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# A Study on Recent Trends of Technology and its Impact on Business and Hotel Industry

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#### **Abstract**

In the rapidly evolving landscape of the 21st century, technology has become an integral part of our daily lives, reshaping industries and revolutionizing the way businesses operate. The business and hotel industry, in particular, have witnessed significant transformations as a result of recent technological trends. This Paper explores the impact of these trends on both sectors, examining how advancements in technology have shaped their strategies, operations, and customer experiences.

**Keywords:** industries, hotel, technology, business, customer.

## INTRODUCTION

Recent technological trends have ushered in a transformative era for both businesses and the hotel industry, reshaping the way they operate and interact with customers.

In the realm of business, digital transformation stands out as a pivotal trend. Organizations are harnessing the power of technologies such as cloud computing, big data analytics, and artificial intelligence (AI) to optimize processes and gain actionable insights. This shift towards a data-driven approach enhances decision-making, agility, and overall efficiency. Additionally, the rise of e-commerce has revolutionized the consumer landscape, prompting businesses to invest in online platforms, mobile applications, and social media for seamless customer engagement and sales.

In the hotel industry, smart technologies have become synonymous with elevated guest experiences. Internet of Things (IoT) devices, smart room controls, and mobile applications empower guests to personalize their stays. Furthermore, online booking platforms and revenue management systems have streamlined reservation processes, enabling hotels to dynamically adjust pricing based on demand. The adoption of contactless services and health technologies, accelerated by recent global events, ensures a safer and more convenient experience for guests.

(Lau, 2020) The tourism industry is in a fight for survival during the coronavirus pandemic. Live-stream promotion and live-stream conference are introduced to primarily

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improve information quality, while 5G technology and Wi-Fi 6 are installed to enhance the system quality. Facial recognition, AI, and Robots are integrated to the daily operations to enhance service quality. (Nguyan, 2018) The tourism and hospitality industries have widely adopted information technology (IT) to reduce costs, enhance operational efficiency, and most importantly to improve service quality and customer experience. Technological innovations have a significant impact on the traditional hotel service process, on the one hand by changing the role of the customers in it, and on the other by modifying the behaviour, functions and tasks of hotel managers and service staff. (Wringly, 2018) The innovations made in the information technology made more tourists to get attracted to our place and also it made a link to the airport channels to bring more ideas including the offers and the new innovations that have made in the tourist filed to become more emerging in to the world. (P.et.al, 2018) Process redesign: The change in the process to optimize the value. The emergence of information technology made changes in the traditional relationship between hotels and travel agents. It proves a loyal service for the customers even in the e-banking payments. (Connolly, 2017). The role of technology in hospitality has gained its high importance in efficiency managing, customer satisfaction and thereby generating enhanced revenue, all these also provide equal benefits to both the customers and the organization. (Umemheshwara, 2017) A business within the tourism industry applies a digital marketing strategy in order to create appealing digital content to gain recognition, to create specific advertisements to attract its target audience, to engage in ongoing communication with customers for them to maintain satisfaction and loyalty to the business. (Mattilaa, 2016) The tourism and hospitality management is the field where the competition is very high so as a solution for that proper promotion to the customer is need. So that more customers may attracted towards the innovative advertisement and promotion made by the sector. (Jung.t.et.al, 2015) The mobile phones and gadgets help to improve the usage of various sites for travelling and accommodation and accessing the information provided. Not only enhancing the use of mobile gadgets in the tourism sector the development of new emerging applications and the new technologies made a wide change in the processing.

In both sectors, the integration of technology is not just a response to current challenges but a proactive strategy to stay competitive in a rapidly evolving market. The symbiotic relationship between businesses and technology, as well as hotels and smart solutions, underlines the necessity of embracing these trends for sustained growth and success.

