindsets. (Zarnadze & Kasradze, 2020). According to a recent study focusing on the pandemic situation, Organizational Cultures significantly Predict organizational happiness levels (Köse & Kahveci, 2021). Organizational DNA and organizational Happiness support each other and contribute positively to building Happy workplaces. Based on the above discussion, we propose that

Proposition 1: Resilient Organizational Structures Positively Contribute Toward Building Happy Organizations in the New Normal

Discussion 2: Quality organization starts with quality personnel, not a quality machine or office (Chaiprasit & Santidhiraku, 2011). Happy Employees lead to successful organizations. (Pelosi & Specialist, 2015). According to an article in The Economics Times, top companies have prioritized Human Capital as they understand the importance of Employee well-being.

Top Companies like TCS, Accenture, Wipro, Big Basket etc., have supported their employees throughout the unprecedented times. Yahoo Finance (2020) said there is a significant positive relationship between employees' Happiness and the company's success or performance. Happy employees form Happy organizations. According to past research, an employee with the highest amount of work experience might be the worst person to work with within an organization. An employee's personality plays a significant role in handling different situations.

Hiring Happy Employees positively strengthens the basis for building happy Organizations. (Stein, 2021). Past literature has always supported that the Happy-Productive worker hypothesis may be more accurate than we thought. (Fisher, 2010a). A recent study by Nemteanu, Marcela Sefora, Dinu, Vasile Dabija, and Dan Cristian proved an effective and positive relationship between job instability and employee insecurity during the COVID times (Nemteanu et al., 2021). Employees' personality plays a significant role in supporting these uncertain times. An employee's mindset and that feeling of self-fulfilment; group working, attaining goals; leadership; sustainability and job/family balance during difficult times enhances employees Happiness, ultimately making the workplace happier (Dutschke et al., 2019). On the basis of the above discussion, we propose that

Proposition 2: Happy Employees Positively Contribute Towards Building Happy Organizations in the New Normal

Discussion 3: Global disasters and uncertainties crop-up new situations which might not be imagined in normal circumstances. In situations like these, new plans, policies and work patterns are implemented. The current VUCA environment has broadened the scope of responsibility on employers and HR managers, as they are required to switch towards a proactive approach bringing forth best practices favouring the employee and organizational needs. (Kaushik, 2020) Organizations are revering through huge and unimaginable business changes, which requires adapting trial and error approaches. (Elsafy & Ragheb, 2020) Mistakes are common when something new is being adapted for the first time. For example, work from home became the new normal for every Organization, irrespective of the sector they belonged to (Vahdat, 2021). Building and adapting with the new work environment is uncertain for organizations and employees. A Study conducted by Loren Toussaint, Frederic Luskin, Rick Aberman, and Arthur DeLorenzo Sr introduced the concept of Forgive for good and highlighted the point that forgiveness training can be effectively implemented in the workplace setting as a means to promote wellness and increase productivity (Toussaint et al., 2019). In an uncertain situation where every individual is striving for survival, mistakes should be considered experiences. Forgiveness training would positively contribute to building a mindset that worker well-being and productivity benefit when forgiveness skills are taught (Toussaint et al., 2019).

Proposition 3: Forgiveness Training Positively Contributes Towards Building Happy Organizations in the New Normal

Discussion 4 : Technology use and adaption at the workplace is no longer an option (Dey et al., 2020). It's a new reality of the new normal where employees need to learn and upgrade themselves about the technologies for performing their day-to-day jobs. (Vahdat, 2021). Earlier, employees had an option to work online or offline. But the lockdown forced all the sectors to shift from offline to online modes. Organisations and institutions adapted and provided complete access to Technology and the need of the hour was to learn and adapt that Technology (Carroll & Conboy, 2020). Based on the above Literatures Reviewed, Technology has proved to be the only means for continuing work in organizations and institutions. Technology has empowered employees to fulfil their job requirements and enhanced their productivity even during the pandemic (Dey et al., 2020). Hence, technology adoption by organizations is now one of the most critical factors impacting employees' overall performance and ability to contribute to the new age of Tech-empowered organizations by seamlessly adapting the new tech-infused work patterns. Happy Organizations focus on employee well-being and support them to overcome their shortcomings. On the basis of the above discussion, we propose that

Proposition 4: Technology Adoption at the Workplace Positively Contributes Towards Building Happy Organizations in the New Normal

Discussion 5: Employee engagement has been considered one of the most important aspects for enhancing Employee happiness at the workplace (Othman et al., 2018). An old study suggested that employee engagement regularly extends the benefits further than the employees' individual Happiness (Rodríguez-Muñoz et al., 2014). Covid times have posed various unfamiliar challenges to employees, altering their working patterns. Employees being unable to understand the new tech-based functional ways has hampered the employee engagement intensity at the workplace. For example, in educational institutions, a recent assessment by the National Foundation for Educational Research highlighted that the pandemic had burdened academicians with work-from-home demands, the use of advanced teaching methods, parental pressure, additional work duties, and the care of young children (Walker et al., 2020). This has led to imbalanced engagement among the employees. Employee engagement enhances the competitive advantage of the organizations and positively contributes to upskilling and reskilling of employees. (Lalić et al., 2020). Hence, Employee engagement is a vital factor impacting the organizations' productivity in the new normal.

