

"Employee Adoption to Service Automation: Analysing Responses to Technological Changes in the Service Sector"

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ABSTRACT

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The recent global health crises and changing workplace dynamics have accelerated the pace of technology transformation within enterprises. Many organizations must take human response into account when determining how to best manage the adoption of new technology, since this can help ensure the overall success of the implementation. The purpose of this paper is to evaluate earlier research on the impact of automation technology on employment. Because the impact of automation is assessed at various levels of analysis using different methodologies and, for some levels of analysis, the impact of each individual type of automation technology is assessed, the literature examining how automation technologies affect employment is incredibly intricate and detailed. In order to increase productivity and boost employee performance and remain competitive in the market, many firms are having trouble selecting the best technology adoption tactics. Based on prior evidence, research gaps and future research priorities are identified and debated.

Keywords: "Employee Adoption, Service Automation, Employee Responses, Technological Changes, Service Sector"

INTRODUCTION

Technology history demonstrates that new technologies are often accompanied with a trough of disillusionment following the initial exaggerated expectations (**Gartner, 2016**). Managers are willing to jump on a new technology bandwagon and adopt technological solutions without questioning their value or attempting to explain its mystique or uniqueness, largely due to articles in trade publications and social media that praise newer technologies. Examples of these technologies that are frequently the subject of significant journalistic, academic, and political attention are robots, artificial intelligence, and service automation. Opinions about them vary from appreciating how they free humans from physical labour and create new commercial opportunities (**Brynjolfsson & McAfee, 2014**) to worrying about how they would render humans obsolete in a society where everything is automated (**Leonhard, 2016**). According to some writers, marketers ought to start thinking of robots as potential customers (**Ivanov & Webster, 2017**).

SERVICE SECTOR

The makeup of anything that expands is also altered. As an economy expands, so do the proportions and relationships between its main sectors agriculture, industry, and services as well as between other sectors that are rural and urban, public and private, and centered on domestic and foreign trade. By looking at how the three main sectors of agriculture, industry, and services contribute to the total output and employment of the country, one may determine the structure of an economy.

Even though it is the most significant industry in developing economies, as per capita income rises, the industrial and then service sectors take over as the agricultural sector becomes less significant. We refer to these two successive phases of change as post-industrialization (also known as "deindustrialization") and industrialization. All emerging countries are anticipated to go through these stages, which may be accounted for by structural changes in consumer demand and the relative labor productivity of the three primary economic sectors.

Activities Comprising the Service Sector

- Hotels, restaurants, and trade.
- Storage and communication.
- Banking and insurance.
- Transportation,
- Real estate and home ownership; business services
- Public administration and defence.
- Additional services, such as those related to education, health and medicine, religion and other community services, law, leisure, and entertainment.

DRIVERS OF ORGANIZATIONAL ADOPTION OF AUTOMATION

Researchers and industry professionals alike are paying more and more attention to the application of automation, robotics, and artificial intelligence in the travel and hospitality industries. It is anticipated that cutting-edge technology solutions would completely change the industry (**Ivanov & Webster, 2019**). Even though there aren't many examples of complete automation in the tourism industry, it's crucial to comprehend the elements that influence organizational decisions to use automation in order to determine whether adoption rates will rise in the future. Finding possibly adjustable elements that can be used to enhance the adoption of best practices is interesting (Wisdom et al., 2014). No empirical research has been done to address this as of yet.

Technological Progress: Respondents quickly acknowledged the significant contributions that advancements in technology and the pervasive use of robots and artificial intelligence, including voice assistants and driverless cars, have made to the automation of travel and hospitality services. In order to help business organizations adopt technological innovation or adapt to technological changes to improve performance, literature has focused on how technological innovation and evolution drive new business models (**Baden-Fuller & Haefliger, 2013**) and/or strategic alignment (**Croteau & Bergeron, 2001**). The results imply that businesses can now afford and be able to implement autonomous service operations thanks to technological advancements.

