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*Research Article*

# **Impact Of Digitalization Of Hospital Services On Customer Centric Strategies That Realize Customers' Expectation And Ensure Customer Satisfaction**

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## **Abstract**

Digitalization of Hospital Services derived the revolutionary change of healthcare sector where the system meets quality services through technological support system. The smart marketing practices are becoming essential for creating awareness about the digital hospital services among the target customers in the society. Systematic market research and analysis on customer expectations from hospital services can provide the right direction of presenting the customer centric strategies that can ensure the maximum level of satisfaction to the patients. The primary objectives of the present study are to analyse the impact of digitalizing healthcare services on customer centric strategies and to understand the level of satisfaction through latest technology in hospital services. The collected data were analysed by using statistical tools of descriptive statistics, t-test and ANOVA. There is a significant level of Digitalization of Hospital Services on Customer Centric Strategies in Bangalore. The prime outcome of the research initiative presents the positive impact of digitalizing healthcare services on customer centric strategies that ensure high level of satisfaction to the target audience of higher class and middle-class family members in Bengaluru. The research outcomes and the suggestions will interconnect the future research initiatives in the area of Health Care service quality that will reach to everyone in our society.

**Key Words:** Digitalization, Services delivery, Hospital Services, Healthcare Sector and Customer Centric Strategy

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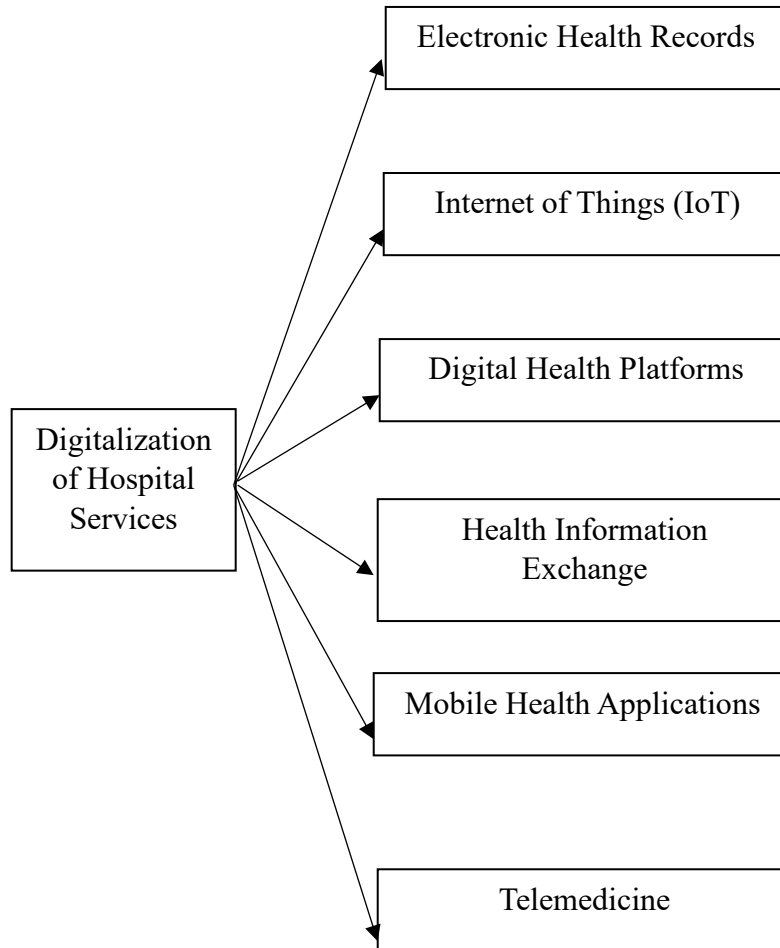
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**1. Introduction**

A customer-centric strategy is an approach that places the customer at the centre of all business activities, decisions, and processes. The goal is to create a positive and personalized experience for customers, meeting needs and expectations to build long-lasting relationships (Adindu A. 2021).

Emerging technologies are significantly impacting the quality of services in hospitals and healthcare facilities (Baile G.R., Neal D. 2019). These technologies are transforming patient care, improving operational efficiency, enhancing communication, and increasing patient satisfaction (Bauer et al., 2020).