Proposition 5: Employee Engagement at the Workplace Positively Contributes Towards Building Happy Organizations in the New Normal

Discussion 6: Organizations in the new normal require a separate set of research-oriented approaches for effective workplace management. The pandemic cropped up circumstances unanticipated by the governments, policymakers, organizations, etc. Take an example of the education, as the worldwide lockdown impacted the knowledge exchange patterns and may be the education sector was not ready for such a drastic shift in the teaching-learning

paradigms(Doyumaç et al. 2020). Research has become the general basis for addressing the limitations faced by employees. According to a recent study, faculties are willing to participate in significant research projects, which helps them enhance their happiness levels at the workplace. (Arora, 2020). Hence, Research and development system in the Organization impacts the employees' happiness levels at the workplace.

Proposition 6: Research & Development Practices at the Workplace Positively Contribute Towards Building Happy Organizations in the New Normal
Proposed Framework



Figure 1 Factors Contributing to Building happy Organizations

Conclusion

This paper is meant to examine the dimensionality of Happy organizations as a construct and to investigate the factors positively contributing toward building Happy organizations in the new normal. Various works of literature have helped us explore the factors contributing toward building happy organizations in the new normal as Technology Empowerment, the adaption of resilient organizational structure, Happy Employees, Forgiveness Trainings, Employee engagement, and Research & development practices.

Theoretical Contribution and Directions for Future Research

This paper makes various conceptual contributions to the existing literature on building Happy organizations in the New Normal, by studying the theories and research outcomes related to Happiness in the workplace and Organization's situation during COVID times. Specifically, our primary contribution is advancing the body of knowledge on the impact of the pandemic on factors contributing to building Happy organizations. We theorized old and new factors contributing toward building Happy Organizations in the New Normal. The second contribution lies in extending the body of work on how various components contribute towards enhancing Happiness at workplace in the new tech-based working Environment. The final contribution lies in extending the literature of factors strongly contributing toward building happy organizations to become more resilient in the uncertain Environment.

Apart from the above contributions, more in-depth and rigorous research is needed on this construct of Happy Organizations vis-à-vis its relationships and connections with other institutional and management-related outcomes due to the change in working patterns because of the pandemic. This study aims to widen our perceptions of Building Happy organizations and its transformation due to the pandemic, ultimately strengthening the knowledge base in this domain to add new dimensions to the existing Organizational Happiness and Well-being literature.

Several directions for future research could be explored further to expand the frontiers of knowledge in this domain. For validating the proposed model, Employees from different sectors could be approached, and data could be collected from primary sources. Studies could be undertaken to find empirical support for the model. Next, based on the proposed model, new scales and measures are required to be developed for measuring the levels of Organizational Happiness so that empirical studies can be conducted by collecting primary Data with greater ease. Future research must also explore upgraded theories and other possible dimensions of building Happy Workplaces in different nations which follow different philosophies. Further, the validity of the proposed model can be checked by collecting data from different sections of society, which would be a significant theoretical contribution to future studies in this field.

Managerial Implications

The proposed model can be implemented across all organizations to test the positive enhancement levels towards building Happy Organizations. In the present situation, when the organizations are opening up again, the top management should take the necessary steps to develop a culture of resilience and health in the Organization. Training could be planned further based on the proposed model. This model is appropriate for all organizations, irrespective of their sector. Step-by-step inculcation of all the factors in the model would lead to building a strong Happy Organization

Conflict of Interest

This research work has not been funded by any funding organization. Thus, there is no Conflict of interest between any parties.