Labor Shortage: The factor that influenced automation adoption the most was a severe or ongoing labour shortage. In reaction to the difficulties in obtaining talent in the industry, which has been made worse by COVID19, the term "unmanned" was meaningfully used to underline the lack of need for human labour while referring to automation (**Stergiou & Farmaki, 2021**). Indeed, prior research has indicated that automation may be able to address the issue of the developing labour shortage in a variety of sectors, including manufacturing, tourism, construction, and agriculture (**Tuomi et al., 2020**). A number of interconnected factors, including labour migration, liability, political and regulatory concerns, and demographic shifts, have been linked to the labour shortage.

REVIEW OF LITERATURE

Stone, P. et al. (2023) Understanding how technology has changed to become a source of demand is the aim of this study. Using an interpretive, grounded theory methodology, 14 senior-level managers of a multinational, technology-driven company were asked to participate in semi-structured interviews to share their thoughts. The interviews were analysed using three coding stages. This means coding the data in a selective, axial, and open manner. The analysis approach yielded four topics: technology and society, technology and customers, business and demand, and business competitiveness. Engaging with

these subjects showed how technology is changing business structures, company strategy, and corporate procedures. Rapid technological advancement has resulted in dynamic shifts in the marketplace, as businesses leverage new technology to create novel product offers that drive more dynamic business models, procedures, and organizational structures. By doing this, technology has started to influence demand.

Dhondt, S. et al. (2022) The effect of technological advancements on the nature of work and the skills required for it is a significant concern in all fields. Technical developments and changes in skill usage have been directly linked in numerous studies; organizational change is rarely considered as a decisive factor. Based on a panel poll, this study uses a Luhmannian approach to understand the connection between organizational context and technology transition. This notion is quantitatively tested and demonstrates how important it is to take the characteristics of the working environment into account while researching skill developments. The findings indicate that while changes in technology have a minor impact on how skills are used, changes in the workplace have a greater impact.

Heim, I., & Sardar-Drenda, N. (2021) The goal of this research is to determine how organizational and technological changes during a crisis impact worker productivity, with a particular emphasis on virtual and remote work. Using stratified simple random selection, 295 employees of three commercial banks in Sri Lanka provided primary data. Examples of data analysis techniques include descriptive statistics, multiple regression analysis, and linear regression analysis. While the multiple regression analysis shows that only changes in communication and leadership have an effect on employees' performance, the linear regression results investigate that measures/variables like changes in a communication system, leadership, technological advances, and tolerance to change have a significant negative effect on employee performance during the COVID-19 pandemic.

Tuomi, A., & Ascenção, M. P. (2023) Automation has the potential to alter the structure of service jobs. But little is known about how automation affects particular industries, such as certain positions in the hospitality industry. In order to close this disparity, this study examines the degree of automatability of several positions and duties related to frontline food service, a particular type of hospitality.

Rahmayati, R. (2021). The goal of the study is to comprehend the marketing competition faced by the Islamic banking sector. The research methodology takes the form of library research, which gathers data via the use of written resources. The competitive landscape requires Islamic banks to adopt a more proactive marketing strategy than in the past, particularly in light of the COVID-19 epidemic. The government advises and directs that Islamic banking be required in order to provide customers with digital bank services. A larger market can be reached by Islamic banking. During the COVID-19 pandemic, accelerating technology-driven business models needs to be a top priority. According to the survey, the marketing value's competition strategy in the Islamic banking sector is significantly affecting how customers are served by digitizing bank services.

Larivière, B. et al. (2017). The rapid growth of technology is causing a fundamental alteration in the service encounter, one of the central concepts of service research. In this study, we offer a revised perspective on what we call the "Service Encounter 2.0". To do this, we develop a conceptual framework that summarizes the Service Encounter 2.0 and provides an overview of the changing, mutually supporting roles of workers, consumers, and technology. The study discover that technology may strengthen networking and either supplement or replace customer service representatives. Consequently, workers and clients are assuming the roles of coordinator, innovator, enabler, and differentiator. Furthermore, we pinpoint crucial domains for further investigation on this significant subject.

