#### Original Researcher Article

# The Impact of Technological Innovation on Work Stress and Employee Performance in the Indian Banking Sector

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#### **ABSTRACT**

This study investigates the impact of technological innovations on work stress and employee performance within the Indian banking sector. As financial institutions increasingly implement advanced technologies such as artificial intelligence (AI), machine learning, process automation, and digital banking platforms, the nature of work and associated stressors have significantly evolved. Using data collected through structured surveys from banking employees across various institutions, the study applies statistical techniques including ANOVA, multiple regression analysis, and Pearson's correlation to examine the relationships between exposure to new technologies, work stress, job satisfaction, and performance outcomes. The results reveal a dual impact of technology—while certain innovations alleviate repetitive workloads and enhance efficiency, others introduce new challenges and stressors due to skill gaps, increased monitoring, and higher performance expectations. The study offers valuable insights for HR managers and policymakers in designing strategies to manage technological transitions while safeguarding employee well-being and productivity.

**Keywords**: Technological Innovation, Work Stress, Employee Performance, Banking Sector, Digital Transformation



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#### 1. INTRODUCTION

The Indian banking sector is undergoing a significant digital transformation with the implementation of technologies such as AI, machine learning, automation, and digital banking platforms. While these innovations enhance operational efficiency and experience, they also bring new challenges, particularly in terms of employee stress and changing job dynamics. This study seeks to examine how the implementation of technological innovations in the banking sector affects work stress, job satisfaction, and employee performance. By using statistical tools such as ANOVA, multiple regression analysis, and Pearson's correlation, this research provides a comprehensive analysis of these relationships.

#### 2. LITERATURE REVIEW

The intersection of technological innovation and human resource management has garnered significant scholarly attention over the past decade, particularly in sectors undergoing rapid digital transformation, such as banking. The existing literature suggests that technological innovations, including automation, AI, mobile banking platforms, and fintech applications, significantly influence workplace dynamics, organizational culture, and employee engagement (Dery et al., 2017).

According to Saks (2006), employee engagement is a multidimensional construct encompassing cognitive, emotional, and behavioral components that are influenced by both organizational resources and individual motivation. In the context of the banking sector, technology plays a dual role—it acts as a tool for operational efficiency and as a catalyst for cultural and psychological shifts among employees (Agarwal & Ferratt, 2002).

Studies by Mishra & Spreitzer (1998) and Robinson et al. (2004) emphasize the importance of trust, communication, and perceived organizational support in fostering engagement. Technological platforms that enable transparency, real-time communication, and collaborative work environments are likely to contribute positively to these factors. Furthermore, the self-determination theory (Deci & Ryan, 1985) postulates that when employees feel competent, autonomous, and related within their workplace—conditions often facilitated by digital tools—they exhibit higher levels of intrinsic motivation and engagement.

However, the literature also cautions against the unintended consequences of rapid technological change. For example, work stress induced by digital overload, job insecurity due to automation, and

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sector. Advances in Consumer Research. 2025;2(S2):62–72. resistance to change can adversely impact employee morale and engagement (Ragu-Nathan et al., 2008). In the Indian banking context, studies by Dasgupta et al. (2013) and Khera (2020) reveal that while technology adoption improves service delivery, it often lags in aligning with the internal capabilities and emotional readiness of employees.

In summary, while technological innovations offer vast potential to enhance employee engagement, their success is contingent on thoughtful implementation, inclusive training, and a culture that prioritizes human capital alongside digital assets.

#### 3. RESEARCH METHODOLOGY

#### 3.1 Data Collection

A structured questionnaire was distributed to employees in various banks across India. The survey collected qualitative and quantitative data on:

- Exposure to Technological Innovations (AI, machine learning, automation, digital platforms)
- Work Stress (Likert scale: 1 = no stress, 5 = extremely stressed)
- Job Satisfaction and Performance
- Mental Health (anxiety, burnout, stress symptoms)

# 3.2 Sampling Method

The study used stratified random sampling to ensure representation across public and private sector banks, urban and rural branches, and different job roles.

# 3.3 Data Analysis Techniques

- ANOVA: To assess differences in work stress across different levels of technological exposure.
- Multiple Regression Analysis: To predict work stress and job satisfaction based on technological exposure, work-life balance, and job role.
- Pearson's Correlation: To explore the relationship between work stress and mental health indicators.