## ROLE OF TECHNOLOGY AND INTERNET

Innovation effects and helps the development of essentially every industry in the present age. Inn industry also isn't protected from its belongings. With nearby and universal lodging foundations staying at work longer than required to take advantage of the intensity of web, so as to catalyze their deals and to improve client relations, it is just clear how web is assuming a key job being developed of inn industry today. Social organizing entrances like Facebook, Twitter and so forth are progressively assuming a prevailing job in methodologies of inns everywhere. Client produced input's and audits on such sites assume an immense job in advancing the administrations of inns by listening in on others' conversations. Further, it additionally winds up less demanding to keep in contact with and keep up associations with ex-customers by making utilization of online tools. Hotel chiefs wherever are recognizing the way that web gives a decent choice to take appointments for their foundations. Albeit many are as yet incredulous about its ability to expand travel buys and inn appointments, many concur that online advancements are an extraordinary method to make intrigue and mindfulness among visitors.

## CONTRIBUTIONS BY SOCIAL MEDIA

Social media has now become the first face of any hospitality service provider with the customer. They are the primary source of information to many travelers based on which

they choose or reject any service. They therefore greatly determine the relationship between guests and hoteliers. There, guest and prospect guests can not only obtain information from the service industry but they can also receive feedback, be it positive or negative, from other fellow travelers from their past experiences with the service providers, regarding their services, amenities, attitude and cost. It is now considered greatly convenient for the traveler to decide where to stay, what restaurants to go, places to visit, transportation and attractions. Such facilities not only benefit the travelers but are also a great tool of attraction for the industrialists to showcase their specialties and compete with other industrialists. Hotels hence strive to work harder to exceed expectations and outsmart their rivals. They also tend to resolve service problems as soon as they occur to prevent negative comments. The threat of a bad social media review has become a highly powerful tool for the visitors.

#### TECHNOLOGICAL TRENDS IN BUSINESS

#### 1. Digital Transformation

One of the most prominent trends shaping the business landscape is digital transformation. In an era dominated by technological innovations, businesses are leveraging digital tools and strategies to revolutionize their operations. Cloud computing, big data analytics, and artificial intelligence (AI) have become integral components of this transformation. The shift towards digital platforms has enabled organizations to enhance efficiency, optimize processes, and make data-driven decisions in real-time.

Digital transformation fosters organizational agility by facilitating rapid adaptation to market changes. Businesses can now seamlessly integrate and analyze vast datasets, gaining valuable insights into consumer behavior, market trends, and operational performance. This data-centric approach empowers businesses to respond promptly to emerging opportunities or challenges, contributing to a more resilient and adaptive corporate ecosystem.

### 2. E-Commerce and Online Platforms

The rise of e-commerce has fundamentally altered the way businesses interact with customers. Online platforms, mobile applications, and social media have become indispensable tools for marketing, sales, and customer engagement. E-commerce facilitates direct interaction between businesses and consumers, eliminating traditional barriers and geographical constraints.

The convenience of online shopping has led to a paradigm shift in consumer behavior. Businesses are adapting to this change by investing in user-friendly websites, mobile applications, and seamless online payment systems. The integration of secure and efficient e-commerce solutions not only expands market reach but also allows for personalized customer experiences, further solidifying brand loyalty.

## 3. Artificial Intelligence and Automation

Artificial intelligence and automation technologies are at the forefront of the technological revolution, influencing various aspects of business operations. From customer service to supply chain management, businesses are leveraging AI and automation to enhance efficiency, reduce costs, and improve overall performance.

Machine learning algorithms play a pivotal role in predicting market trends, analyzing consumer preferences, and optimizing decision-making processes. Automation streamlines routine tasks, allowing employees to focus on more complex and value-added activities. Chatbots, powered by AI, handle customer queries, providing instant responses and improving the overall customer service experience.

#### TECHNOLOGICAL TRENDS IN THE HOTEL INDUSTRY

#### 1. Smart Hotel Technologies

The hotel industry has embraced smart technologies to revolutionize guest experiences. IoT-enabled devices, smart room controls, and mobile applications have become integral to the modern hotel experience. Guests can personalize their stay through these technologies, adjusting room settings, accessing services, and even unlocking doors with their smartphones.