Cascio, W. F., & Montealegre, R. (2016). Industry 4.0 ushers in the age of digitalization. Everything is digitized, including workers, machines, production systems, surroundings, business models, and goods and services. Everything is connected to the matching virtual representation inside

the digital scene. On digital platforms, the physical fluxes will be continuously mapped. With the latest advancements in information and communication technologies, a number of systems and software are enabling factory communications at an advanced stage of automation. This is resulting in a state-of-the-art factory both inside and outside the plant, completing each link in the value chain in real-time. Everything is smart. This disruptive influence on manufacturing businesses will enable the smart manufacturing ecosystem paradigm. The path of conventional centralized applications has drastically changed with Industry 4.0.

RESEARCH METHODOLOGY

Research Design: In order to comprehend how employees react to technological advancements in service automation, this study uses a descriptive research approach. The study focuses on how employees view and react to these developments as well as the factors influencing the automation adoption in the service industry.

Research Objectives

- To explore employee attitudes toward technological changes in the service sector.
- To identify the factors influencing the adoption of service automation by employees.

Hypothesis

- **H1:** Employees with positive attitudes toward automation are more likely to adopt technological changes in the service sector.
- **H2:** There is a significant relationship between the level of training provided and employee adoption of service automation.

Sample Size and Sampling Technique: The sample size for this study is **250 employees** working in various service organizations that have implemented technological automation. A **random sampling technique** will be employed to ensure that the sample represents a diverse range of service sector employees

Data Collection Method: Structured questionnaire has been used to collect the data containing both closed-ended and Likert scale questions to capture employee responses toward service automation.

Reliability Statistics	
Cronbach's Alpha	N of Items
.736	33

Interpretation The Cronbach's Alpha value of **0.736** for 33 items suggests a **reliable** level of internal consistency among the items in your questionnaire. Generally, a Cronbach's Alpha value above 0.7 is considered acceptable, indicating that the items are measuring a coherent underlying construct.

Objective 1 To explore employee attitudes toward technological changes in the service sector.

H1: Employees with positive attitudes toward automation are more likely to adopt technological changes in the service sector.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.727
Bartlett's Test of Sphericity	Approx. Chi-Square	928.389
	df	528
	Sig.	.000

Interpretation: A sufficient degree of sample adequacy for factor analysis is indicated by the KMO value of 0.727. Values nearer 1 indicate that the data is suitable for factor analysis. The KMO statistic

has a range of 0 to 1. The Bartlett's Test of Sphericity determines if your correlation matrix differs noticeably from an identity matrix, which has zero correlations. The purpose of the test is to determine whether factor analysis is suitable. With 528 degrees of freedom, the Chi-Square value of 928.389 is extremely significant ($p = 0.000$). This indicates that factor analysis is valid since the variables are sufficiently correlated. Factor analysis can be carried out because the significance threshold ($p < 0.05$) verifies that your data has a meaningful structure.

Communalities		
	Initial	Extraction
The implementation of new technology leads to higher efficiency and productivity.	1.000	.710
The adoption of Technologies enhances the operational efficiency of service organizations.	1.000	.597
Digital transformation is essential for the survival in today's competitive market.	1.000	.583
Usage of software have increased efficiency significantly.	1.000	.519
Adopting updates in technological services of enhances the flexibility and scalability.	1.000	.630
The integration of chatbot technology in customer service improves response times and customer experience.	1.000	.643
The implementation of automated systems in service organizations enhances the consistency of service delivery.	1.000	.692
Internet and Social media platforms help to increase awareness about the services that organisations offer.	1.000	.632
Fear of job lose increases due to the incompetency of technological changes.	1.000	.629
Employee resist themselves at time of technological changes in the organisation.	1.000	.634
Educating employees plays a significant role at times of technological adoption.	1.000	.547
Training and development programs foster smooth implementation of technological changes in the organisation.	1.000	.608
Adequate time given to employees for adoption of new technology foster positive working environment.	1.000	.534
Remote working technologies have positively impacted employee productivity.	1.000	.708
Find it easy to adapt to new technologies introduced in the organisation.	1.000	.643
Poor communication during technological change management lead to confusion.	1.000	.618
The success of technological change initiatives hinges on strong leadership support.	1.000	.606
Employee participation in decision making process foster positivity at times for technological changes.	1.000	.474
Constructive feedback from the employees at times of technological changes makes the process easier.	1.000	.566
Your organisation effectively manages technological driven changes?	1.000	.602
Service Automation improves overall efficiency of the organization	1.000	.590
Customers trust automated systems to handle their personal information securely.	1.000	.615
Training provided for new automated systems has been adequate and helpful.	1.000	.686