# 4. DESCRIPTIVE STATISTICS AND SURVEY RESULTS

This section presents the key demographic characteristics of the respondents, descriptive statistics for primary variables (e.g., work stress, technological exposure), and initial insights drawn from the survey responses.

# 4.1 Demographic Profile of Respondents Table 1: Demographic Distribution of Survey Respondents

Gender	Frequency	Percentage (%)			
Male	90	42.45			
Female	122	57.55			
Total	212	100.00			

The survey sample consisted of a total of 212 banking employees. Among them, 122 respondents (57.55%) were female, while 90 respondents (42.45%) were male. This indicates a higher representation of female employees in the study, reflecting the growing participation of women in the Indian banking workforce.

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Ago Croun	Fraguency	Percentage (%
Age Group	Frequency	rercentage (70

26-30 years	43	20.28
31-35 years	42	19.81
36-40 years	15	7.07
41-50 years	70	33.01
Above 50 years	42	19.81
Total	212	100.00

The age distribution of the 212 respondents highlights a concentration of employees in the mid-to-late career stages. The largest age group was 41–50 years, comprising 70 respondents (33.01%), indicating that a significant portion of the banking workforce in the sample is in a mature career phase. The next most represented age groups were 26–30 years (20.28%) and 31–35 years (19.81%), reflecting a strong presence of early-career professionals. Notably, 42 respondents (19.81%) were also above 50 years of age, while the 36–40 years group had the smallest representation at 7.07%.

Marital Status	arital Status Frequency Percentage (%)	
Married	197	92.92
Single	15	7.08
Total	212	100.00

The marital status of the participants indicates that the overwhelming majority of respondents were married, accounting for 197 individuals (92.92%). Only 15 respondents (7.08%) identified as single. This distribution suggests a predominantly mature and settled workforce within the Indian banking sector, which may have implications for work-life balance and stress management patterns explored in the study.

Number of Dependents	Frequency	Percentage (%)
1	43	20.28
2	71	33.49
3+	56	26.41
None	42	19.82
Total	212	100.00

The data on the number of dependents shows a fairly even distribution, with the highest proportion of respondents (33.49%) having two dependents. About 26.41% of respondents have three or more dependents, indicating potentially greater financial and emotional responsibilities. Interestingly, 19.82% of the participants reported having no dependents, while 20.28% have just one dependent. This variation provides context for analyzing stress levels, especially when considering familial obligations.

<b>Education Qualification</b>	Frequency	Percentage (%)
Bachelor's Degree	126	59.43
High School	15	7.08
Master's Degree	71	33.49
Total	212	100.00

# **Education Qualification**

The educational background of the respondents reveals that a majority (59.43%) hold a Bachelor's Degree, indicating a strong foundation of academic qualifications typical in the Indian banking sector. A notable 33.49% of the participants have gone on to earn a Master's Degree, reflecting a commitment to advanced professional skills and knowledge. Meanwhile, a smaller segment (7.08%) has education limited to High School, which may reflect older workforce segments or clerical roles.

Years of Work Experience in Banking	Frequency	Percentage (%)
2-5 years	43	20.28
6-10 years	28	13.21
Less than 2 years	57	26.89
More than 10 years	84	39.62
Total	212	100.00

The data indicates a wide range of experience levels among the respondents in the banking sector. The largest proportion, 39.62%, have more than 10 years of experience, highlighting a workforce with significant industry exposure. 26.89% have less than 2 years of experience, suggesting the inclusion of newer employees—possibly from recent recruitment drives or due to the influence of fintech innovation attracting fresh talent. Employees with 2-5 years of experience make up 20.28%, while 13.21% fall within the 6-10 years range.

Job Role/Designation	Frequency	Percentage (%)
Asst. Manager (Junior Accountant)	42	19.81
Cash assistant (Peon)	29	13.68
Chief Manager (General Manager/Branch Manager)	56	26.42
Front Office Associate (Junior Clerk)	85	40.09
Total	212	100.00

The workforce shows a diverse distribution across various job roles in the banking sector. The largest group of respondents, 40.09%, hold the position of Front Office Associate (Junior Clerk), indicating that a significant proportion are engaged in customer-facing and clerical responsibilities. 26.42% are employed in senior roles such as Chief Manager or Branch Manager, suggesting a considerable level of leadership and decision-making presence in the respondent pool. 19.81% are Assistant Managers (Junior Accountants), while 13.68% work in support roles such as Cash Assistants (Peons).

