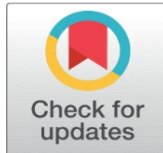
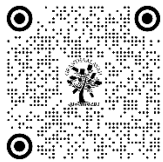


THE FUNCTIONAL AND BEHAVIORAL ASPECTS OF THE ORGANIZATION'S TECHNOLOGICAL TRANSFORMATION

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ABSTRACT

Organizational culture is shaped by people, procedures, and technology, reflecting integrity, progress, future plans, social impact, and brand value. The digital era is transforming working methods, communication, and consumer value. However, implementing rapid cultural changes can be challenging and may lead to issues with employee trust, performance, and office politics. The introduction of technology in healthcare improves processes and products, aiming for overall improvement and enhancing customer care. This has led to the need for professional competency upgrades as employees deliver improved quality services, highlighting the importance of adapting to the digital era.

Keywords: Organizational, Employees, Healthcare, Technology, Technological Transformations

1. INTRODUCTION

Our study demonstrates a holistic approach to achieving change in the healthcare industry, wherein not only the technological changes are focused on but also the associated changes in the human façade are explored and discussed. The introduction of technology in the healthcare system improvises the processes and products of the organizations in such a way that the objective of achieving overall improvement is chased, hence bringing desired changes in customer care. Employees of the industry deliver these improved quality services; resulting in the need of upgrading the professional's competencies.

To fulfil the organizational objective of achieving service quality competencies of professionals required the requisite development to align their performance with introduced technological requirements. Training channelizes this process of competency development to the current status to the developed one, wherein our study explains the role of training in leading professional's competencies according to the introduced technological transformations.

To manage the changing customer needs along with the technological amendments competency package of professionals is supposed to offer holistic care to customers. In this regard, our study identified them as the catalyzers of the transition process of competency development shaping the developed competencies of professionals along with

training. The first two R's i.e. Responsiveness and Responsibility affect the third one i.e. Reflection ultimately impacts the job behavior and development of professional's competencies.

The current study focuses on developing an understanding of incorporating motive and traits as components of developed competency. As discussed before in the literature, motive, and traits are the hidden part of an individual's personality. The current research has explained the role of motives and traits in improving the job behaviour of professionals and hence entailed them as components of developed competency post offering training to professionals. To explain the above-discussed relation of all discussed dimensions and variables CTE model is developed to showcase the link between competency development, technology and employee engagement through training and development

Technology introduction in the healthcare system improvises the processes and products of the organizations in such a way that the objective of achieving overall improvement is chased, hence bringing desired changes in customer care. Employees of the industry deliver these improved quality services; hence technology onset carved the need of upgrading professional's competencies. To fulfil the organizational objective of achieving service quality competencies of professionals required the requisite development to align their performance with introduced technological requirements. Training channelizes the process related to competency enhancement to the developed status. However, the present study explained the role played by training in leading the competencies of the professionals as per the technological transformations.

2. LITERATURE REVIEW

Creasey (2007) stated that change management aims at acquiring the desired business outcomes by considering the perception and behaviour of people regarding the processes of implementing change". Thus, change management emphasizes the appropriate incorporation of organizational tools which can be further utilized in the successful personal transitions for better adoption and realization of change. It also focuses on the impact it has on the people.

Organizational change management is the process of recognizing, guiding, and managing human emotions and reactions in a way that minimizes the inevitable drop in productivity that accompanies change. So, the simplest explanation of change management is "improving performance and results". With the expansion of the concept, the definition of change management can be regarded as, "A structured process designed to deal directly and intentionally with the human factors through behaviour change, achieving the anticipated benefits". The desired behaviour is attained by making people understand and internalize change and by preparing them to be successful contributors to the future state of the organization (McCarthy & Eastman, 2010).

Moreover, the change starts with empowering individuals to attain the organizational vision. Empowering people is an essential feature of change management in an organization that includes a diverse workforce. "Change" basically alters the interaction between people and the system (Lorenzi & Riley, 2000). Thus, it enhances their engagement with their job and accepts changes in a better manner.

Change management is a complex, dynamic and challenging process and is not regarded as a choice between technological or people-oriented solutions; but a combination of all. The ability to change, adapt and evolve provides and aids organizations with a competitive advantage. The combination of change management of focused attention on the elements can be explained by the "The Three-legged stool figure by McCarthy Eastman (2010):

New Product and service design innovations, low performance and morale, innovations in the manufacturing process, new delivery service ideas to customers, and inadequate skills and knowledge (Markovich, 2008).