**[Figure.1 presents the Emerging Technologies that ensure the Hospital Service Quality]**

The Digitalization of Hospital Services are complex in nature. It improves patient care, enhances clinical decision-making, increases efficiency, reduces costs, and expands access to healthcare (Buru et al., 2022). Electronic Health Records (EHRs) are digital versions of patients' paper charts and medical histories. These records contain a comprehensive set of information about a patient's health, including medical history, diagnoses, medications, treatment plans, immunization dates, allergies, radiology images, and laboratory test results (Guerrero et al., 2019). The IoT has introduced a new era of connectivity in healthcare. IoT devices, such as wearable health trackers and remote monitoring tools, and the enable real-time data collection and analysis (Bhushan et al., 2009). IoT facilitates remote consultations and telemedicine by connecting patients and healthcare providers through video conferencing, sharing medical records, and real-time communication (McConnell et al., 2018). Hospitals use IoT to track medical equipment, supplies, and pharmaceuticals,

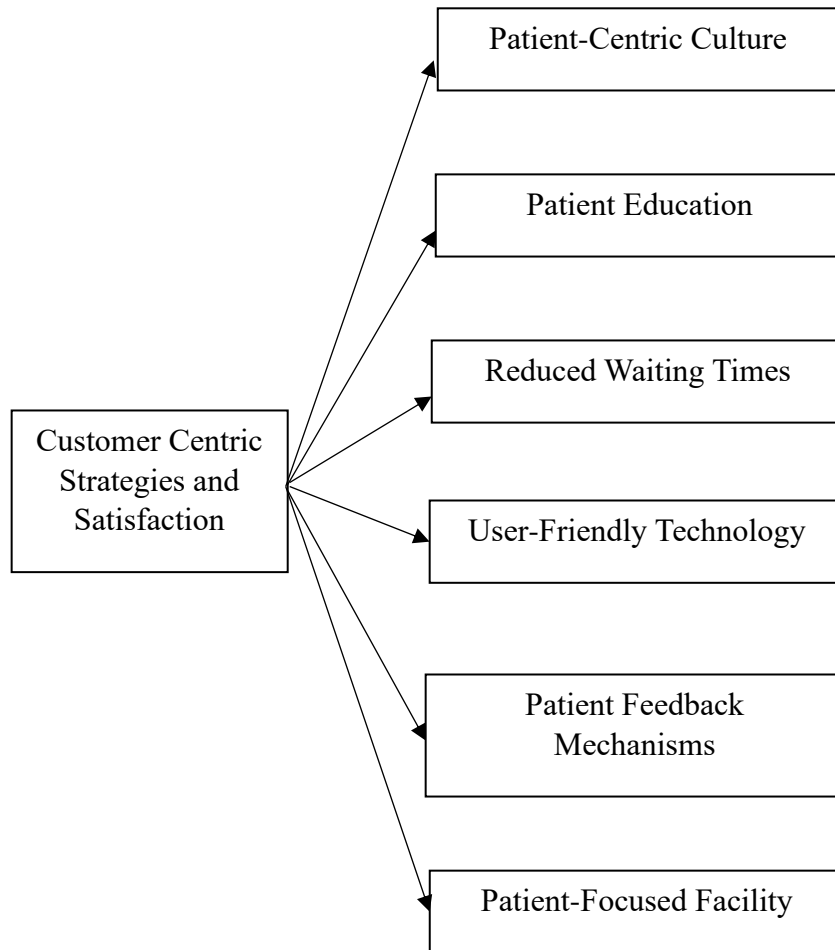
ensuring efficient resource utilization and reducing waste (Agunwa et al., 2018). Hospitals are developing digital platforms and mobile apps that allow patients to access their health records, schedule appointments, communicate with healthcare providers, and even receive virtual care through telemedicine services (Odunaiya et al., (2022). HIE networks enable hospitals to securely share patient information with other healthcare providers, improving care continuity and reducing duplicate tests and procedures (Podder, S., Bicaj, L., Samanta, D. 2024). Mobile applications offer tools for appointment scheduling, medication reminders, and health tracking (Podder et al., 2020). These apps empower patients to actively participate in their healthcare and facilitate communication between patients and healthcare providers. Telemedicine has emerged as a transformative force in healthcare, offering numerous benefits in terms of accessibility, convenience, and cost savings. Routine check-ups, prescription refills, and common health concerns can

be addressed through virtual consultations. Patients can access specialists in areas like cardiology, dermatology and mental health (Podder, Suplab Kanti and Samanta, Debabrata. 2019). The present research initiative will identify the most common diseases and the probable treatment with emerging technologies that may help for better healthcare support to the patients in Bangalore.