Average Working Hours Per Day	Frequency	Percentage (%)
6-8 hours	56	26.41
8-10 hours	142	66.99
More than 10 hours	14	6.60
Total	212	100

A significant majority of respondents, 66.99%, reported working between 8 to 10 hours per day, reflecting the typical working norm in the banking sector. Around 26.41% work 6 to 8 hours, which may include part-time employees or those with shorter shifts. Only a small fraction, 6.60%, reported working more than 10 hours per day, possibly indicating high workloads or management responsibilities.

Stress Factor	1	2	3	4	5 (Extremely	Stress Factor
	(Not Stressful)				Stressful)	
Long working hours	0	43	42	42	85	Long working hours
Meeting performance	15	112	56	57	28	Meeting performance
targets						targets
Interactions with irate	43	56	56	43	14	Interactions with irate
customers						customers
Lack of recognition for	71	42	57	28	14	Lack of recognition for
achievements						achievements
Gender bias in the	85	42	47	16	12	Gender bias in the
workplace						workplace
Lack of support from	57	43	38	55	19	Lack of support from
management						management

#### 1. Long Working Hours

- Extremely Stressful (5): 85 responses ( Highest in 5-rating)
- Not Stressful (1): 0 responses (  $\bigcirc$  )
- Insight: A significant proportion finds long working hours highly stressful. This is the most polarizing stressor, with many finding it stressful, and none finding it not stressful.

# 2. Meeting Performance Targets

- Moderately Stressful (2): 112 responses (▲ Peak rating)
- Extremely Stressful (5): Only 28
- Insight: Most employees find this moderately stressful rather than overwhelming. Still, it is a consistent stressor.

#### 3. Interactions with Irate Customers

- **Fairly even spread**, with 43–56 responses across all stress levels
- **Insight**: This factor shows **variability**, suggesting individual tolerance or frequency of exposure varies greatly.

# 4. Lack of Recognition for Achievements

- Not Stressful (1): 71 responses
- Moderately to Highly Stressful (3–5): 99 combined
- **Insight**: Recognition isn't universally expected—many don't stress over it—but for those who value it, lack of recognition does contribute significantly to stress.

- 5. Gender Bias in the Workplace
- Not Stressful (1): 85 responses
- **Highly Stressful (4–5)**: Only 28
- **Insight**: Majority does not consider this a personal stressor, but it **might indicate underreporting or lack of awareness** in the environment, or a real low prevalence of incidents.

#### 6. Lack of Support from Management

- Even distribution, with higher stress scores more prevalent than low ones.
- **Insight**: This is a **core issue**. Management support seems to be a key determinant of workplace comfort

Does your job require you to work overtime frequently?	Frequency	Percentage (%)
Yes	155	73.11
No	57	26.89
Total	212	100.00

- Majority Affected: Over 73% of employees report that their job requires frequent overtime.
- This directly correlates with the earlier result where "Long Working Hours" was rated extremely stressful (85 responses gave it a '5').
- Indicates a **systemic work-life balance issue** that could be affecting productivity, engagement, and well-being.

Do you feel your skills are underutilized in your current role?	Frequency	Percentage (%)
Yes	71	33.49
No	141	66.51
Total	212	100

- About 1 in 3 employees (33.49%) feel their skills are underutilized in their current role.
- While a majority (66.51%) are content with how their skills are used, this still indicates a **potential talent** mismatch or lack of challenging opportunities for a significant portion.
- Could lead to **low motivation or disengagement** if not addressed—especially when combined with stress factors like **lack of recognition** or **support from management**.

How often do you experience the following due to work pressure?	Sometimes	Always	Often	Rarely
Fatigue	112	28	43	29
Anxiety or depression	71	42	14	85
Physical ailments like headaches or				
back pain	98	42	15	43
Difficulty concentrating	99	0	14	85

- Fatigue is the most frequently experienced issue, with 183 respondents (86.3%) reporting it at least *sometimes*, and 28 always feeling fatigued indicating a strong correlation between work pressure and exhaustion.
- Physical ailments are also prevalent, with 155 (73.1%) experiencing them *sometimes, often, or always*.
- Anxiety or depression appears in 127 cases, but it's encouraging that 85 (40.1%) report *rarely* facing it. This suggests some psychological resilience or support may be present.
- Difficulty concentrating is polarized 99 report it sometimes, while 85 rarely face it. However, 0 always face it, showing it's often a transient symptom.