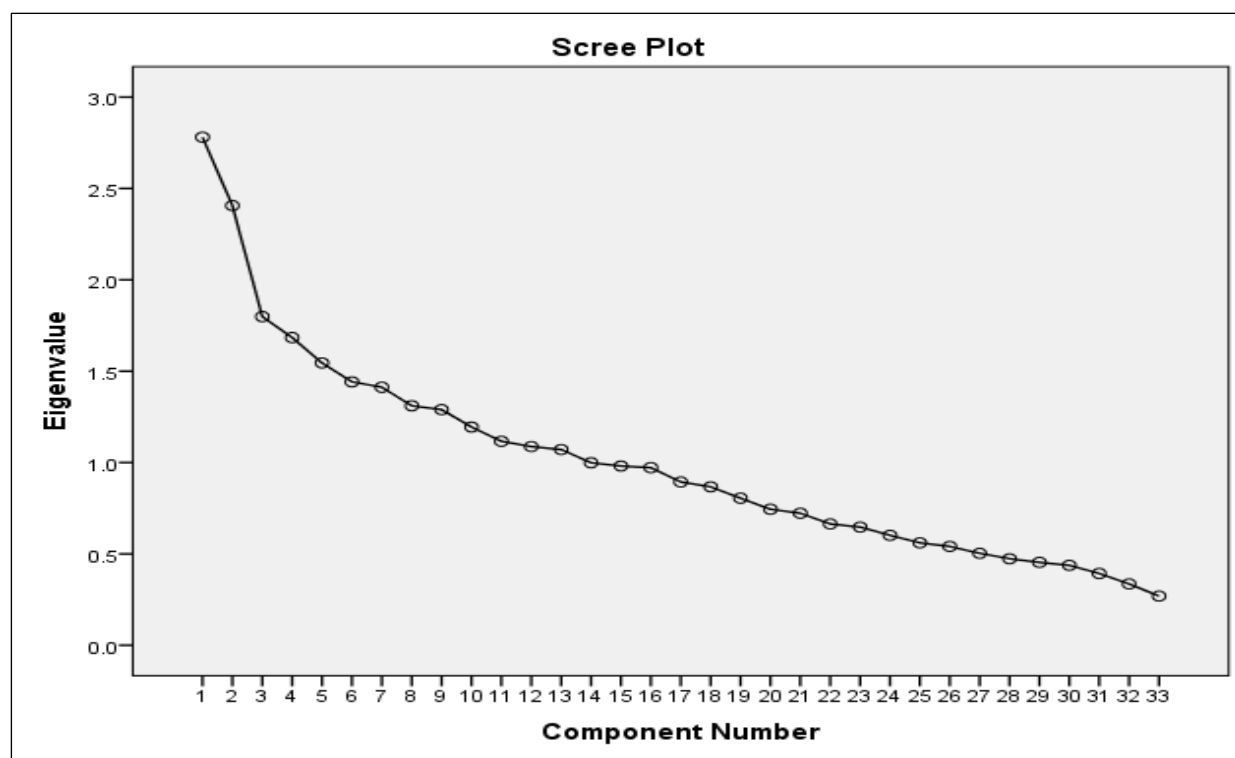
Service organizations that leverage big data analytics gain a competitive edge over those that do not.	1.000	.594
Automating customer service processes leads to faster resolution of customer inquiries.	1.000	.600
Service Automation reduces the operational cost by eliminating employee requirement.	1.000	.582
Service Automation can handle complex customer issues as effectively as human agents.	1.000	.577
Investing in Service Automation technology yields high returns.	1.000	.730
Automation in service organizations leads to better data collection and analysis for decision-making.	1.000	.539
Automated service systems enhance the overall customer experience.	1.000	.578
Implementing automated customer service systems requires significant upfront investment	1.000	.703
Service Automation technologies are essential for keeping up with competitors	1.000	.643
Service Automation enhance your working experience	1.000	.523

