

Digital Transformation of Hospitality Businesses and Workplaces - A Way Forward to Good Governance and Sustainable Development

¹Saurabh Bharti, ²Nikhil Saini, ³Lovely Kumari, ⁴Punita Thakur

¹Assistant Professor, UITHM Chandigarh University, India, saurabhe7251@cumail.in

²Research Scholar, School of Hospitality & Tourism GD Goenka University, India, nikhil.saini@gdgu.org

³Assistant Professor, UITHM Chandigarh University, India, lovely.e7755@cumail.in

⁴Assistant Professor, UITHM Chandigarh University, India, punitathakur89@gmail.com

Abstract

Customer behavior in hospitality and travel started to change with the advent of the digital age. From booking their accommodations within a few clicks, to receiving detailed information about their accommodations, such as customer service, activities, and room features, it is expected to have a customer-centric feeling. The aim of this study is to find out how the digital transformation in the hospitality sector can bring good governance and sustainability. The paper primarily relies on secondary sources. Information about hospitality digital transformation was primarily gathered from literature reviews. The data collected was analyzed for common themes between the three parameters: governance, sustainability, and digital transformation. The study resulted that using analytics as digital technology help in increasing customer experience. Many firms realize the advantages of digital transformation in the hotel sector by increasing brand recognition and operational efficiency, and by enhancing customer experience. Digital revolution has largely reached all industries, and one of them is hospitality. Sadly, just a few firms have done so with the constraint of innovation. It tends to be adequate despite the tremendous development of technology in the past decade. More and quick technology innovations are necessary for the hospitality business.

Keywords: Digital Transformation, Governance, Sustainability, Tourism and Hospitality Business.

INTRODUCTION

Customer service has always been dominated by automation in the travel industry. After the Second World War, American Airlines started automating flight reservations with the Reseriorsystem, later replaced by IBM's Sabre system, released in 1960 (Vinod, B. (2021)). Sabre is one of the biggest global distribution systems (GDS) used by travel agencies to make reservations and accept payments online for flights, hotels, and car rentals for clients, as well as competing with Galileo (Travelport) and Amadeus. From the introduction of the World Wide Web decades

ago, digital transformation has existed (Emmanuel, A. A.(2018)). For the last two decades, hotels and travel agencies controlled the hospitality and tourism industries. The entry of new competitors often motivates companies to become digital. In the transformation market, Uber's rapid success - and subsequent disruption - is a perfect example. Taxi firms, car rental companies, automobile manufacturers, and even bike-sharing companies like Citibike were forced to adapt their business models to incorporate similar technology(Nikitas, A. (2019)). It is rare for digital transformations to be self-motivated, and many fail because they are not prepared.

Literature Review

Digital transformation in hospitality business

Hospitality professionals must invest wisely in technology and understand how to benefit optimally from technology to stay competitive, satisfy today's customers, and remain competitive (Momongan & Papandreou, 2018). It is crucial to analyze the objectives and customer types to determine what kind of technology is needed to integrate (Tutek et al., 2018). In self-service, customers do not have to interact directly with employees, which is a preferred approach by business people because it is faster and more productive.

The implementation of self-service technology is not aligned with the values of luxury hotels, but it cannot be avoided as technological development cannot be halted (Tomašević, 2018). Next to offering a personalized experience at scale, it offers a remarkable ability to predict customer needs in a timely manner that is based on customer itself (Hospitality Technology, 2018). Also on the horizon are robots. As bartenders, receptionists, room service providers, housekeepers and concierges, they are being introduced in major hotel chains. In addition to being able to move at human speeds, robots with Wi-Fi sensors can also ride elevators independently (Seitzman, Bhattacharjee, & Seeley, 2017). A front desk representative can also help guests with questions regarding hotel facilities, services, and operating hours (Bellini & Convert, 2016). Human interaction plays a vital role in the luxury experience, and in certain areas it is highly valued. However, the level of use should be carefully considered.

Governance in hospitality business

Among the most difficult challenges for an organization is to build and manage a successful operating model; the government plans, funds, and executes its IT programs; and it solves problems in a creative way based on the business and customer objectives. For the most successful companies, evaluating the impact of web-based initiatives and funding them most appropriately is a key factor. In order to achieve high performance,

organizations use innovative governance models that change both organizational dynamics and interpersonal dynamics inside and outside the organization. There is less bureaucracy and less hierarchy in the work process. Sometimes, leadership doesn't follow government. Businesses that have achieved success in the internet industry have built flexible governance structures that allow them to adjust to changing market conditions.