References

- Algan, E. K., & Ummanel, A. (2019). Toward sustainable schools: A mixed methods approach to investigating distributed leadership, organizational Happiness, and quality of work life in preschools. *Sustainability (Switzerland)*, 11(19).
- Arora, R. G. (2020). Happiness among higher education academicians : a demographic analysis. 14(1), 3–17.
- Arslan, Y., & Polat, S. (2018). Adaptation of Well-Being at Work Scale to Turkish. *Educational Administration: Theory and Practice*, 23(4).
- Business, T. H. E., & For, C. (2012). Stanford2 Business the Business Case for Happiness. July.
- Carroll, N., & Conboy, K. (2020). Normalising the "new normal": Changing tech-driven work practices under pandemic time pressure. *International Journal of Information Management*, 55(June), 102186.
- De', R., Pandey, N., & Pal, A. (2020). Impact of digital surge during Covid-19 pandemic: A viewpoint on research and practice. *International Journal of Information Management*, 55(June), 102171.
- Dey, B. L., Al-Karaghoul, W., & Muhammad, S. S. (2020). Adoption, Adaptation, Use and Impact of Information Systems during Pandemic Time and Beyond: Research and Managerial Implications. *Information Systems Management*, 37(4), 298–302.
- Dutschke, G., Jacobsohn, L., Dias, A., & Combadão, J. (2019). The job design happiness scale (JDHS). *Journal of Organizational Change Management*, 32(7), 709–724.
- Elsafty, A., & Ragheb, M. (2020). The Role of Human Resource Management Towards Employees Retention During Covid-19 Pandemic in Medical Supplies Sector - Egypt. *Business and Management Studies*, 6(2), 50.
- Fisher, C. D. (2010a). Happiness at Work. *International Journal of Management Reviews*, 12(4), 384–412.
- Fisher, C. D. (2010b). Happiness at Work. *International Journal of Management Reviews*, 12(4), 384–412.
- Kaptein, M. (2015). The Living Code: Embedding Ethics into the Corporate DNA. *SSRN Electronic Journal*, May.
- Kaushik, M. (2020). The Impact of Pandemic COVID -19 in Workplace. *European Journal of Business and Management*, May, 8–18.
- Köse, Ö., & Kahveci, G. (2021). An Analysis of Relationship Between Schools' DNA Profiles and Organizational Happiness According to the Perception of Teachers. *Journal of Education*.
- Lalić, D., Milić, B., & Stanković, J. (2020). Internal Communication and Employee Engagement as the Key Prerequisites of Happiness. 5, 75–91.

- Nemteanu, M. S., Dinu, V., & Dabija, D. C. (2021). Job insecurity, job instability, and job satisfaction in the context of the COVID-19 pandemic. *Journal of Competitiveness*, 13(2), 65–82.
- Othman, A. K., Mahmud, Z., Noranee, S., & Noordin, F. (2018). Measuring employee happiness: Analyzing the dimensionality of employee engagement. *Advances in Intelligent Systems and Computing*, 739, 863–869.
- Pelosi, C., & Specialist, I. (2015). *Happy Employees , Successful Organizations*. July.
- Rodríguez-Muñoz, A., Sanz-Vergel, A. I., Demerouti, E., & Bakker, A. B. (2014). Engaged at Work and Happy at Home: A Spillover–Crossover Model. *Journal of Happiness Studies*, 15(2), 271–283.
- Savić, D. (2020). COVID-19 and work from home: Digital transformation of the workforce. *Grey Journal*, 16(2), 101–104.
- Sciences, A. (2020). Consideration over a Happy Organization. 14, 1–3.
- Simmons, B. L. (2013). Organizational Characteristics of Happy Organizations. *Well-being*, III, 1–18.
- Simon-thomas, B. Y. E. R. (2018). The Four Keys to Happiness at Work WANT TO BE What does Happiness at work mean ? 1–8.
- Stein, B. C. (2021). 7 Simple Ways To Cultivate A Happy Workplace. 13–15.
- Swinmurn, N. (2016). Resisting Being Put in a "Box." 1–6.
- Tosten, R., Avci, Y. E., & Sahin, E. (2018). The relations between the organizational Happiness and the organizational socialization perceptions of teachers: The sample of physical education and sport. *European Journal of Educational Research*, 7(1), 151–157.
- Toussaint, L., Luskin, F., Aberman, R., & DeLorenzo, A. (2019). Is Forgiveness One of the Secrets to Success? Considering the Costs of Workplace Disharmony and the Benefits of Teaching Employees to Forgive. *American Journal of Health Promotion*, 33(7), 1090–1093.
- Vahdat, S. (2021). The role of IT-based technologies on the management of human resources in the COVID-19 era. *Kybernetes*, ahead-of-p(ahead-of-print).
- Wesarat, P. O., Sharif, M. Y., & Majid, A. H. A. (2015). A conceptual framework of Happiness at the workplace. *Asian Social Science*, 11(2), 78–88.
- Who. (2020). Changes from the previous version. <https://www.who.int/publications/i/item/considerations-in-adjusting-public-health-and-social-measures-in-the-context-of-covid-19-interim-guidance>
- Zarnadze, N., & Kasradze, T. (2020). Strong Organizational Culture – An Effective Tool for Companies to Survive in a Pandemic World. *European Journal of Language and Literature*, 6(2), 1.
- <https://economictimes.indiatimes.com/news/company/corporate-trends/in-times-of-covid-19-crisis-top-companies-give-priority-to-employees-wellbeing/articleshow/74964709.cms>
- <https://finance.yahoo.com/news/research-indicates-happiness-powered-autonomy-100000520.html>



Chief Editor
TSM Business Review Office
THIAGARAJAR SCHOOL OF MANAGEMENT
 Pambanswamy Nagar, Thiruparankundram
 Madurai – 625005, India
 Email: editortbr@tsm.ac.in