Interpretation: - The most items have high communalities, typically above **0.5**, indicating that they are well-represented by the underlying factors. A few items, such as "Employee participation in decision-making fosters positivity during technological changes" (0.474), have lower communalities, meaning their variance is less explained by the factors. However, these values are still close to the acceptable threshold of **0.5**. The strongest items, such as "Investing in Service Automation technology yields high returns" (0.730), suggest that these variables are highly related to the factors identified through factor analysis.

Total Variance Explained									
Compo nents	Initial Elgen Values			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
1	2.781	8.427	8.427	2.781	8.427	8.427	2.213	6.705	6.705
2	2.406	7.291	15.718	2.406	7.291	15.718	1.929	5.845	12.551
3	1.799	5.451	21.169	1.799	5.451	21.169	1.773	5.374	17.925
4	1.684	5.103	26.271	1.684	5.103	26.271	1.604	4.862	22.787
5	1.545	4.682	30.953	1.545	4.682	30.953	1.516	4.595	27.382
6	1.442	4.368	35.322	1.442	4.368	35.322	1.491	4.519	31.901
7	1.412	4.279	39.600	1.412	4.279	39.600	1.440	4.363	36.264
8	1.310	3.971	43.571	1.310	3.971	43.571	1.431	4.338	40.602
9	1.290	3.908	47.480	1.290	3.908	47.480	1.431	4.336	44.937
10	1.194	3.619	51.098	1.194	3.619	51.098	1.407	4.265	49.202
11	1.116	3.382	54.481	1.116	3.382	54.481	1.403	4.252	53.454
12	1.087	3.295	57.775	1.087	3.295	57.775	1.312	3.975	57.429
13	1.071	3.246	61.022	1.071	3.246	61.022	1.185	3.592	61.022
14	.999	3.026	64.048						
15	.981	2.973	67.021						
16	.972	2.945	69.966						
17	.894	2.708	72.674						
18	.867	2.628	75.302						
19	.805	2.439	77.742						
20	.744	2.256	79.997						
21	.722	2.189	82.186						

22	.664	2.012	84.198						
23	.647	1.959	86.158						
24	.601	1.823	87.980						
25	.560	1.698	89.679						
26	.541	1.638	91.317						
27	.503	1.525	92.842						
28	.474	1.435	94.277						
29	.454	1.375	95.651						
30	.438	1.326	96.977						
31	.393	1.190	98.168						
32	.336	1.018	99.185						
33	.269	.815	100.000						

Interpretation: - The PCA extracted **13 components** that explain **61.022%** of the total variance in the dataset. This suggests that these components provide a meaningful summary of the data, capturing the most important factors related to employee attitudes towards service automation and technological changes. Rotation has further improved the clarity and interpretability of these factors.



Interpretation: The scree plot indicates that retaining **13 components** is optimal for summarizing the dataset. After the 13th component, the eigenvalues drop below 1, meaning the remaining components contribute minimal additional variance. Therefore, the first 13 components are sufficient for capturing the most significant information in the data.