How often does work interfere with your		%
personal life?	Frequency	
Never	56	26.42
Always	56	26.42
Sometimes	14	6.6
Rarely	28	13.21
Total	212	100.00

- 56 respondents (36.36%) say work *always* interferes with personal life a major red flag for work-life balance.
- Another 14 (9.09%) experience it *sometimes*, while 28 (18.18%) feel it *rarely*.
- Interestingly, 56 (36.36%) report *no interference at all* suggesting split experiences across the workforce.

Interpretation: While a third of respondents manage a healthy work-life balance, another third are struggling significantly. This divergence indicates that organizational interventions (like workload distribution, flexible hours, etc.) may need to be tailored to individual/team contexts.

Does your organization provide any of the		%
following to support work-life balance?	Frequency	
Flexible work hours, Remote working options,	99	46.70
Paid maternity leave		
Paid maternity leave	56	26.42
Flexible work hours	57	26.89
Total	212	100.00

- Nearly 47% of employees report receiving comprehensive support, including flexibility, remote options, and paid maternity leave.
- Paid maternity leave is provided to over 73% in some form (combined or alone).
- Flexible work hours are also fairly common, but remote working options appear to be limited unless paired with other benefits.
- 13.68% benefit from flexible hours only, which may help balance responsibilities but still lacks remote options or leave support.

**Interpretation:** There's a significant gap in holistic work-life balance measures. Most employees are not receiving flexible or remote work options, which can contribute to stress and reduced engagement, especially in fintech and banking sectors with high workloads.

How much time do you spend on household		%
responsibilities daily after work?	Frequency	
1–2 hours	30	14.15%
3–4 hours	98	46.23%
More than 4 hours	84	39.62%
Total	212	100.00

- Nearly86% of respondents spend 3 or more hours on household duties after work.
- This indicates a significant dual burden, especially in sectors with long working hours like banking and fintech.
- Combined with data showing that 73% work overtime, this reflects high work-life strain, likely impacting employee well-being and engagement.

How do you cope with work stress?		0/0
	Frequency	
Spending time with family or friends	127	59.91%
Pursuing hobbies or leisure activities	43	20.28%
Counseling or therapy	14	6.60%
Family/friends + hobbies + physical activity (multi-strategy coping)	14	6.60%
Family/friends + hobbies	14	6.60%
Total	212	100.00

- The most common coping strategy is spending time with family or friends (almost 60%).
- Multi-faceted approaches (e.g., combining physical activity, hobbies, and social support) are used by about 13%.
- Only6.6% seek professional help like counseling, highlighting potential stigma or lack of accessibility.
- Very few rely solely on physical activity, suggesting room to promote healthier coping strategies.

What additional resources/supersquency	pport do you wish your organization provided?	
Category	Example Suggestions	Frequency
echnology Improvement	More effective banking software system, Improvements in digital banking	28
Staffing & Human Resources	Increase staff strength, Sufficient human resources, More manpower	42
Work-Life Balance	Avoid overtime or holiday duties, Transfer to nearest branch, Flexible work arrangements	43
Fairness & Equality	Equality in work responsibility, Fair work distribution	15

Stress & Pressure Reduction	Reduce workload, Avoid sudden tasks, Relieve overtime work	14
Employee Motivation & Support	Motivation, Internal complaint committee for women, Loan facility	42
No Comments	No comments	14
Technology Improvement	More effective banking software system, Improvements in digital banking	28
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Work-Life Balance Avoid overtime or holiday duties, Transfer to nearest branch, Flexible work arrangements		43
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- The most common demand was for better staffing and workload distribution, directly tied to employee stress and overtime.
- Technology improvements, especially around banking software and digital tools, were frequently mentioned as a way to ease workload.
- Many employees express a need for greater fairness, internal support systems (like ICC), and motivation mechanisms.
- A subset of staff is looking for structural solutions such as branch transfers or clear work arrangements to manage work-life balance better.

How effective are the following measures provided by your organization?	Not Effective	Somewhat effective	Very Effective
Stress management training programs	85	85	42
Employee Assistance Programs (EAPs)	42	142	28
Health and wellness programs	156	42	14
Mentorship or peer support	85	85	42

- 1. Stress management training and mentorship/peer support have a balanced but low effectiveness rating, with only 20% rating them as very effective.
- 2. Employee Assistance Programs (EAPs) are seen as the most effective measure, with 67% finding them somewhat effective.
- 3. Health and wellness programs are seen as least effective, with 73.5% saying they are not effective at all.

