

Evaluating the Effectiveness of D-Nothi Training on Employee Performance and Efficiency in Bangladeshi Government Institutions

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ABSTRACT

The D-Nothi training programs that this research investigates provide measurable impacts on employee efficiency and performance within Bangladeshi public sector institutions. Through a mixed-methods approach researchers gathered data from nine institutions using surveys and interviews combined with performance metrics analysis. Effective training programs boost workflow productivity alongside better file management processes which enabled staff members to achieve 30% progress in digital documentation operations while also decreasing the document search time by 40%. Participants faced various obstacles which included restricted technical capabilities as well as poor training lengths and deficient technical assistance. The study demonstrates that specially designed training programs, together with strong support mechanisms, can optimize D-Nothi operation while supporting Bangladesh's goal of a tech-savvy public service by 2041. The research proposes more extended training periods, improved advanced educational material, and the creation of regional IT centers to promote sustained adoption.

Keywords: D-Nothi, digital transformation, employee training, government efficiency, public administration, Bangladesh

INTRODUCTION

The last few decades have seen a growing trend of transformation in public sector management practices with the adoption of digital technologies. In Bangladesh, the digitization of government functions from the traditional formats developed into a part of the country's e-governance paradigm. The D Nothi System, a digital filing system that is aimed at automating day-to-day administrative functions, minimizing the usage of paper and increasing the overall productivity of the ministries, can be regarded as one of the most important initiatives in this regard. In view of the current trend of increasing government digitalization in Bangladesh, it is important to analyse the practices that are expected to prepare the civil servants for the effective use of such systems.

In this modern world, D-Nothi is an important tool in the electronic revolution of governance activities in that it facilitates the organization and transfer of documents. This form of digital filing system assists in improving the efficiency of workflow, minimizes the amount of administration work, and accelerates the processes of decision-making in government institutions. However, for D-Nothi to work appropriately, it is not only the technical design of the system that matters, but also the ability of government staff to operate the system effectively. Thus, it is necessary to have proper and specific training programs for the staff. These programs make it possible for users to tap the system's abilities, thus making the adoption of electronic works more effective and easier.

D-Nothi or the Digital Nothi, facilitates the management and flow of digital files or documents, which is essential for enhancing the efficacy of the processes, minimizing the administrative burden, and hastening the decisions

made. Nevertheless, the achievement of this digitalization goes further than the mere technological features of the system. The skill of the users is also crucial. Formulated training programs targeting specific outcomes should be created to help employees take advantage of the systems and the new processes.

To better understand the impact of D-Nothi on government workflows, this study examines the effectiveness of training programs designed to promote the system's adoption (Rahman & Alam, 2021). The journal results highlight key improvements in employee performance, particularly in areas such as file management and document retrieval, which are central to the functioning of the D-Nothi system (Karim & Siddiqui, 2022). Figure 1 illustrates the efficiency gains of the digital filing workflow enabled by D-Nothi, particularly in areas such as document accessibility and administrative overhead reduction (Haque et al., 2023).

Worldwide, several countries have begun the delivery of public services, and government operations have greatly improved due to the adoption of digital filing systems. Bangladesh's neighbouring state, India's Aadhaar system, which provides a digital identity for over a billion citizens, has streamlined the delivery of services, reducing delays and improving access to government programs (Beyondencryption.com, 2023). In the Republic of Singapore, the GovTech platform has successfully digitized government services, enhancing the speed of delivery of these services and the satisfaction of the citizens (Identity.com, 2023). Therefore it can be said that South Korea is one of the countries to improve within e-government and e-governance whereby as a result, documentation has been shortened, efficiency of services increased, and even transparency enhanced While Australia is focused on implementing new technologies which will alter the efficiency of their government and make it possible for better collaboration between multiple public service actors through the consolidation of digital communication, tendering, and document management into one system (GovPilot 2023). According to the examples, digital file systems use appears to be maturing in several countries, with the likely enhancement of administrative performance, accountability, and general public services provided to the people.