Develop cross-functional teams to complete projects spanning multiple departments across the organization. Consequently, this helps to resolve conflicts and to spur innovation within a company. Focus on quantifiable business results and short-term benefits from IT expenditures. To thrive online, encourage accountability. Develop a compensation and incentive structure that is inclusive of all worker levels. If you are more familiar with outdated applications or manual methods, try adopting Web-based apps and common tools. Businesses should decide for themselves and along the process IT provides a strategic direction.

Sustainable development in hospitality business

In a development project or undertaking, sustainable development means utilizing productive resources in a way that ensures environmental, social, and economic sustainability over the long run. By employing sustainable development techniques, all project stakeholders can benefit from long-term socioeconomic benefits without compromising future generations' ability to meet their own needs. Vivek (2012) asserts that customer engagement refers to a customer's involvement in what the organization provides or does. Three aspects of client involvement have been discovered by Brodie et al. (2013): cognitive, emotional and conductual. Analysis of branded applications by Bellman et al. (2011) reveals two categories: information and experience. The content of an informative app provides a useful or functional experience that enables consumers to achieve their objectives. The experience element of providing experiential rewards is inherently exciting and entertaining.

Bellman (2011) says that "relaxation and relieve tension" is the reason for connecting with mobile application. Utilitarian and experiential motives are linked to the forms of motivation, which Kim discovered (2013) . Functional motivation in efficiency, convenience of use and time conservation elements is evident whereas hedonic fun, enjoyment and pleasure are shown. According to Zhang (2014) , consumer sociability is based on reciprocal social interactions, which emerge as a platform for clients with similar interests, and where various services are recommended and commented on. Customers construct their online identities and networks during their transactions, to deliver social advantages including social support, friendship and intimacy.

Strategies for digital Transformation

Changing to a digital strategy can help hotel owners achieve a number of goals. Choosing the most impactful goal is critical to digital transformation. By pegging your technology acquisition to a specific outcome, you can change your operational and personnel strategies to make your venture successful(Gupta, S. (2018)) . The high volume of overbookings is among the obstacles to gaining digital revenue. An overbooked hotel occurs when the number of rooms reserved by guests during a time period exceeds the number of rooms available. Overbookings occur because hotels wish to mitigate the loss of no-shows, cancellations, or early check-outs; however, they may also signify poor hotel management (Momma, M. T. R. (2016)) .

As one digital transformation initiative, it may be necessary to adopt an intelligent accommodation management tool - such as the Oracle OPERA system - that integrates with the property management system (Nam, K., Dutt(2020)) . Overbooking of specific room types can be avoided by using this tool, and room cleaning and maintenance are ensured timely. Platform rules, schedules, and item inventory availability are enforced automatically so guests feel like they're in control. This means there are no added costs

from transporting guests to another location(Tien(2019)) .

Another example of digital transformation involves improving customer outcomes with the help of a PMS. An example would be a hotel trying to solve the problem of long waiting times at check-in (Treiblmaier, H. (2020)) . It is possible for staff members to check in guests using a mobile version of Oracle OPERA. As well as room reservation, room status, task sheet management, room maintenance, and real-time updates on room status and maintenance requests, the mobile platform provides access to other features(Moraitis, P. (2018)) .

Research Methodology

The paper is primarily based on secondary sources of information. Information about hospitality digital transformation was primarily gathered from literature reviews . In addition, archive documents, journals, books, and websites were used. Analyzing the data, both analytically and descriptively, is performed on the basis of these classifications to know about the impact of digital transformation on sustainability and governance .

Data Collection

Survey results, reference books, and research papers were collected and analyzed for common themes between the three parameters: governance, sustainability, and digital transformation. The emphasis is not on the link between traditional information technology technologies such as corporate and business applications but on digital transformation. The analysis of the data-focused mainly on impacts of Digital Transformation elements which are Social Computing, Customer Relationship Management, Mobile Computing, Analytics, and Cloud Computing, on governance and sustainable development.