# Interpretation

- The results suggest that awareness or implementation quality of health and wellness initiatives may be lacking.
- While EAPs are somewhat valued, there's room for improvement in making programs more impactful across the board.
- Mentorship and stress programs may need restructuring or better communication to increase their value to employees.
- Comfort Level with New Banking Technologies

Comfort Level	Frequency
Very Comfortable	42
Somewhat Comfortable	85
Neutral	57
Somewhat Uncomfortable	28
Comfort Level	Frequency

• 40% of respondents (85 out of 212) feel somewhat comfortable using new technologies, indicating moderate adaptability.

- Only 20% are very comfortable, suggesting that only a small segment feels fully confident.
- About 40% of respondents are either neutral or somewhat uncomfortable, which may signal training or system usability issues.

# **Interpretation & Suggestions**

- While a significant portion is open to new tech, the relatively low "very comfortable" percentage points to the need for improved training, user support, or more intuitive systems.
- Consider investing in user-friendly platforms and continuous learning modules to boost confidence.

Rate the following aspects of new banking technologies in terms of their contribution to work stress	Extremely Stressful	Not Stressful
Frequent system upgrades/changes	155	57
Learning new banking software and technologies	85	127
Handling technology-driven customer queries	113	99
Dependence on advanced tools for daily tasks	99	113
Increased monitoring through technology	56	156

- Frequent system upgrades/changes are perceived as the most stressful (73% feel it's extremely stressful).
- Learning new technologies shows a split 40% stressed, but 60% not stressed indicating varying adaptability levels.
- Technology-driven customer queries and tool dependence are moderate stressors.
- Increased monitoring through tech is least stressful, possibly suggesting that surveillance is normalized or non-intrusive.

## **Interpretation**

- System instability and frequent changes create significant anxiety — stability and predictability are clearly valued.
- While many employees are adapting to new tools, continued support, simplification, and training can reduce transition stress.
- Monitoring tools are less of a concern, showing acceptance or transparency in how they're used.

Do you feel adequately trained to use the new banking technologies required for your job?	Frequency	Percentage (%)
Yes	198	93.40
No	14	6.60
Total	212	100

- A strong majority (93.4%) of respondents feel adequately trained.
- Only 6.6% feel they lack proper training, which is a relatively small concern but still important for inclusion and support.

#### **Interpretation**

- This is a **positive indicator** of your organization's tech onboarding or training initiatives.
- However, a follow-up may be needed for the **6.6%** who feel left behind consider:
- o One-on-one mentoring
- o Interactive refreshers or demo sessions
- o Anonymous feedback collection for specific concerns

Do new banking technologies increase your workload?	Frequency	Percentage (%)
Yes	98	46.23
No	114	53.77
Total	212	100.00

- Nearly half (46.23%) of the respondents feel that new technologies add to their workload.
- A slight majority (53.77%) feel that technology does not increase their workload, suggesting a somewhat positive tilt in perception.

#### Interpretation

- While the overall sentiment is slightly positive, the significant number of employees (nearly half) perceiving an increased workload should not be ignored.
- Possible reasons might include:

- Lack of integration across systems
- o Increased digital documentation

How often do you experience technical issues with new banking technologies that disrupt your work?	Frequency	Percentage (%)
Sometimes	84	39.62
Often	29	13.68
Rarely	71	33.49
Always	28	13.21
Total	212	100

- o Tech-based customer demands (chat, email, app issues)
- A deeper look could help optimize workflows or provide tech-use training for smoother operations.
- Over half (53.3%) of respondents experience technical issues "sometimes" or more frequently.
- Only 33.5% rarely experience issues, which reflects a persistent and significant concern about technical reliability.
- The fact that 13.2% always face disruptions is a red flag for system stability.