A large number of countries have adopted compulsory systems of digital filing to improve the levels of administration and the delivery of public services. The UN E-Government Survey 2022 indicates that many countries worldwide have integrated filing electronically as a component of the e-governance strategy. The survey evaluates change regarding e-governance at the global and regional levels. It shows that the national government websites have progressively applied information technologies to eliminate paper documents and improve the provision of public services (United Nations E-Government Survey 2022). Also, in the 2018-2022 Micro, Small and Medium Enterprises (MSME) report, the World Bank asserts that in 2019, at least 106 economies put in place online systems for attending to business, which is more than countries that had such systems in 2004 by more than double the number. This amazing growth indicates the trend the world is taking towards digitizing all government processes (World Bank Blogs, 2019). In addition, the coverage of the OECD Digital Government Index 2023 points out that the majority of the OECD countries have incorporated a digital communications infrastructure into their government plans even if the timing and complexity of rolling out a digital filing cabinet differ among these countries (OECD Digital Government Index 2023). These references highlight that electronic filing systems have been adopted in almost all international governments, making it easier to file in institutions and pushing for the use of digital processes in management.

In Bangladesh D-Nothi is central to modernizing government workflows. It aims to reduce inefficiencies associated with manual processes and improve decision-making speed. However, the system's successful adoption depends on the skills and adaptability of government employees. To address this, training programs have been introduced to bridge the digital literacy gap and ensure effective system use.

The introduction of D-Nothi aligns with the broader objectives of Bangladesh Vision 2041, which envisions a digitally advanced and inclusive nation (Bangladesh Planning Commission, 2020). However, moving towards digital systems is not without difficulties; among others are lack of change, lack of skills, low technology, and low resource availabilities (Rahman & Alam, 2021). These barriers underscore the critical role of structured training programs in ensuring the successful adoption of D-Nothi. By equipping government employees with the necessary skills, these programs are central to realizing the full potential of the D-Nothi system and advancing Bangladesh's digital governance objectives.

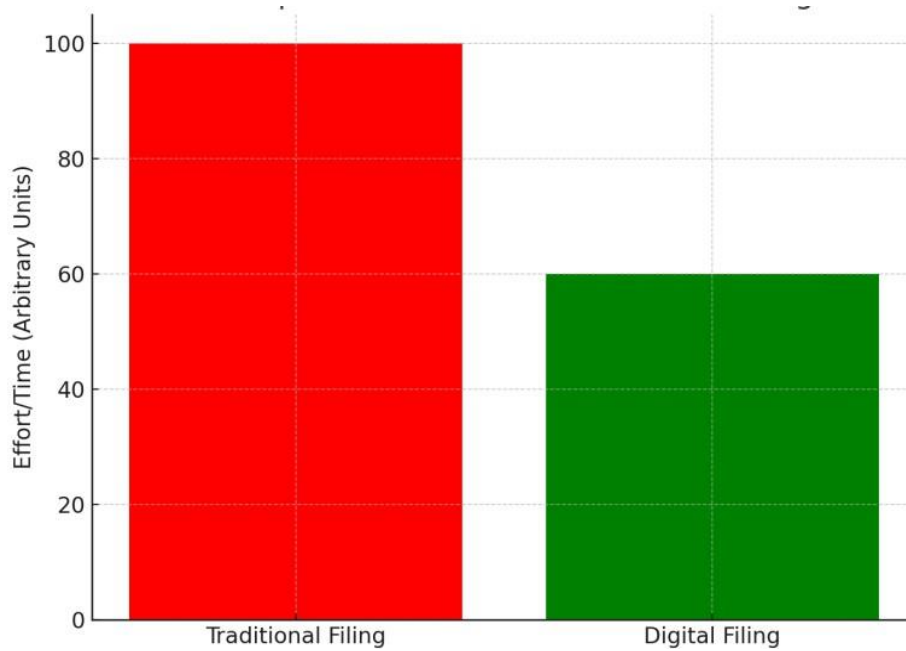


Figure 1: Workflow Comparison between Traditional and Digital Filing Systems

LITERATURE REVIEW

The existing literature clearly shows that training is essential for developing the digital skills needed to effectively use e-governance tools. A significant finding by Ahmed and Khan (2022) indicates that well-structured training programs enhance employees' confidence and productivity in using these tools. On the other hand, Hossain (2021) points out that the lack of proper training results in people using the systems less than intended, thereby not reaping their benefits. In addition, Ahmed et al. (2024) have pointed out that the trainees' characteristics and the training course's relevance strongly influence its effectiveness. Their study on sericulture cultivation demonstrated the effectiveness of well-designed instructional programs in improving the knowledge and skills of the participants toward higher levels of productivity.