Smart hotel technologies not only enhance guest satisfaction but also contribute to operational efficiency. Centralized control systems allow hotels to monitor and manage various aspects, such as energy consumption, room occupancy, and maintenance needs. This level of automation contributes to resource optimization, reducing operational costs and minimizing environmental impact.

# 2. Online Booking Platforms and Revenue Management Systems

The advent of online booking platforms and sophisticated revenue management systems has transformed how hotels manage their bookings and optimize revenue. Real-time inventory management, dynamic pricing strategies, and personalized promotions are now facilitated through advanced technological solutions.

Hotels utilize data analytics to gain insights into customer booking patterns, preferences, and behavior. This data-driven approach allows for more effective marketing strategies, ensuring that promotional efforts are targeted and relevant. Furthermore, revenue management systems enable hotels to adjust pricing dynamically based on demand, maximizing occupancy rates and overall revenue.

# 3. Contactless Services and Health Technologies

Recent global events, particularly the COVID-19 pandemic, have accelerated the adoption of contactless services and health technologies within the hotel industry. Contactless check-ins, digital concierge services, and mobile payment options have become essential components of the guest experience.

Health technologies, including temperature scanners and air quality sensors, are implemented to ensure the safety and well-being of guests and staff. The integration of these technologies not only addresses immediate concerns related to health but also positions hotels as proactive and customer-centric establishments, building trust and loyalty among guests.

## THE SYMBIOTIC RELATIONSHIP

The impact of recent technological trends on both business and the hotel industry underscores the symbiotic relationship between technology and these sectors. As businesses embrace digital transformation, the demand for innovative solutions and services from the technology sector increases. Simultaneously, the hotel industry's adoption of smart technologies and digital solutions creates new markets and opportunities for technology providers.

The seamless integration of technology in these industries is blurring the lines between traditional sectors, fostering a dynamic and interconnected business ecosystem. For instance, a hotel's success is not solely dependent on providing exceptional accommodations but also on its ability to leverage digital marketing, data analytics, and customer relationship management systems.

## **CONCLUSION**

The impact of recent technological trends on business and the hotel industry is undeniable, bringing about transformative changes in the way these sectors operate and interact with customers. The integration of digital technologies has not only improved efficiency and productivity but has also become a catalyst for innovation and adaptability.

In the hotel industry, the adoption of smart technologies and digital solutions has elevated the guest experience and streamlined operations. The emphasis on contactless services and health technologies reflects a commitment to meeting evolving consumer expectations and ensuring the safety of guests.

As both business and hospitality continue to evolve in the digital era, organizations that embrace technological advancements are better positioned to thrive. The symbiotic relationship between technology and these industries promises continued innovation, efficiency gains, and enhanced customer experiences. In this ever-changing landscape, the ability to adapt and leverage technology will be a key determinant of success for businesses and hotels alike.