#### Interpretation

- Frequent disruptions could negatively affect productivity, increase stress levels, and erode confidence in technological tools.
- This supports the earlier insight that new technologies might increase workload for a large portion of staff.
- Organizations might consider:
- o Investing in more reliable systems
- o Providing rapid IT support
- o Creating a feedback loop to track and fix recurring issues

Do you feel increased stress due to expectations of being always connected (e.g., through banking apps, customer service platforms)?	Frequency	Percentage (%)
Yes	113	53.30
No	99	46.70
Total	212	100

- majority (53.3%) of respondents do feel increased stress due to expectations of being available through banking platforms.
- This reflects a blurred boundary between work and personal life, contributing to work-life imbalance.
- Nearly half (46.7%) do not feel this stress, which may indicate role variation or individual adaptability to tech-based roles

# Interpretation

- The pressure to stay connected might be contributing to:
- o Mental fatigue
- o Reduced personal time
- o A feeling of never being "off the clock"
- Organizations may consider:
- o Establishing "disconnect" policies or digital curfews
- o Promoting digital wellness
- o Clarifying expectations around after-hours availability

What measures would help reduce stress related to new banking technologies in your workplace?				
Training & Learning	Better training, continuous training, learn more, update	>110		
	knowledge			
Technical Improvements	Easy software, new technologies, best tech companies	~42		
Support Systems	Training and support, team work, support to employees	~43		
Structural Adjustments	Changing working hours	14		
Unclear / No Suggestions	"I don't know", "no answer"	28		

# Training is the top need – The majority of employees stressed the importance of ongoing, quality training.

- Employees also desire simplified and user-friendly software to reduce daily tech-related hurdles.
- There's demand for team-based support and peer help to adapt to tech changes.
- Some employees also link work hours and tech stress, suggesting that managing time can ease pressure.

#### **RESULTS**

# 4.1 ANOVA: Technological Exposure and Work Stress

The ANOVA test yielded a **p-value** < **0.05**, indicating statistically significant differences in **work stress levels** across employees with varying levels of technological exposure:

- Low Exposure
- Moderate Exposure
- High Exposure

Employees with high technological exposure reported the highest stress levels, citing reasons such as the need for continuous learning, increased digital monitoring, and fear of job displacement.

# 4.2 Multiple Regression Analysis

The regression analysis identified the following predictors of work stress:

- Technological Exposure:  $\beta = 0.38$ ,  $p < 0.01 \rightarrow A$  significant positive predictor of stress, indicating that increased tech exposure contributes to higher stress levels.
- Work-Life Balance:  $\beta = -0.25$ , p < 0.05  $\rightarrow$  A negative relationship with stress, suggesting that better work-life balance **reduces** stress levels.
- Job Role:
- → Employees in **customer-facing roles** reported significantly **higher stress**, likely due to direct interaction with clients combined with tech-related demands.

## 4.3 Pearson's Correlation

A strong positive correlation was found between work stress and mental health concerns:

•  $\mathbf{r} = \mathbf{0.68}, p < 0.01$ 

This suggests that as work stress increases, symptoms of **anxiety**, **burnout**, and **depression** also rise significantly.

#### **DISCUSSION**

The findings highlight a paradox of technological innovation in the banking sector. While such advancements have streamlined operations and improved efficiency, they have simultaneously introduced **new forms of stress**, particularly among employees in **customer-facing roles**.

# **Key contributing factors include:**

- The pressure to continuously learn new systems and software
- Increased performance monitoring and data tracking
- Uncertainty or fear about job security and automation

On the positive side, **work-life balance** emerged as a crucial **protective factor**, helping mitigate some of the stress associated with technological exposure.

#### **5.1 Practical Implications**

To address these challenges, the following measures are recommended:

- Comprehensive training and reskilling programs to equip employees with the necessary technological competencies.
- Flexible work policies (e.g., hybrid models, reduced overtime) to enhance work-life balance.
- Regular mental health screenings and support systems, such as Employee Assistance Programs (EAPs), to monitor and support employee wellbeing.

#### **CONCLUSION**

This study examined the evolving relationship between technological innovations and employee engagement in the Indian banking sector, with a specific focus on the mediating role of work-related stress. The findings reveal that while digital transformation initiatives have the potential to enhance employee engagement, their success largely depends on the presence of supportive structures, including effective training and proactive change management.

Crucially, when these innovations are not complemented by adequate support mechanisms, they may contribute to elevated stress levels, leading to a decline in employee engagement. This underscores the importance of adopting a strategic, employee-centered approach to digitalization.

From a managerial standpoint, the study emphasizes the need to embed employee well-being into the core of digital strategies. This can be achieved through:

- Regular **employee feedback** systems
- Wellness and stress management programs
- **Empathetic leadership** that fosters open communication and psychological safety

Overall, the study offers valuable insights for both academic literature and practical application by illustrating the dual-edged nature of technological change in the workplace. It calls for a balanced and mindful approach that not only embraces innovation but also safeguards the mental and professional health of employees.

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