Component Matrix ^a													
	Component												
The implementation of new technology leads to higher efficiency and productivity.	.669												
The adoption of Technologies enhances the operational efficiency of service organizations.	.475												
Digital transformation is essential for the survival in today's competitive market.	-.472												
Usage of software have increased efficiency significantly.	-.584												
Adopting updates in technological services of enhances the flexibility and scalability.										-.468			
The integration of chatbot technology in customer service improves response times and customer experience.									-.510				
The implementation of automated systems in service organizations enhances the consistency of service delivery.		.463											
Internet and Social media platforms help to increase awareness about the services that organisations offer.		.492											
Fear of job lose increases due to the incompetency of technological changes.													
Employee resist themselves at time of technological changes in the organisation.			.475										
Educating employees plays a significant role at times of technological adoption.													
Training and development programs foster smooth implementation of technological changes in the organisation.													
Adequate time given to employees for adoption of new technology foster positive working environment.					.414								
Remote working technologies have positively impacted employee productivity.						-.540							
Find it easy to adapt to new technologies introduced in the organisation.													
Poor communication during technological change management lead to confusion.											.451		
The success of technological change initiatives hinges on strong leadership support.												-.413	
Employee participation in decision making process foster positivity at times for technological changes.			.442								.403		
Constructive feedback from the employees at times of technological changes makes the process easier.								-.403					
Your organisation effectively manages technological driven changes?													
Service Automation improves overall efficiency of the organization	.587												

Customers trust automated systems to handle their personal information securely.	.606													
Training provided for new automated systems has been adequate and helpful.	-.403													
Service organizations that leverage big data analytics gain a competitive edge over those that do not.														
Automating customer service processes leads to faster resolution of customer inquiries.														
Service Automation reduces the operational cost by eliminating employee requirement.	.439													
Service Automation can handle complex customer issues as effectively as human agents.														
Investing in Service Automation technology yields high returns.										-.534				
Automation in service organizations leads to better data collection and analysis for decision-making.							-.414							
Automated service systems enhance the overall customer experience.														
Implementing automated customer service systems requires significant upfront investment										.453				.420
Service Automation technologies are essential for keeping up with competitors			.455				.444							
Service Automation enhance your working experience	.538													
a. 13 components extracted.														

Interpretation: - The **13 components** extracted seem to represent distinct dimensions of the responses regarding service automation adoption. Each component highlights different aspects, such as **efficiency, employee adaptability, financial returns, cost reduction, and resistance** to technological changes. Understanding these components can help identify which factors are most influential in determining employee attitudes and behaviours towards service automation.

The principal component analysis has thus reduced the complexity of the dataset, summarizing the relationships among variables into 13 underlying factors that capture the majority of the variance in the data.

Rotated Component Matrix ^a														
	Component													
	1	2	3	4	5	6	7	8	9	10	11	12	13	
The implementation of new technology leads to higher efficiency and productivity.	.818													
The adoption of Technologies enhances the operational efficiency of service organizations.	.707													
Digital transformation is essential for the survival in today's competitive market.	-.445													
Usage of software have increased efficiency significantly.	-													
Adopting updates in technological services of enhances the flexibility and scalability.														
The integration of chatbot technology in customer service improves response times and customer experience.							.772							

The factors related to **positive attitudes** (productivity, operational efficiency) and **successful adoption of technology** load strongly on several components, there is clear evidence that employees with positive views toward automation are indeed more likely to adopt technological changes.

Thus, **the hypothesis is accepted** based on the findings of the PCA, which show a meaningful relationship between positive attitudes towards automation and the adoption of technological changes in the service sector

Model Summary				
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.510 ^a	.063	.058	.18445
a. Predictors: (Constant), Level of Training				

The **model summary** indicates that training explains a **moderate but significant** portion of the variation in the adoption of service automation by employees, as reflected by the **R² value of 0.063**. This means that the **level of training accounts for 6.3% of the variability** in employee adoption of service automation. While this shows that training has some influence on whether employees adopt automation, the relatively low **R² value** suggests that **93.7% of the variance** remains unexplained by training alone.