**Customer Centric Strategies and Satisfaction**

Developing customer centric strategies ensures delivering high-quality products and services that align with customer expectations. It also maintains a

consistent brand image and messaging across all customer touchpoints (D. Samanta et al., 2023). Consistently meeting or exceeding customer expectations builds trust and loyalty and helps customers recognize and remember your brand. Such plan of action develops a culture within the organization that values empathy and places a strong emphasis on understanding and meeting customer needs (S. K. Podder et al., 2022). This customer-centric culture should be ingrained at all levels of the organization



[Figure.1 presents the Customer Centric Strategies and Satisfaction]

Customer centric culture can be adopted by designing care processes and services around the needs and preferences of patients. Patients must be involved in decision-making, management should listen to their concerns, and provide personalized care plans (Suplab Kanti Podder, Debabrata Samanta 2022). Care providers should provide comprehensive and easily accessible information to patients about their conditions, treatment options, and preventive measures (Suplab et al., (2024). Well-informed patients are more likely to actively participate in their healthcare. Management should minimize wait times for appointments, tests, and procedures. Efficient scheduling, proper resource allocation, and effective triage systems contribute to a positive patient experience (Velescu et al., 2020).

Implement user-friendly electronic health record (EHR) systems, patient portals, and other digital tools (Verulava et al., 2018). Technology should enhance, not hinder, the patient experience and facilitate better communication. Establish mechanisms for collecting and analyzing patient feedback. Regularly solicit input through surveys, focus groups, and use the insights to make continuous improvements (Ymerhalili, A., Samanta, D., Podder, S. 2024). Design hospital spaces with the patient experience in mind. Comfortable waiting areas, clear signage, and a welcoming environment contribute to a positive impression.

**2. Review of Literature**

Ludwick and Doucette (2021) described the impact of digital health platforms on quality hospital services.

Digital health platforms facilitate for maintaining the electronic health records that become cornerstone of modern healthcare. The systems enable healthcare providers to store, manage, and exchange patient information electronically. Studies have consistently shown that electronic health records implementation improves patient safety and enhances care coordination. Chandra, Y.; Shang, and L.; Roy, M.J. (2020), described about the sustainable practices in healthcare services not only reduce environmental impact but also contribute to improved patient outcomes, cost savings, and community well-being. Hospitals and healthcare facilities play a crucial role in setting an example of responsible resource management and environmental stewardship, aligning with the broader goals of sustainability and environmental conservation. Alimardani et al., (2020) explained about the importance of using robotic-assisted surgery systems for more precise and minimally invasive procedures, resulting in faster recovery times and shorter hospital stays. Robotics technology has found applications in surgeries, patient care, and medication management. Robotic-assisted surgeries, for instance, have been shown to reduce complications and shorten hospital stays. Mettler & Chen (2019) described the research indicates that IoT can enhance patient engagement, help prevent chronic diseases, and improve the management of chronic conditions. The data security and privacy concerns remain significant barriers to its adoption. Bashshur & Bergmo (2018) examined about the role of Telemedicine in modern healthcare services. Telemedicine has gained prominence. It allows remote diagnosis and treatment, reducing the need for in-person visits. Numerous studies have highlighted the potential benefits of telemedicine, such as improved access to care for rural populations and reduced healthcare costs. Regularly assess and improve the quality of care through continuous quality improvement initiatives.

### **3. Statement of Problems**

All the previous research articles have described the status, performance and trends of emerging technology in healthcare services in India and other countries. Few journal articles addressed the role of healthcare industry, challenges and opportunities of hospital services. Digital systems are vulnerable to cyber threats and hacking attempts. Protecting patient data from breaches is a significant challenge, and hospitals must invest in robust cybersecurity measures to safeguard sensitive information. Ensuring seamless data exchange between different healthcare systems and devices can be challenging due to interoperability issues. Lack of standardization and compatibility can hinder the effective sharing of patient information.

### **4. Research Gap**

The specific research related to impact of digitalization of hospital service quality in Bangalore are not found in

the previous literatures. The motive of initiating the research study was to understand the degree of impact of emerging technologies on hospital service quality. Inadequate research and principal outcomes of the previous literatures related to the title with special consideration of private and government hospitals acknowledged the Research Gap and Statement of Problems.

### **5. Objectives of the Research Study**

The consideration of Statement of Problems and Research Gap leads to address the objectives of the research study:

- (i) To identify the Digitalization of Hospital Services that ensure the effective Healthcare system in Bangalore.
- (ii) To analyse the impact of Digitalization of Hospital Services on Customer Centric Strategies in Bangalore.
- (iii) To evaluate the impact of Digitalization of Hospital Services on Customer Satisfaction.
- (iv) To analyse the association between Digitalization of Hospital Services and Customer Satisfaction.