#### References

- 1. Chandra, K. Ram, M. Ramachandran, and Soniya Sriram Kurinjimalar Ramu. "Exploring The Possibilities of Web Based Learning." Contemporaneity of Language and Literature in The Robotized Millennium 4.1 (2022): 19-27.
- 2. Chandra, K. Ram, Et Al. "Understanding Blended Learning Advantages and Limitations." Contemporaneity of Language and Literature in the Robotized Millennium 4.1 (2022): 10-18.
- 3. Chandra, K. Ram, Et Al. "Recent Trends in Workplace Learning Methodology." Contemporaneity of Language and Literature in the Robotized Millennium 4.1 (2022): 28-36.
- Chala Wata Dereso, Dr. Om Prakash H. M., Dr. K. Ram Chandra, Dr. Javed Alam, Dr. K. S. V. K. S. Madhavi Rani, Dr. V. Nagalakshmi. "Education beyond Covid-19 –The World Academic Coalition". Annals of the Romanian Society for Cell Biology, Vol. 25, No. 2, Mar. 2021, Pp. 2062-76.
- 5. K Ram Chandra, Bbrg Vijaya Lakshmi, Mrs G Rani, Raghavendra Kumar. "Farmer Digital Marketing System" Solid State Technology, Vol. 63, No. 5 (2011), 3250-3257.
- 6. Ram Chandra Kalluri. "Meaning Reorganization View Vis-A- Vis Hidden Reality View-Revisiting The Allotropes of Psychodynamics of Insight". International Journal of Human Resources Management and Research, Vol. 3 No. 4 (2013), 69-74.
- 7. K Ram Chandra. "Hetero-Balancing Approach to Curriculum Planning Using the Systemic-Functional Analysis" Proceedings of Isfc 35: Voices Around the World, 78.
- 8. Svgva Prasad, Cm Anitha, K Ram Chandra, Vijaya Lakshmi, Ravi Chandran, B Annapurna. "Pesticide Spraying Robot: The Mechatronics Approach to Agriculture". International Journal of Early Childhood Special Education, Vol.14 No.5, 2022.
- Dr. M. Esther Kalyani P. Hemalatha, Dr. K Ram Chandra, Dr. Shakila Azim, Dr. B. Annapurna, Dr. V. Nagalakshmi. "The Element of Emotional Intelligence and Their Impact on Social Relation". International Journal of Early Childhood Special Education. Vol.14 No.03 (2022), 7.
- 10. Ram Chandra Kalluri. "Effects of Covid-19: The Psychosocial Impact on Schools and College Admissions", Journal of Applied Science and Computations, Vol.8 No.10 (2021).
- 11. Sharma, S. K., and A. K. Sharma. "Effect of Bi-Parabolic Thermal and Thickness Variation on Vibration of Visco-Elastic Orthotropic Rectangular Plate." Journal of Advanced Research in Manufacturing, Material Science and Metallurgical Engineering 1.2 (2014): 26-38.
- 12. Khanna, A., A. Kumar, and M. Bhatia. "A Computational Prediction on Two Dimensional Thermal Effects on Vibration of Visco-Elastic Square Plate of Variable Thickness." Presented and Published in Proceeding of Coniaps Xiii (2011).

- 13. Kumar Sharma, A., and S. K. Sharma. "Vibration computational of visco-elastic plate with sinusoidal thickness variation and linearly thermal effect in 2D." Journal of Advanced Research in Applied Mechanics & Computational Fluid Dynamics 1.1 (2014).
- 14. Jaichandran, R., Krishna, S. H., Madhavi, G. M., Mohammed, S., Raj, K. B., & Manoharan, G. (2023, January). Fuzzy Evaluation Method on the Financing Efficiency of Small and Medium-Sized Enterprises. In 2023 International Conference on Artificial Intelligence and Knowledge Discovery in Concurrent Engineering (ICECONF) (pp. 1-7). IEEE.
- 15. Manoharan, G., Durai, S., Rajesh, G. A., & Ashtikar, S. P. (2023). Credit and Risk Analysis in the Financial and Banking Sectors: An Investigation. In Artificial Intelligence for Capital Markets (pp. 57-72). Chapman and Hall/CRC.
- 16. Manoharan, Geetha & Durai, Subhashini & Rajesh, Gunaseelan & Ashtikar, Sunitha. (2023). Sentiment Analysis of Customer Reviews for Online Stores That Support Customer Buying Decisions. 10.4018/978-1-6684-6519-6.ch015.
- 17. Manoharan, Geetha & Durai, Subhashini & Rajesh, Gunaseelan & Ashtikar, Sunitha. (2023). A Study on the Application of Natural Language Processing Used in Business Analytics for Better Management Decisions. 10.1201/9781003328414-21.