3. DEVELOPING ORGANIZATIONAL COMPETENCIES

Through Technological Adoption Healthcare industry has encountered a series of transformations that are attributed to technological changes. The development of new products and alterations in processes has benefited customers with improved care, accurate diagnostic results, reduced time, alternative treatment techniques, and provision of holistic care. Technology has considerably affected treatment processes and their duration. This has demanded changes in the competencies of healthcare professionals.

3.1. TECHNOLOGY ADOPTION LEADING TO PROCESS IMPROVEMENT

Quality improvement has become one of the major concerns for the healthcare industry in the last two decades. It is done with the intention of “delivering better services to customers”. Technology incorporation in healthcare is done to achieve this quality care through improvement in processes and products. The attitude towards process improvement post-technology adoption is to improve systems performance with reduced errors and also improve the quality of services for achieving customer satisfaction leading to high customer footfall. This is done through working with best practices, evidence-based care and finally standardizing the processes; resultant is customer-centric care (Nelson, Godfrey, Batalden, Berry, Bothe, McKinley, Melin, Muething, Moore, Wason and Nolan, 2008).

Table1 Process improvement leading service quality by category of hospitals

	Reduced No. of Errors						Enhanced Customer Satisfaction						High Customer Footfall					
	Commercial Hospitals			Non-Commercial Hospitals			Commercial Hospitals			Non-Commercial Hospitals			Commercial Hospitals			Non-Commercial Hospitals		
	Percentage of Respondents Agreed	Correlation Value	R-Square	Percentage of Respondents Agreed	Correlation Value	R-Square	Percentage of Respondents Agreed	Correlation Value	R-Square	Percentage of Respondents Agreed	Correlation Value	R-Square	Percentage of Respondents Agreed	Correlation Value	R-Square	Percentage of Respondents Agreed	T-Value	R-Square
Improvement Using Technology	90%	0.952	0.906	9%	0.102	0.001	75%	0.88	0.77	60%	0.643	0.41	72%	0.826	0.68	7%	0.028	0.007
Improvement in Quality of Services	63%	0.732	0.53	5%	0.011	0.0001	65%	0.754	0.56	14%	0.158	0.02	56%	0.598	0.35	8%	0.095	0.009

3.2. IMPROVEMENT USING TECHNOLOGY AND ERROR REDUCTION

Delivering service quality is a prominent task that healthcare organizations strive to achieve due to its heterogeneous nature. In this regard, the healthcare industry has majorly relied on technology to improve the quality of care. According to the leading healthcare leaders, technology incorporation augments quality customer care by reducing the number of errors like medication errors and assessment errors. It further improves the reconnaissance system with fast response.

Therefore, healthcare organizations incorporate technology to improve the efficiency of processes, which can be traced by reducing the number of errors while improving delivery. Improvement in Processes at commercial hospitals showed very strong synchronization (0.952) with the expected change in terms of reducing the number of errors (Table1). 90% of the professionals at the hospital expressed that the overall efficiency of processes has improved due to technology adoption, which has contributed to the improved functionality of the hospital.

Technology has also resulted in lessening the time of processes thus reducing the decision-making time for professionals. This furthers the overall work quality. According to the professionals at commercial hospitals, technology has improved medical as well as non-technical processes. The non-technical staff at commercial hospitals expressed their satisfaction with the technology usage, which has considerably reduced their physical efforts contributing to the improvement of their performance. Unlike commercial hospitals, the responses at non-commercial hospitals showed a weak relation (0.102) between technology-oriented improvements and a reduction in errors (Table1).

3.3. TECHNOLOGY ATTRIBUTED TO ENHANCED CUSTOMER SATISFACTION AND FOOTFALL

For several years, customer satisfaction is considered an important source of information through which gaps in delivery and desired performance of customer services can be identified. The fulfilment of these gaps helps in improving the quality of processes. Customer perception depicts the extent to which organizations are providing customer-centric services, eventually reflecting the level of customer satisfaction. Thus, it can be understood that 93 overall improvements in the system of organizations will enhance customer satisfaction to a significant level. In the context of the healthcare industry, it is stated by Abri and Balushi, 2014, Healthcare organizations design their healthcare strategies by considering their customers' perceptions. This is noted and analyzed at commercial hospitals, where the improvement in services has led to an improved level of customer satisfaction. A very strong correlation (0.880) was observed between the improvement of services and enhanced customer satisfaction (Table1). Around 75% of the professionals at commercial hospitals believed that they can deliver the expected healthcare outcomes with the assistance of technological improvements made in the hospital's system.