### **Hypothesis Formulation**

*Null Hypothesis:  $H_{01}$  = There is no significance level of impact of Digitalization of Hospital Services on Customer Centric Strategies in Bangalore.*

*Alternative Hypothesis:  $H_{a1}$  = There is a significance level of impact of Digitalization of Hospital Services on Customer Centric Strategies in Bangalore.*

*Null Hypothesis:  $H_{02}$  = There is no significance level of impact of Digitalization of Hospital Services on Customer Satisfaction in Bangalore.*

*Alternative Hypothesis:  $H_{a2}$  = There is a significance level of impact of Digitalization of Hospital Services on Customer Satisfaction in Bangalore.*

*Null Hypothesis:  $H_{03}$  = There is no significant association between Digitalization of Hospital Services and Customer Satisfaction.*

*Alternative Hypothesis:  $H_{a3}$  = There is a significant association between Digitalization of Hospital Services and Customer Satisfaction.*

### **6. Research Methodology**

The research study instigated in identifying past experiences of hospital services in Bangalore. The trends of an increasing number of healthcare services through modern technologies encouraged the researchers for understanding future trends and opportunities of the same. The research addresses the validity and reliability of the research. It includes discussions on how researchers ensured the quality and trustworthiness of their data. Snowball Sampling technique was implemented for selecting the respondents and collecting the data. The sample size for the research was 384. The collected data were filtered and classified as per the requirements of data analysis using statistical tools.

**7. Data Analysis and Interpretation**

**7.1 The frequency distribution of Gender from Hospitals in Bangalore**

**Table No. 1 shows the frequency distribution of Gender from Hospitals in Bangalore (N=384)**

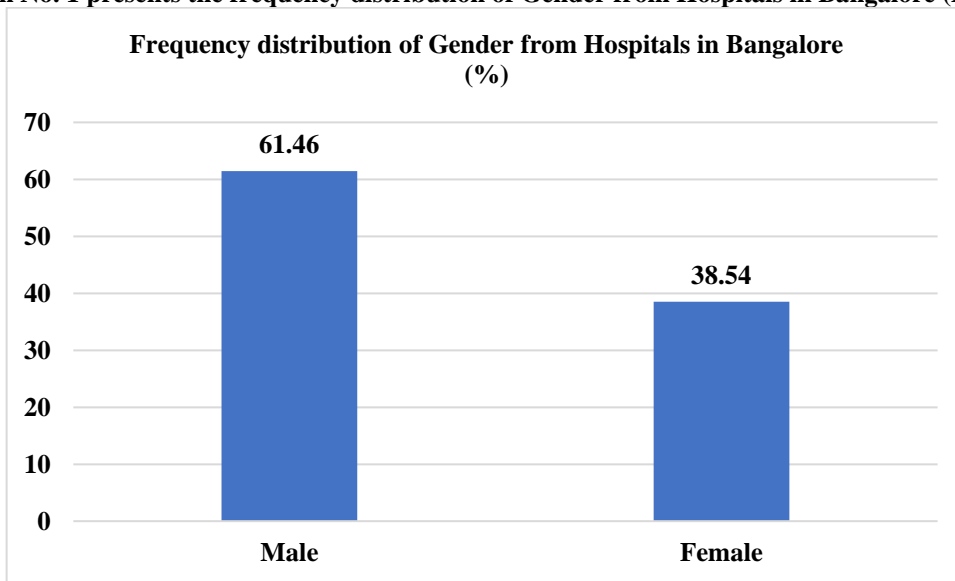
<b>Gender</b>	<b>No. of Respondents</b>	<b>Percentage (%)</b>
Male	236	61.46
Female	148	38.54
<b>Total</b>	<b>384</b>	<b>100</b>

**Analysis**

The above table shows the Gender of Respondents from Hospitals in Bangalore. As per the demographic

details of the respondents from Hospitals in Bangalore, 61.46% male and 38.54% female respondents.

**Graph No. 1 presents the frequency distribution of Gender from Hospitals in Bangalore (N=384)**



**Interpretation**

The gender of the respondents are the representatives of total population those who have considered for sharing their expectations and experiences regarding the service

quality from Private Hospitals in Bangalore. The majority of the respondents are male (61.46%) and female (38.54%).