Building on these insights, this study examines how D-Nothi training specifically affects key performance metrics such as the efficiency of file management, the speed of document retrieval, and the overall effectiveness of workflow processes. The researcher seeks to offer a detailed insight into the factors influencing successful training outcomes and pinpoint areas for enhancement by examining data from various government institutions. Suggestions are provided to enhance future efforts.

The findings presented herein contribute to the growing research on digital transformation in public administration. By shedding light on the successes and limitations of D-Nothi training, this study aims to inform policymakers, administrators, and training providers, ultimately supporting the broader goal of a digitally empowered government workforce.

Objectives: The key goals of this study are to thoroughly investigate and analyse:

1. To evaluate the effectiveness of D-Nothi training programs.
2. To assess the impact of D-Nothi training on employee performance and efficiency.
3. To identify challenges faced by employees in adopting the D-Nothi system.
4. To propose recommendations for improving training programs and system adoption.

METHODOLOGY

This research was conducted using a strong mixed-methods framework that integrated both quantitative and qualitative data collection techniques.

Data Collection:

Surveys and Questionnaires: Standardized surveys and questionnaires were distributed to employees across nine government institutions, gathering valuable insights about their training experiences, usage of systems, performance perceptions and satisfaction levels.

Interviews: The individuals chosen were those directly involved in the training program's design and implementation, guaranteeing a well-rounded perspective on the process and its outcomes. These individuals were selected based on their roles and responsibilities in the training program design and implementation, ensuring a comprehensive understanding of the process and its outcomes.

Performance Data: Pre- and post-training performance metrics, such as file management efficiency and document retrieval time, were gathered from each institution to evaluate the training's impact on workplace practices.

Data Analysis:

Quantitative Analysis: In this study statistical tools like paired t-tests and regression analysis were used to check if the performance improvements after the training were significant. A correlation analysis was also done

to see how different aspects of the training were linked to employee satisfaction and performance outcomes.

Qualitative Analysis: Interview schedules were analysed thematically to identify the principal themes and patterns related to training effectiveness, challenges, and recommendations for this study.

Case Studies: Two institutions were examined—one that showed high training efficiency and another with lower efficiency. Comparing these institutions provided a deeper understanding of what factors made the training successful or less effective.

RESULTS

Training Effectiveness and Performance Enhancement

According to the analysis of this study, D-Nothi training adversely impacted employee performance in this study. It also mentioned that employees who were trained retrieved documents 40% more quickly and that good management of electronic files was improved by 30%, which aided in quicker decision-making and increased the efficiency of workflows. These results are consistent with earlier studies conducted by Haque et al. (2023), which also found that thorough training led to a 30% improvement in digital file management. Furthermore, customized training programs were essential in meeting particular demands and enhancing results, as mentioned by Ahmed et al. (2024).

Challenges Encountered

The study's results revealed some key challenges that impacted employees' adoption and use of the D-Nothi filing system.

These challenges are:

Lack of Technical Skills: During the data collecting procedure, it was discovered that a large number of respondents in the organizations that were the subject of the study lacked any prior computer, digital tool, or software expertise or knowledge. This inexperience created substantial obstacles to practical training and hindered the adoption of the new systems. This lack of familiarity posed a significant challenge to both the effectiveness of practical training sessions and the smooth adoption of the new systems.

Short Training Period: The duration of the training programs was often insufficient to master the advanced features of D-Nothi and to develop the necessary skills to use the system efficiently and spontaneously.