Results

This section presents Data and Results based on two parts. Business problems are perceived differently by organizations. Business situations can be simulated through cases that have elements of sustainability and governance. In the second example, digital transformation should be viewed as a driver for sustainability and good governance. Study frameworks, case studies, and digital transformation are used as a proxy for creating the business case.

Late in the 1990s, Digital Transformation began to evolve. As identified by Berman (2011), there are three phases of the Digital Evolution: Product and infrastructure development in the late 1990's, Distribution and Web strategy in the 2000's, and Digital Transformation of business models in 2010. With digital transformation, business results and management model success are on the rise. Studies have examined how Digital Transformation impacts organizations since early 2010. Each study selected impacts that have some sustainability element.

Digitally transformed businesses report marked improvement in processes, a committed workforce at levels across the organization, and new business models according to the Deloitte & MIT study (Kane, 2015). Employers are competing to attract and retain talent by upgrading their digital game, thus motivating employees to work for digital leaders.

Study Bain Consulting (Berez, 2015): Digital leaders are more successful in performing than others in terms of attributes. These include 'clear digital careers and recruitment strategies,' 'separated legacy and digital IT organisations' and 'more financial allocations to IT.'

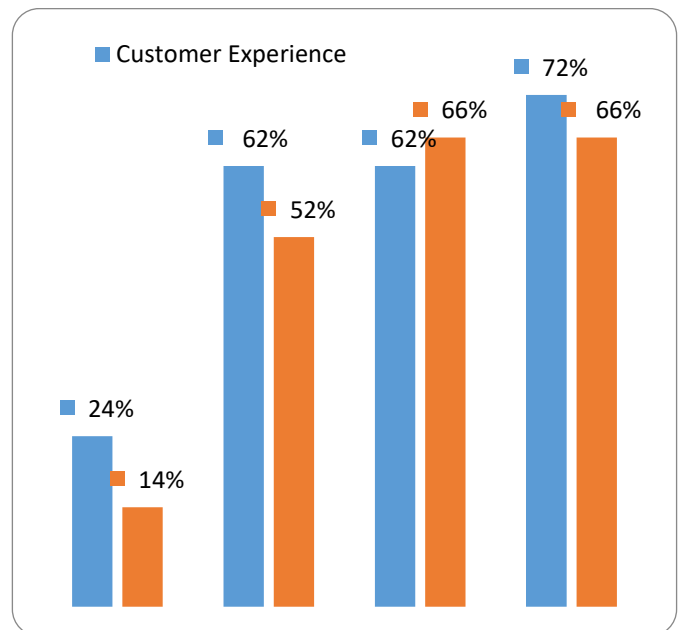
(Westerman, 2011): This is one of the first digital transformation studies. It claims that companies are using digital technology for some time to increase customer experience and to improve operational operations. The survey statistics for the proportion of companies that used digital technology in these two fields are presented in Table 1.

Table 1. *Percentage of Firms using Digital Technologies for good governance*

(Westerman, 2011)

Digital Technology	Customer Experience	Operational process efficiencies
Embedded devices	24%	14%
Social Media	62%	52%
Mobile	62%	66%
Analytics	72%	66%

Graph1 *Depicts the Firms using Digital Technologies for good governance*



Joint study of Cap Gemini and MIT (Fitzgerald, 2013): This 2013 survey gives further information on the experiences of companies in digital transformation: Digital Transformation will be essential to their companies in the next two years, according to 78% of respondents. 63% indicated that their organization's rate of technology change was slow. The "lack of urgency" was the most often mentioned difficulty. Digital Transformation was an ongoing element in their management agenda just 38 percent of the respondents indicated. 93% of CEOs believed it was the correct thing for the business, while just 36% of

CEOs had such a view. When they revealed their views on Digital Transformation.

CEO poll of PwC 2014 (Moritz, 2014) : The poll shows that, in the next five years and three worldwide technologies trends, firms that are investing in 86 percent of U.S. CEOs have identified technology developments as the most significant global trend in company transformation: Socially enabled business processes Business Analytics Customer engagement for mobile applications. The results of this survey were: End-customers, suppliers and participants must rethink their engagement by firms. Companies must support and maintain the endgame on social, mobile, analytical and cloud digital integration to enable the establishment of new business models and utilize Analytics to answer specific queries. In one business, improved customer experience shapes customer expectations in another. For revenue development, cost control and the creation of desired customer experience more analytical precision is necessary.