**7.2 The frequency distribution of Age Group from Hospitals in Bangalore**

**Table No. 2 shows the descriptive statistics of Age Group from Hospitals in Bangalore (N=384)**

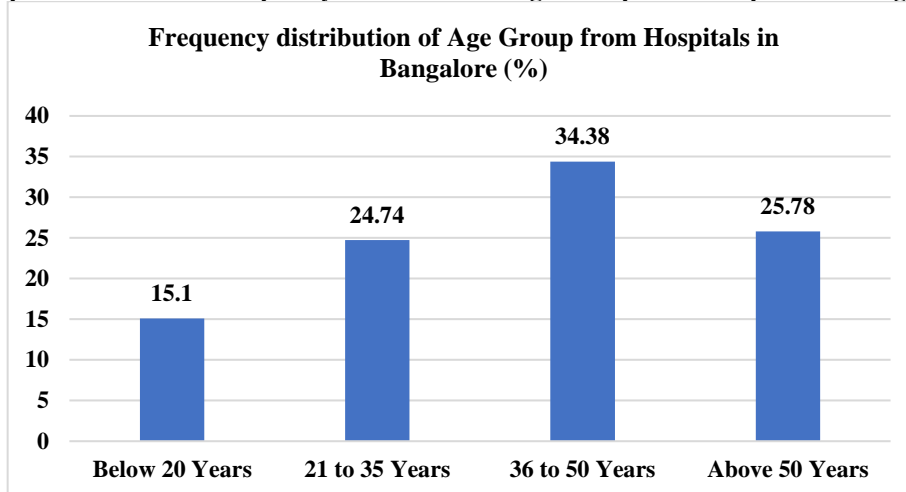
<b>Age Group</b>	<b>No. of Respondents</b>	<b>Percentage (%)</b>
Below 20 Years	58	15.10
21 to 35 Years	95	24.74
36 to 50 Years	132	34.38
Above 50 Years	99	25.78
<b>Total</b>	<b>384</b>	<b>100</b>

**Analysis**

The above graph shows the Age Group of the Respondents from Hospitals in Bangalore. As per the demographic details of the respondents from Hospitals

in Bangalore, 15.10% respondents under the age group of below 20 years, 24.74% under the age group 21 to 35 years, 34.38% under the age group of 36 to 50 years, and 25.78% above 50 years.

Graph No.2 shows the frequency distribution of Age Group from Hospitals in Bangalore



**Interpretation**

The age group of the respondents indicates the distribution of questionnaire and collection of data from different age groups from Private Hospitals in Bangalore. As per the demographic details of the respondents from Private Hospitals in Bangalore, 15.10% respondents under the age group of below 20 years, 24.74% under the age group 21 to 35 years, 34.38% under the age group of 36 to 50 years, and 25.78% above 50 years.

**7.3 Analysis related to the Digitalization of Hospital Services that ensure the effective Healthcare system in Bangalore.**

The descriptive statistics include the value of Mean, Std. Error of Mean, Median, Mode, Std. Deviation, Variance, Skewness, Std. Error of Skewness, Kurtosis, Std. Error of Kurtosis, Range, Minimum, Maximum and Sum.

Table No. 3 presents the Digitalization of Hospital Services that ensure the effective Healthcare system

Descriptive Statistics								
	Gender	Age	Electronic Health Records	Internet of Things (IoT)	Digital Health Platforms	Health Information Exchange	Mobile Health Applications	Telemedicine
N	384	384	384	384	384	384	384	384
Mean	1.38	2.76	3.10	3.10	3.18	3.18	3.24	3.10
Std. Error of Mean	0.025	0.048	0.061	0.061	0.064	0.064	0.063	0.063
Median	1.00	3.00	3.00	3.00	3.00	3.00	3.00	3.00
Mode	1	3	3	3	3	3	3	3
Std. Deviation	0.487	0.948	1.204	1.191	1.247	1.249	1.231	1.231
Variance	0.237	0.898	1.449	1.419	1.556	1.561	1.516	1.515
Skewness	-0.484	-0.393	-0.079	-0.019	-0.144	-0.121	-0.133	-0.037
Std. Error of Skewness	0.125	0.125	0.125	0.125	0.125	0.125	0.125	0.125
Kurtosis	-0.775	-0.721	-0.834	-0.851	-0.900	-0.938	-0.908	-0.934
Std. Error of Kurtosis	0.248	0.248	0.248	0.248	0.248	0.248	0.248	0.248
Range	1	3	4	4	4	4	4	4
Minimum	1	1	1	1	1	1	1	1
Maximum	2	4	5	5	5	5	5	5
Sum	531	1060	1191	1189	1220	1220	1245	1190

**Analysis**

The above table presents the descriptive statistics that include the value of Mean, Std. Error of Mean, Median, Mode, Std. Deviation, Variance, Skewness, Std. Error of Skewness, Kurtosis, Std. Error of Kurtosis, Range, Minimum, Maximum, and Sum related to the Digitalization of Hospital Services that ensure the effective Healthcare system in Bangalore city.

**Interpretation**

The above descriptive statistics table includes the Mean values are 1.38, 2.76, 3.10, 3.10, 3.18, 3.18, 3.24, and 3.10 for the Gender, Age, Electronic Health Records, Internet of Things (IoT), Digital Health Platforms, Health Information Exchange, Mobile Health Applications, and Telemedicine respectively with respect to Digitalization of Hospital Services that ensure the effective Healthcare system in Bangalore city.