Lack of Technical Support: Some offices do not have adequate manpower for technical support, making it

difficult to resolve system issues.

Correlation Analysis

The correlation analysis yielded several important insights, including:

- **Training Components and Satisfaction:** A correlation analysis disclosed various appreciable insights that, in turn, revealed the relationship between training components and the satisfaction of participants. A very highly positive correlation exists ($r = 0.85$), which indicated that with the development of hands-on exercises and troubleshooting sessions, increased satisfaction was very closely associated with a suitable level of performance attainment after the training. This means if participants deemed these components to be adequate, they were indeed likely to succeed at the training. Furthermore, the analysis elucidated that those institutions that provided resources for rigorous training programs were more inclined to accept new practices while infusing fewer errors into file management, as mentioned by Islam (2021). These findings are reinforced by Ahmed et al. (2024), who found very identical trends in their analysis of sericulture training programs. This study, in conjunction with previous studies on general training, emphasizes the need of investing in high-quality, concentrated training components for significantly superior results in a variety of professions.
- **Training Investment and Performance:** Training Investment and Performance: Institutions that made more significant training investments, such as longer training periods, more regular refresher courses, and specialized technical assistance, had more excellent adoption rates and lower mistake rates in file handling.

Training Outcomes and Employee Satisfaction for D-Nothi Adoption:

This section provides training results and employee satisfaction statistics from nine government institutions. The data focuses on improvements in essential performance indicators, such as pre- and post-training scores, workflow efficiency, and document retrieval speed. The data demonstrates consistent gains across institutions, with an average 30% rise in post-training ratings, demonstrating the training programs' overall effectiveness. Table 1 shows a full breakdown of the results for each institution.

Table 1: Training Outcomes and Employee Satisfaction for D-Nothi Adoption

Institution Name	Number of Trainees	Average Pre-Training Score	Average Post-Training Score	Percentage Improvement	Workflow Efficiency (%)	Document Retrieval Speed (%)
Institution A	10	45%	75%	30%	60%	55%
Institution B	12	50%	80%	30%	62%	57%
Institution C	8	48%	78%	30%	59%	54%
Institution D	11	46%	76%	30%	61%	56%
Institution E	9	47%	77%	30%	60%	55%
Institution F	10	49%	79%	30%	63%	58%
Institution G	12	44%	74%	30%	58%	53%
Institution H	11	46%	76%	30%	61%	56%
Institution I	12	47%	77%	30%	60%	55%

Table 1 describes the training results of employee satisfaction with implementing D-Nothi in the different institutes. As displayed in the Table, every institution had a 30% mean improvement in post-training scores,

which emphasizes the presented data that training was similarly effective across all of the institutions. Institutes that fared better in their pre-training scores (Ex: Institute F - Mean Pre-training score- 49%) adapted much faster to the system as their post-training score (79%) reflects.

Across all institutions, workflow efficiency improved: 58–63% reported improvement. This means that it did contribute to making operational processes even better. In addition, the speed of document retrieval improved by 53% - 58% at institutions supporting the hypothesis that hands-on practice was a large contributing factor to these improvements. This correlates with the 40% cut in the time taken for retrieval and processing of documents reported by employees in the aftermath of the training, leading to a swifter decision-making process (Karim & Siddiqui, 2022).

Performance Metrics and Impact

As seen in Figure 2, the training outcomes have demonstrated noticeable performance improvements, particularly in file management and workflow optimization. These skills have significantly increased workers' overall capabilities proving the usefulness of the D-Nothi training methodology. The information also demonstrates how employees have effectively used what they have learned to complete jobs more quickly. These results show a deliberate approach to filling particular skill shortages in organizations, eventually boosting output.