Discussion

Many firms realize the advantages of digital transformation in the hotel sector by increasing brand recognition and operational efficiency, and by enhancing customer experience.

- No more long line - No longer or take more time to inspect or utilize services for customers or users.
- Increase communication flows- Hoteliers may also refresh their clients' intriguing offers or news periodically and provide them access to information that can be updated automatically. And hotel firms can not only produce highly focused digital ads, but also assess their achievements.
- Take green initiatives- To get green and ecologically beneficial by adopting IoT. You may print less key cards, fewer boarding tickets and less paperwork using less paper examples and create them using digital content. You also eat less, e.g. by heating the room just 30 minutes before the visitors return, instead of keeping it warm all day, etc.

- Knowing your customers- is possible with the help of data analytics. The more you know about your customers, the better you can serve them.

- Personalize your offer or mass customization- Depending on the profile of your guests, you can provide a high level of support. Hoteliers will gain from customer experience, greater operational effectiveness and higher income.

- Improve your performance- By giving your employees access to more client information, as well as by improving collaboration, you will improve your departmental performance. Hotel firms are also able to build and assess their performance through highly focused digital campaigns.

It is certain that firms will recover from the epidemic by implementing digital transformation in the tourism sector. In reality, organizations experience the most troubling problems, including vendor search, software development, and project management, when they accelerate the technology upgrade programs. Another step towards maturity is thought to be taken by AR (Augmented Reality) and by the VR (virtual reality). However, businesses are pushed to improve their customer travel by using these technologies all the time. When consumers travel to the resort, end-to-end services within the hotel sector do not commence. It started before. Customers planning their vacations need to develop AR and VR. For example, extensive hotel reservation providers advise customizing their room using AR. It also gives an option for on-board VR entertainment.

Conclusion

In conclusion, the digital revolution offers the hotel industry a host of options that can be sustainable in nature for the development of hospitality business. The impact on conventional companies is immense and good. Some still feel that in the hotel and tourism sector there are few methods of being creative, yet the contrary is true. If you are in the

hospitality industry, you will lose a considerable number of clients to your competitors who are more responsive to customer needs and have become distinctive in the market. Digital revolution has largely reached all industries, and one of them is hospitality. Sadly, just a few firms have done so with the constraint of innovation. It tends to be adequate despite the tremendous development of technology in the past decade. More and quick technology innovations are necessary for the hospitality business. In the hospitality sector, business executives must endeavor to modify the way they define plans and operate their companies in order to satisfy client expectations. Increased productivity and effectiveness, new markets and supply chain through data analytics optimization are being utilized by technology with the continuously shifting expectations of customers. The challenge for the hotel business is how to address this shift, how to seize this chance to innovate, distinguish and grow, and how to do it all at a cost-effective level employing and fine tune the newest information technologies in the whole operation.