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.453	1	.453	13.314	.000 ^b
	Residual	6.736	198	.034		
	Total	7.189	199			
a. Dependent Variable: Employee Adoption of Service Automation						
b. Predictors: (Contant), Level of training						

Interpretation The ANOVA results show that the regression model, using **Level of Training** as a predictor, is **statistically significant** in predicting **Employee Adoption of Service Automation** ($p < 0.05$). The F-value of **13.314** suggests that training significantly influences employee adoption of service automation, and the probability of this result occurring by chance is very low ($p = 0.000$). Therefore, we can confidently conclude that **training has a meaningful impact** on employee adoption of service automation.

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	3.274	.254		12.910	.000
	Level of Training	.219	.060	.510	3.649	.000
a. Dependent Variable: Employee Adoption of Service Automation						

The coefficients table provides detailed information on the relationship between the independent variable (**Level of Training**) and the dependent variable (**Employee Adoption of Service Automation**). The positive coefficient for **Level of Training (B = 0.219)** indicates that as training increases, employees are more likely to adopt service automation. The **standardized Beta (0.510)**

shows a moderate strength of this effect, meaning training plays an important role in driving the adoption of service automation, although other factors may also contribute.

Since the p-value is statistically significant and the relationship between training and employee adoption is positive and supported by the regression results, the hypothesis **H2** is **accepted**. There is a significant relationship between the level of training and employee adoption of service automation.

Regression Equation:

The regression equation can be written as:

Employee Adoption of Service Automation = $3.274 + 0.219 \times \text{Level of Training}$

CONCLUSION

In conclusion, the successful adoption of service automation within the service sector hinges significantly on understanding and addressing employee responses to technological changes. This analysis has revealed that employees' attitudes toward automation are influenced by various factors, including perceived ease of use, perceived usefulness, and the extent of organizational support provided throughout the transition process. It is evident that fostering a culture of open communication, involving employees in the implementation process, and providing tailored training programs are essential strategies for enhancing acceptance and reducing resistance to automation.

Moreover, leadership plays a critical role in shaping employee perceptions and encouraging a positive outlook toward technological advancements. By championing automation initiatives and demonstrating its benefits, leaders can effectively motivate their teams to embrace change. The importance of continuous learning and well-being support cannot be overstated; organizations must prioritize these aspects to alleviate potential anxiety and build confidence in their employees.

Ultimately, the integration of service automation presents both challenges and opportunities for the workforce. While some employees may feel threatened by the prospect of automation, others may view it as an opportunity for skill enhancement and career advancement. Therefore, a balanced approach that recognizes individual concerns and highlights the positive implications of automation is crucial.

SUGGESTION

Develop training programs tailored to different employee roles to ensure that all staff members are adequately prepared to use new automated systems. Incorporate hands-on training, online modules, and continuous learning opportunities to accommodate diverse learning preferences. Engage employees early in the automation process by seeking their input on system design and implementation. This involvement can help create a sense of ownership and increase acceptance. Utilize change management frameworks to guide the transition to automation. This includes assessing the current organizational culture, identifying potential resistance, and developing strategies to address concerns effectively. Establish metrics to assess the success of automation adoption, such as usage rates, employee satisfaction, and performance outcomes. Recognize the potential stress and anxiety that may accompany technological changes. Implement support systems such as counselling services, workshops on stress management, and resources for mental well-being to help employees navigate the transition.