4. PRODUCT INNOVATION IN HEALTHCARE ORGANIZATIONS

Business organizations have witnessed a proliferation in product innovations aimed at enhancing the quality of services. In achieving this aim, technology has played a significant role. Technology has invoked product innovation, which has improved the efficiency and effectiveness of organizational systems. Technology has facilitated organizations with developed equipment's/machinery; it has also motivated the manpower of the industry towards development. Along with these improvements, industries are undergoing major reforms of heightened customer demands that are thrusting pressure on the industry to expand the range of technologically developed products.

For successful integration of innovation within the system, healthcare organizations must bridge the gap between possessed and required infrastructural facilities. Therefore, it is essential to align the organizational structure and facilities according to the requirement of technological product innovation for achieving the maximum benefits of innovation-oriented development. In this regard, the required infrastructural changes are expected to be inculcated in the healthcare systems. Once technological innovation is successfully integrated into the structure of healthcare systems, organizations will encounter various beneficial changes

Table 2 Infrastructural requirements for Technology introduction by category of hospitals

Technological Utilities	Infrastructural Facilities					
	Commercial Hospitals			Commercial Hospitals		
	Percentage of Respondents Agreed	Correlation Value	R-Square	Percentage of Respondents Agreed	Correlation Value	R-Square
	30%	0.401	0.16	18%	0.215	0.04

Commercial hospitals are more attentive towards the latest technological utilities for better and improved product development, as they showed moderate (0.401) synchronization with the changes to be implemented in infrastructural facilities to accommodate new technology (Table2). Only 30% of the professionals believed that their hospitals are attentive towards the latest technological updates and possess all the relevant infrastructural facilities. It construes that though the hospitals are progressive enough to develop their products to improve the quality of services, any infrastructural change or development has not been observed to a much extent. It has been observed during the study that sometimes-restricted financial resources bound little infrastructural change to happen.

Introducing technology to an existing system entails huge costs, thus recurring any other cost to change the infrastructure is not feasible. Considering such financial constraints, only necessary changes are implemented.

Therefore, the financial constraint was again found to be the reason behind the non-occurrence of any infrastructural change in the facilities along with being attentive to the latest technological utilities. Hence, a weak relation (0.215) was found between paying enough attention towards the latest technological utilities and possessing all the required infrastructural utilities in the system as only 18% of the participants gave positive responses (Table2).

5. IMPROVED PRODUCTIVITY AND COST-EFFICIENT OUTCOMES

With the mounting cost associated with technological developments, finance has become a constraint for healthcare organizations. This has affected the cost of healthcare services incrementally, wherein the expenses are ever-increasing. Development in healthcare should be affordable for both the care provider and the receiver. For this purpose, several organizations look for potential developments to offer cost-effective services to customers. Thus, product development should be affordable and effective so that it can deliver cost-efficient outcomes along with being reasonable for the organization and customers by curtailing complexity and reducing duplicity of diagnostic tests. The impact of technology on increasing healthcare costs is known but yet acceptable. The cost is not only on the customers but on the organizations as well. The associated procurement and implementation cost with any new development puts the organization under financial restriction.

Table 3 Technology-oriented cost-efficient productivity by category of hospitals

Improved Productivity	Cost efficient Outcomes					
	Commercial Hospitals			Commercial Hospitals		
	Percentage of Respondents Agreed	Correlation Value	R-Square	Percentage of Respondents Agreed	Correlation Value	R-Square
	23%	0.25	0.062	11%	0.143	0.02

Following the trend of escalating costs with the use of technological initiatives in the healthcare industry, commercial hospitals are also not barred from the same. The technology adoption by the hospital has not contributed to the productivity of the outcomes in terms of the associated cost. This is reflected by the weak correlation on the negative side (0.25) between improved productivity and change in the outcomes of being cost-efficient (Table3).

Only 23% of the professionals believed that the improvement in cost-efficient productivity is invoked by technology. At commercial hospitals, technology has certainly contributed to improving the quality of services and raising the level of customer satisfaction but has not contributed to making the services cost-efficient. Implementation cost for the commercial hospital is way too high and restricts the outcomes of efficiency and productiveness in terms of cost.