The values of Standard Deviation are 0.487, 0.948, 1.204, 1.191, 1.247, 1.249, 1.231, 1.231 for the Gender, Age, Electronic Health Records, Internet of Things (IoT), Digital Health Platforms, Health Information Exchange, Mobile Health Applications, and Telemedicine. Standard deviation quantifies the extent to which data points in a dataset deviate or vary from the mean. A higher standard deviation indicates that the data points are more spread out from the mean, while a lower standard deviation means that the data points are closer to the mean. The above table presents the higher standard deviation indicates that the data points are more spread out from the mean.

The values of variance are 0.237, 0.898, 1.449, 1.419, 1.556, 1.561, 1.516, and 1.515 respectively with respect

to Electronic Health Records, Internet of Things (IoT), Digital Health Platforms, Health Information Exchange, Mobile Health Applications, and Telemedicine. A small variance relative to the mean suggests that the data points are tightly clustered around the mean, while a large variance relative to the mean indicates that the data points are more widely dispersed. The above table presents the large variance relative to the mean indicates that the data points are more widely dispersed.

The values of Skewness are negative -0.484, -0.393, -0.079, -0.019, -0.144, -0.121, -0.133, and -0.037 while the values of Kurtosis also negative -0.775, -0.721, -0.834, -0.851, -0.900, -0.938, -0.908, and -0.934. Both the Skewness and Kurtosis values are between 1 to -1 that indicates the distribution of data are approximately normally distributed.

**7.4 Analysis regarding the impact of Digitalization of Hospital Services on Customer Centric Strategies in Bangalore.**

Digitalization of hospital services involves the integration of digital technologies and information systems to enhance various aspects of healthcare delivery. This transformation aims to improve efficiency, patient care, and overall operational effectiveness within hospitals.

*Null Hypothesis:  $H_{01}$  = There is no significance level of impact of Digitalization of Hospital Services on Customer Centric Strategies in Bangalore.*

*Alternative Hypothesis:  $H_{a1}$  = There is a significance level of impact of Digitalization of Hospital Services on Customer Centric Strategies in Bangalore*

**Table No.4 presents impact of Digitalization of Hospital Services on Customer Centric Strategies in Bangalore ANOVA Test**

			Sum of Squares	df	Mean Square	F	Sig.
Electronic Health Records	Between Groups		221.149	4	55.287	62.754	0.000
	Within Groups		333.891	379	0.881		
	Total		555.039	383			
Internet of Things (IoT)	Between Groups		270.043	4	67.511	93.635	0.000
	Within Groups		273.392	379	0.721		
	Total		543.435	383			
Digital Health Platforms	Between Groups		265.882	4	66.471	76.316	0.000
	Within Groups		330.076	379	0.871		
	Total		595.958	383			
Health Information Exchange	Between Groups		273.512	4	68.378	79.881	0.000
	Within Groups		324.446	379	0.856		
	Total		597.958	383			
Mobile Health Applications	Between Groups		306.056	4	76.514	105.682	0.000
	Within Groups		274.421	379	0.724		
	Total		580.477	383			
Telemedicine	Between Groups		428.812	4	107.203	137.439	0.000
	Within Groups		295.664	379	0.780		
	Total		724.477	383			

**Analysis**

The result has a positive of Digitalization of Hospital Services on Customer Centric Strategies in Bangalore. The calculated F-values (Fstat) are 62.754, 93.635, 76.316, 79.881, 105.682, and 137.439, and the critical F-value (Fcritical) for this test can be obtained from the F-Table with numerator degree of freedom (4) and the denominator degree of freedom (379), Fcritical (4, 379) = 2.37. Since the (Fstat) are greater than (Fcritical), so the Null Hypothesis is rejected. From the results of ANOVA test, the p-value is 0.000 which is less than 0.05 at the 5% level of significance. Again, the Null Hypothesis is rejected. Both the results (F-value and p-value) lead the same decision regarding the validity of the analysis. There is a significance level of impact of Digitalization of Hospital Services on Customer Centric Strategies in Bangalore.

**Interpretation**

The digitalization of hospital services is an ongoing process, and the adoption of emerging technologies will

continue to shape the landscape of healthcare delivery. It is essential for healthcare organizations to prioritize data security, interoperability, and user experience as they embrace digital transformation to improve patient outcomes and operational efficiency.

**7.5 Analysis regarding the impact of Digitalization of Hospital Services on Customer Satisfaction.**

Digitalization of hospital services involves the integration of digital technologies and information systems to enhance various aspects of healthcare delivery. This transformation aims to improve efficiency, patient care, and overall operational effectiveness within hospitals.