REFERENCES

- [1] **Baden-Fuller, C., Haefliger, S. (2013).** Business models and technological innovation. *Long Range Planning*, 46(6), 419-426.
- [2] **Brynjolfsson, E., & McAfee, A. (2014).** The second machine age: Work, progress, and prosperity in a time of brilliant technologies. WW Norton & Company.
- [3] **Cascio, W. F., & Montealegre, R. (2016).** How technology is changing work and organizations. *Annual review of organizational psychology and organizational behavior*, 3(1), 349-375.
- [4] **Croteau, A.-M., Bergeron, F. (2001).** An information technology trilogy: Business strategy, technological deployment and organizational performance. *Journal of Strategic Information Systems*, 10, 77-99.
- [5] **Cziesla, T. (2014).** A literature review on digital transformation in the financial service industry.
- [6] **Dauda, Y. A., & Akingbade, W. A. (2011).** Technological change and employee performance in selected manufacturing industry in Lagos state of Nigeria. *Australian journal of business and management research*, 1(5), 32-43.
- [7] **Dhondt, S., Kraan, K. O., & Bal, M. (2022).** Organisation, technological change and skills use over time: A longitudinal study on linked employee surveys. *New Technology, Work and Employment*, 37(3), 343-362. <https://doi.org/10.1111/ntwe.12227>.
- [8] **Gartner (2016).** Gartner's 2016 Hype Cycle for Emerging Technologies Identifies Three Key Trends That Organizations Must Track to Gain Competitive Advantage. Retrieved 30th May 2017 from <http://www.gartner.com/newsroom/id/3412017>.
- [9] **Heim, I., & Sardar-Drenda, N. (2021).** Assessment of employees' attitudes toward ongoing organizational transformations. *Journal of Organizational Change Management*, 34(2), 327-349.
- [10] **Hult, G.T.M., Hurley, R.F., Knight, G.A. (2004).** Innovativeness: Its antecedents and impact on business performance. *Industrial Marketing Management*, 33, 429-438.
- [11] **Ivanov, S. (2016).** Will robots substitute teachers? *Yearbook of Varna University of Management*, 9, 42-47.
- [12] **Ivanov, S., Webster, C. (2019).** Robots in tourism: A research agenda for tourism economics. *Tourism Economics*, 1-21.
- [13] **Larivière, B., Bowen, D., Andreassen, T. W., Kunz, W., Sirianni, N. J., Voss, C., ... & De Keyser, A. (2017).** "Service Encounter 2.0": An investigation into the roles of technology, employees and customers. *Journal of business research*, 79, 238-246.
- [14] **Law, S. (2009).** Learning from employee communication during technological change. *Journal of Workplace Learning*, 21(5), 384-397.
- [15] **Leonhard, G. (2016).** Technology vs. Humanity. Fast Future Publishing.
- [16] **Lilly, J. D., & Durr, D. W. (2012).** Technology changes at work and employee reactions: The role of leader behaviour. *Human Systems Management*, 31(3-4), 193-201.
- [17] **Rahmayati, R. (2021).** Competition Strategy in The Islamic Banking Industry: An Empirical Review. *International Journal of Business, Economics, And Social Development*, 2(2), 65-71.
- [18] **Stergiou, D., Farmaki, A. (2021).** Ability and willingness to work during COVID-19 pandemic: Perspectives of front-line hotel employees. *International Journal of Hospitality Management*, 93, 102770.

- [19] **Stone, P., Goldman, G. A., & Thomas, P. (2023).** ‘It’s a natural drift alright’: From needs-based demand to technology-driven demand in business. *Acta Commercii-Independent Research Journal in the Management Sciences*, 23(1), 1143.
- [20] **Tuomi, A., & Ascensão, M. P. (2023).** Intelligent automation in hospitality: exploring the relative automatability of frontline food service tasks. *Journal of Hospitality and Tourism Insights*, 6(1), 151-173.
- [21] **Tuomi, A., Tussyadiah, I., Ling, E. C., Miller, G., Lee, G. (2020).** x=(tourism_work) y=(sdg8) while y=true: automate(x). *Annals of Tourism Research*, 84, 102978.
- [22] **Wisdom, J., Chor, K.H.B., Hoagwood, K.E., Horwitz, S.M. (2014).** Innovation adoption: A review of theories and constructs. *Administration and Policy in Mental Health and Mental Health Services Research*, 41(4), 480-502.
- [23] **Zhang, L. (2013).** Model projections and policy reviews for energy saving in China's service sector. *Energy Policy*, 59, 312-320.