Similarly, non-commercial hospitals are also not able to deliver cost-efficient productive outcomes. Hence a weak correlation (0.143) depicts unsuccessful product development in terms of producing productivity in delivering cost-efficient outcomes (Table3). Only 11% of the professionals at non-commercial hospitals expressed the achievement of productive outcomes. Though new technology certainly brings high improvements, it adds additional cost for healthcare organizations, which is reflected in the treatment cost of the customers as well.

6. ROLE OF TRAINING AND DEVELOPMENT IN FACILITATING TECHNOLOGY INTEGRATION

To orient the new technology with the system and achieve the desired changes in the direction of improvement, an alignment of employees' competencies is imperative. Workforce training for developing employees' competencies is an important concern to be looked upon by organizations. It is essential to impart the requisite training to the professionals to facilitate their development to make them eligible to work on new products and processes. This training is necessary to ensure that professionals are aware of new technologies and can also work on them. Thus, the training programs should be designed in such a way that they fulfil the aim of preparing a competent and trained workforce. In our study, with the professionals of both the categories of commercial and non-commercial hospitals, interviews were conducted. Based on the analysis of the responses, we tried to understand the extent of healthcare organizations in introducing new technological updates in the market, and its associated relationship with the role of training and development in developing professionals' competencies to work on the new technology.

Table 4 Role of Training and Development in Technology Integration

	Sufficient Training Programs		Beneficial Training Programs	
	Commercial Hospitals	Non-Commercial Hospitals	Commercial Hospitals	Non-Commercial Hospitals

	Percentage of Respondents Agreed	Correlation Value	R-Square	Percentage of Respondents Agreed	Correlation Value	R-Square	Percentage of Respondents Agreed	Correlation Value	R-Square	Percentage of Respondents Agreed	Correlation Value	R-Square
Latest Technological Utilities	35%	0.401	0.215	19%	0.22	0.05	66%	0.746	0.55	%	0.053	0.28

7. TRAINING AND DEVELOPMENT LEADING TO BEHAVIOURAL IMPROVEMENT AND EMPLOYEE ENGAGEMENT

Effective training provides an enriching learning experience to the employees, which brings out a permanent change in their behaviour leading to enhanced productivity. Training is focused on the development of current skills and competencies resulting in enhanced employee engagement. If training is effectively delivered, then it aids employees in managing their work stress, and are proven to be more productive and engaged in their work. The training aims on improving the current competencies of the employees to bring out an improvement in future job behaviour thus enhancing professionals' engagement with the job.

7.1. TRAINING AND DEVELOPMENT LEADING TO BEHAVIOURAL IMPROVEMENT (BI)

Any new technology adopted by an organization gives rise to the need for requisite training to be imparted to its employees. Training entails constructive development in employees, which helps in improving their behaviour. Moreover, training substantiates a connecting link between the current and the desired job behaviour of professionals by enhancing their abilities. With these improved abilities employees become capable enough to deliver service quality to customers with excellence. Thus, training brings the desired behavioural changes in the employees facilitating the effective delivery of customer service.

Table 5 Training Facilitating Behavioural Improvement by category of hospitals

	Improved Productivity						Peer to Peer Learning					
	Commercial Hospitals			Non-Commercial Hospitals			Commercial Hospitals			Non-Commercial Hospitals		
	Percentage of Respondents Agreed	Correlation Value	R-Square	Percentage of Respondents Agreed	Correlation Value	R-Square	Percentage of Respondents Agreed	Correlation Value	R-Square	Percentage of Respondents Agreed	Correlation Value	R-Square
Sufficient Training	20%	0.25	0.06	10%	0.143	0.02	96%	1.00	1.00	22%	1.00	1.00
Beneficial Training	95%	1.00	1.00	20%	0.267	0.07	95%	0.25	0.06	20%	0.27	0.07

8. CONCLUSION

Healthcare organizations' transformations take time to fully integrate and achieve desired results. Business houses are sensitive to environmental changes and constantly strive for benchmarking. Previous research has developed various perspectives and models for studying change and its management. The study emphasizes the role of competent employees in meeting organizational objectives and the importance of holistic development of healthcare professionals. The study focuses on change management from an overall perspective, considering technology as the focal point and integrating competent and engaged healthcare professionals.

CONFLICT OF INTERESTS

None.

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