*Null Hypothesis:  $H_{02} =$  There is no significance level of impact of Digitalization of Hospital Services on Customer Satisfaction.*

*Alternative Hypothesis:  $H_{a2} =$  There is a significance level of impact of Digitalization of Hospital Services on Customer Satisfaction.*

**Table No.5 presents the impact of Digitalization of Hospital Services on Customer Satisfaction**

ANOVA Test						
		Sum of Squares	df	Mean Square	F	Sig.
Electronic Health Records	Between Groups	221.149	4	55.287	60.757	0.000
	Within Groups	333.891	379	0.881		
	Total	555.039	383			
Internet of Things (IoT)	Between Groups	270.043	4	67.511	83.589	0.000
	Within Groups	273.392	379	0.721		
	Total	543.435	383			
Digital Health Platforms	Between Groups	265.882	4	66.471	71.323	0.000
	Within Groups	330.076	379	0.871		
	Total	595.958	383			
Health Information Exchange	Between Groups	273.512	4	68.378	78.876	0.000
	Within Groups	324.446	379	0.856		
	Total	597.958	383			
Mobile Health Applications	Between Groups	306.056	4	76.514	95.672	0.000
	Within Groups	274.421	379	0.724		
	Total	580.477	383			
Telemedicine	Between Groups	428.812	4	107.203	97.419	0.000
	Within Groups	295.664	379	0.780		
	Total	724.477	383			

**Analysis**

The result has a positive of Digitalization of Hospital Services on Customer Satisfaction in Bangalore. The calculated F-values (Fstat) are 60.757, 83.589, 71.323, 78.876, 95.672, and 97.419, and the critical F-value (Fcritical) for this test can be obtained from the F-Table with numerator degree of freedom (4) and the

denominator degree of freedom (379), Fcritical (4, 379) = 2.37. Since the (Fstat) are greater than (Fcritical), so the Null Hypothesis is rejected. From the results of ANOVA test, the p-value is 0.000 which is less than 0.05 at the 5% level of significance. Again, the Null Hypothesis is rejected. Both the results (F-value and p-value) lead the same decision regarding the validity of



the analysis. There is a significance level of impact of Digitalization of Hospital Services on Customer Satisfaction.

**Interpretation**

The digitalization of hospital services has significantly impacted customer satisfaction by streamlining processes, enhancing service quality, and improving overall patient experiences. Telemedicine extends healthcare access to remote areas, allowing patients to consult doctors without traveling, which boosts convenience and satisfaction. Real-time communication and feedback platforms also empower patients to share concerns and receive timely responses, fostering trust and satisfaction. The digitalization enhances operational efficiency and patient-centered care, making healthcare more responsive to the needs and

preferences of patients, which significantly contributes to higher satisfaction levels.

**7.6 Analysis regarding the association between Digitalization of Hospital Services and Customer Satisfaction.**

The analysis related to the correlation between Digitalization of Hospital Services and Customer Satisfaction. Analysis related to summary of Chi-square test (correlation between Digitalization of Hospital Services and Customer Satisfaction).

*Null Hypothesis:  $H_{03} =$  There is no significant association between Digitalization of Hospital Services and Customer Satisfaction.*

*Alternative Hypothesis:  $H_{a3} =$  There is a significant association between Digitalization of Hospital Services and Customer Satisfaction.*

**Table No.6 shows the association between Digitalization of Hospital Services and Customer Satisfaction**

<b>Chi-Square Tests</b>			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	23.436 <sup>a</sup>	12	.024
Likelihood Ratio	23.945	12	.021
Linear-by-Linear Association	.089	1	.766
N of Valid Cases	384		

**Analysis**

The table no.6 presents the correlation between Digitalization of Hospital Services and Customer Satisfaction. There is a significant correlation between Digitalization of Hospital Services and Customer Satisfaction at 5% significance level. The p-value 0.024 which is less than the commonly accepted level of 0.05. So, the Null Hypothesis is rejected.

**Interpretation**

A significant correlation exists between the digitalization of hospital services and customer satisfaction, as digital solutions address key areas of patient needs and enhance healthcare delivery quality. Online scheduling and billing reduce administrative burdens, allowing healthcare providers to devote more attention to direct care. The digital feedback mechanisms enable hospitals to swiftly address patient concerns, strengthening trust and communication. As these digital improvements align healthcare services with patients' expectations for speed, accuracy, and convenience, they foster a more patient-centred approach, driving satisfaction and loyalty in healthcare services.

**8. Summary of Findings**

**The major findings of the present study are summarised based on the objectives of the research as follows:**

Objective No.1: To identify the Digitalization of Hospital Services that ensure the effective Healthcare system in Bangalore.