References

- [1] Abidi, N., Errais, E., Duplay, J., Berez, A., Jrad, A., Schäfer, G., & Trabelsi-Ayadi, M. (2015). Treatment of dye-containing effluent by natural clay. *Journal of cleaner production*, 86, 432-440.
- [2] Bellini, N., & Convert, L. (2016). The Concierge. Tradition, Obsolescence and Innovation in Tourism. *Symphonya. Emerging Issues in Management*, 2, 17-25.
<https://doi.org/http://dx.doi.org/10.4468/2016.2.03bellini.convert>
- [3] Bellman, S., Potter, R. F., Treleaven-Hassard, S., Robinson, J. A., & Varan, D. (2011). The effectiveness of branded mobile phone apps. *Journal of interactive Marketing*, 25(4), 191-200.
- [4] Berman, E., Shapiro, J. N., & Felter, J. H. (2011). Can hearts and minds be bought? The economics of counterinsurgency in Iraq. *Journal of Political Economy*, 119(4), 766-819.
- [5] Brodie, R. J., Ilic, A., Juric, B., & Hollebeek, L. (2013). Consumer engagement in a virtual brand community: An exploratory analysis. *Journal of business research*, 66(1), 105-114.
- [6] Dennison, P. E., Brewer, S. C., Arnold, J. D., & Moritz, M. A. (2014). Large wildfire trends in the western United States, 1984–2011. *Geophysical Research Letters*, 41(8), 2928-2933.
- [7] Edmondson, A.C., 2012. *Teaming: How organizations learn, innovate, and compete in the knowledge economy*. John Wiley & Sons.
- [8] Emmanuel, A. A., Oluwafunmilayo, O. O., Mobolaji, O. A., Abioye, A., & Adedoyin, O. O. (2018). Perception of Travel Agents Towards Amadeus And Galileo Global Distribution System. *Canadian Social Science*, 14(10), 17-30.
- [9] Graham, A., Powell, M. A., Anderson, D., Fitzgerald, R., & Taylor, N. J. (2013). *Ethical research involving children*. Florence: UNICEF Office of Research-Innocenti.
- [10] Gupta, S. (2018). *Driving digital strategy: A guide to reimagining your business*. Harvard Business Press.
- [11] Hospitality Technology. (2018). Three Ways Technology Will Transform Luxury Concierge in 2018. Retrieved December 3, 2018, from <https://hospitalitytech.com/three-waystechnology-will-transform-luxury-concierge-2018>
- [12] Kane, G. C., Palmer, D., Phillips, A. N., Kiron, D., & Buckley, N. (2015). Strategy, not technology, drives digital transformation. *MIT Sloan Management Review and Deloitte University Press*, 14(1-25).
- [13] Kim, H. Y. (2013). Statistical notes for clinical researchers: assessing normal distribution (2) using skewness and kurtosis. *Restorative dentistry & endodontics*, 38(1), 52-54.
- [14] Law, R., Chan, I. C. C., & Wang, L. (2018). A comprehensive review of mobile technology use in hospitality and tourism. *Journal of Hospitality Marketing & Management*, 27(6), 626-648.
- [15] Matos, S. and Silvestre, B.S., 2013. Managing stakeholder relations when developing sustainable business models: the case of the Brazilian energy sector.

- Journal of Cleaner Production, 45, pp.61-73
- [16] Momma, M. T. R. (2016). An Exploratory Study of Revenue Management and Hotel Distribution Practices in Coastal Hotels Located in São Sebastião, Brazil.
- [17] Momongan, M., & Papandreou, R. (2018). Hospitality: New Data Trends for 2018.
- [18] Moraitis, P. (2018). Design and development of a "Property Management System" software suite for hotels.
- [19] Nam, K., Dutt, C. S., Chathoth, P., Daghfous, A., & Khan, M. S. (2020). The adoption of artificial intelligence and robotics in the hotel industry: Prospects and challenges. *Electronic Markets*, 1-22.
- [20] Nikitas, A. (2019). How to save bike-sharing: An evidence-based survival toolkit for policy-makers and mobility providers. *Sustainability*, 11(11), 3206
- [21] Saldaña, J. (2021). The coding manual for qualitative researchers. sage.
- [22] Sanjana, N. E., Shalem, O., & Zhang, F. (2014). Improved vectors and genome-wide libraries for CRISPR screening. *Nature methods*, 11(8), 783-784.
- [23] Seitzman, N., Bhattacharjee, D., & Seeley, J. (2017). Advanced analytics in hospitality: Driving innovation, delighting customers, and capturing value.
- [24] Teofilovic, N., 2002. The reality of innovation in government. *Innovation Journal*, 7(3), pp.1-22.
- [25] Teunissen, P. W., & Westerman, M. (2011). Opportunity or threat: the ambiguity of the consequences of transitions in medical education. *Medical education*, 45(1), 51-59.
- [26] Tien, N. H., Anh, D. B. H., & Thuc, T. D. (2019). Global supply chain and logistics management. Dehli: Academic Publications.
- [27] Tomašević, A. (2018). Luxury Hotels: Concept and New Trends. In *Quality Services and Experiences in Hospitality and Tourism* (9th ed., pp. 195–211). Emerald Publishing Limited. <https://doi.org/10.1108/S2042-144320180000009014>
- [28] Treiblmaier, H. (2020). Blockchain and tourism. *Handbook of e-Tourism*, 1-21.
- [29] Tutek, E., Roth, C., & Simatic, A. (2018). Rethinking Luxury in Hospitality.
- [30] Vinod, B. (2021). The Evolution of Yield Management in the Airline Industry. Management for Professionals.
- [31] Vivek, S. D., Beatty, S. E., & Morgan, R. M. (2012). Customer engagement: Exploring customer relationships beyond purchase. *The Journal of Marketing Theory and Practice*, 20(2), 127-145