The Digitalization of Hospital Services are telemedicine that has emerged as a transformative force in healthcare, offering numerous benefits in terms of

accessibility, convenience, and cost savings, the IoT facilitates remote consultations and telemedicine by connecting patients and healthcare providers through video conferencing, sharing medical records, and real-time communication. Hospitals are developing digital platforms and mobile apps that allow patients to access their health records, schedule appointments, communicate with healthcare providers, and even receive virtual care through telemedicine services. Health Information Exchange networks enable hospitals to securely share patient information with other healthcare providers, improving care continuity and reducing duplicate tests and procedures. Hospitals are using robotic-assisted surgery systems for more precise and minimally invasive procedures, resulting in faster recovery times and shorter hospital stays. Sustainability in healthcare services involves making environmentally conscious decisions, reducing waste, conserving resources, and promoting the overall well-being of patients, staff, and communities.

Objective No.2: To analyse the impact of Digitalization of Hospital Services on Customer Centric Strategies in Bangalore.

The result has a positive of Digitalization of Hospital Services on Customer Centric Strategies in Bangalore. The calculated F-values (Fstat) are 62.754, 93.635, 76.316, 79.881, 105.682, and 137.439, and the critical F-value (Fcritical) for this test can be obtained from the F-Table with numerator degree of freedom (4) and the denominator degree of freedom (379), Fcritical (4, 379) = 2.37. Since the (Fstat) are greater than (Fcritical), so the Null Hypothesis is rejected. From the results of ANOVA test, the p-value is 0.000 which is less than 0.05 at the 5% level of significance. Again, the Null Hypothesis is rejected. Both the results (F-value and p-

value) lead the same decision regarding the validity of the analysis. There is a significant level of impact of Digitalization of Hospital Services on Customer Centric Strategies in Bangalore.

Objective No.3: To analysis the impact of Digitalization of Hospital Services on Customer Satisfaction.

The result has a positive of Digitalization of Hospital Services on Customer Satisfaction in Bangalore. The calculated F-values (Fstat) are 60.757, 83.589, 71.323, 78.876, 95.672, and 97.419, and the critical F-value (Fcritical) for this test can be obtained from the F-Table with numerator degree of freedom (4) and the denominator degree of freedom (379), Fcritical (4, 379) = 2.37. Since the (Fstat) are greater than (Fcritical), so the Null Hypothesis is rejected. From the results of ANOVA test, the p-value is 0.000 which is less than 0.05 at the 5% level of significance. Again, the Null Hypothesis is rejected. Both the results (F-value and p-value) lead the same decision regarding the validity of the analysis. There is a significant level of impact of Digitalization of Hospital Services on Customer Satisfaction in Bangalore.

Objective No.4: To evaluate the correlation between Digitalization of Hospital Services and Customer Satisfaction.

The correlation between the digitalization of hospital services and customer satisfaction is a complex relationship that depends on various factors. If digitalization improves the efficiency of hospital services, reduces waiting times, and enhances accessibility to healthcare, it is likely to positively impact customer satisfaction. The table no.6 presents the correlation between Digitalization of Hospital Services and Customer Satisfaction. There is a significant correlation between Digitalization of Hospital Services and Customer Satisfaction at 5% significance level. The p-value 0.024 which is less than the commonly accepted level of 0.05. So, the Null Hypothesis is rejected.

## 9. Suggestions

Improving hospital services is crucial for providing better healthcare and enhancing patient satisfaction. Implement a comprehensive EHR system to digitize and centralize patient records. Ensure interoperability with other healthcare systems to enable seamless sharing of patient data among different providers. The hospitals need to establish telemedicine capabilities for remote consultations and follow-ups. Use wearable devices and remote monitoring tools to track patient health data and provide timely interventions. Incorporate Internet of Things (IoT) devices to monitor patient vitals and equipment status in real-time. Implement smart beds, IV pumps, and other IoT-enabled medical equipment for improved patient care and resource management. In service area customers can be retained only by providing better service quality. Quality of care has become utmost important out of other services as it involves care of life. People at the cost of life do not compromise with the quality. Hence,

for all healthcare providers providing best care is supreme requirement.

## 10. Conclusions and Future Scope of the Study

In order to functionalize and enhance the effectiveness of the health services system, both the private and government hospitals should consider strategies that have been implemented by other developed cities and countries. The opportunities for improvement rely on governance and policy initiatives, technological innovations and advancements, knowledge sharing and collaborative partnerships, training and capacity building, and data standardization. Virtual reality and Augmented Reality technologies will find applications in medical training, surgical planning, and patient education. The future scope of the digitalization of hospital services is vast and holds the potential to further transform healthcare delivery. Several emerging technologies and trends are likely to shape the future of digital healthcare.

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