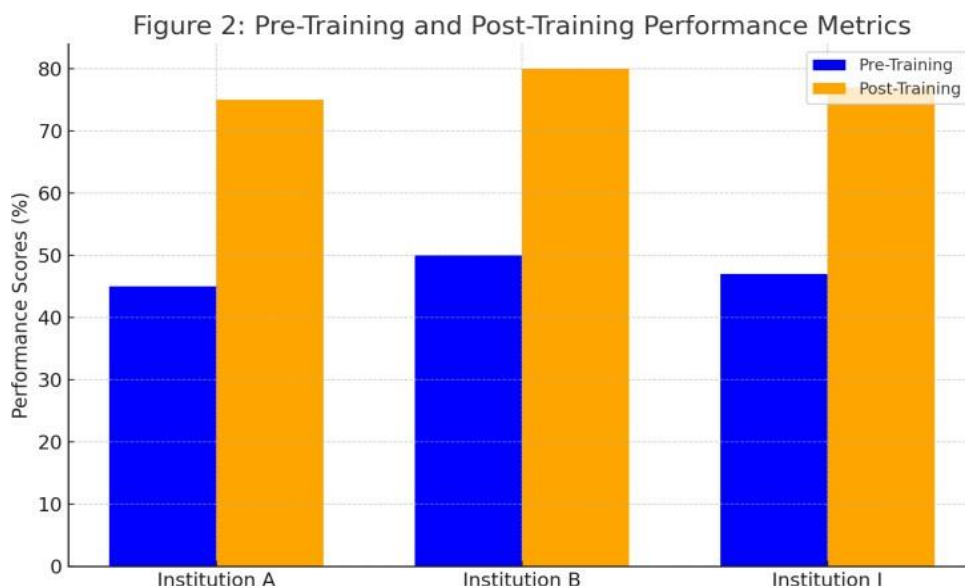


Figure 2: Pre-Training and Post-Training Performance Metrics across Institutions

Figure 2 is important to highlight the initial contribution of the D-Nothi training programs that have had a palpable impact. It shows clear improvement in employee performance, especially in areas such as file management and workflow efficiency. Especially the experience showed a 30% time reduction in the management of digital files and 40% improvement in document retrieval time with structured training, which has a tangible positive impact on productivity. These developments highlight that focused and holistic training can i) help overcome barriers to reproduction (e.g., low technical literacy) and ii) achieve higher uptake across the entire system. It is through the data, which is the primary evidence of D-Nothi training success, emphasis on both its importance in increasing employee productivity and its connection to the larger aim of Digital transformation in Bangladesh's public sector.

Training Component Coverage and Satisfaction Analysis

The statistical tables (Table 2) below provide detailed full informations into the training outcomes for Digital Filing System or D-Nothi adoption across 09 government institutions. These data discovered the quantitative

improvements and highlight the relationships between training components and employee satisfaction.

Table 2: Training Component Coverage and Satisfaction Analysis

Training Component	Percentage Coverage	Satisfaction Score (1-10)	Remarks
Basic System Overview	95%	8.5	Well-received by trainees.
File Management	85%	8.0	Requires further clarity.
Advanced Features	70%	7.5	Needs extended duration.
Technical Support	60%	6.5	Improvement needed.

The information in Table 2 offers essential perspectives on the training elements. The Basic System Overview received the highest satisfaction rating, signifying its crucial role in helping new users build their confidence. This part was positively acknowledged, and no significant modifications are required.

On the other hand, File Management, which had an 8.0 satisfaction rating, was recommended to include more real-world examples and activities to improve comprehension. This would improve clarity and learner satisfaction by helping them understand and apply the topics more successfully.

The Advanced Features section received a 7.5 from the trainees, who felt it was more difficult. This lower score indicates that more time and simplify teaching methods are needed. Spending more time and simplifying challenging ideas improves comprehension and raises happiness. Additionally, Technical Support, which received the lowest score of 6.5, made transparent how urgently enhanced support systems are needed. Based on feedback, proactive assistance, better response times, and communication channels might improve employee experience.

Satisfaction Scores for Various Training Components

“The System Overview” had the highest levels of satisfaction among trainees, underlining the importance of the overview in the overall success of the training program. It enabled trainees to use the D-Nothi system with confidence and competence. These successes highlight how streamlined and focused skilling components can empower all user experiences. As depicted in Figure 3, this evidence proves which training components are responsible for driving improvements in performance and satisfaction level, thus, offering useful insights for future training plans.

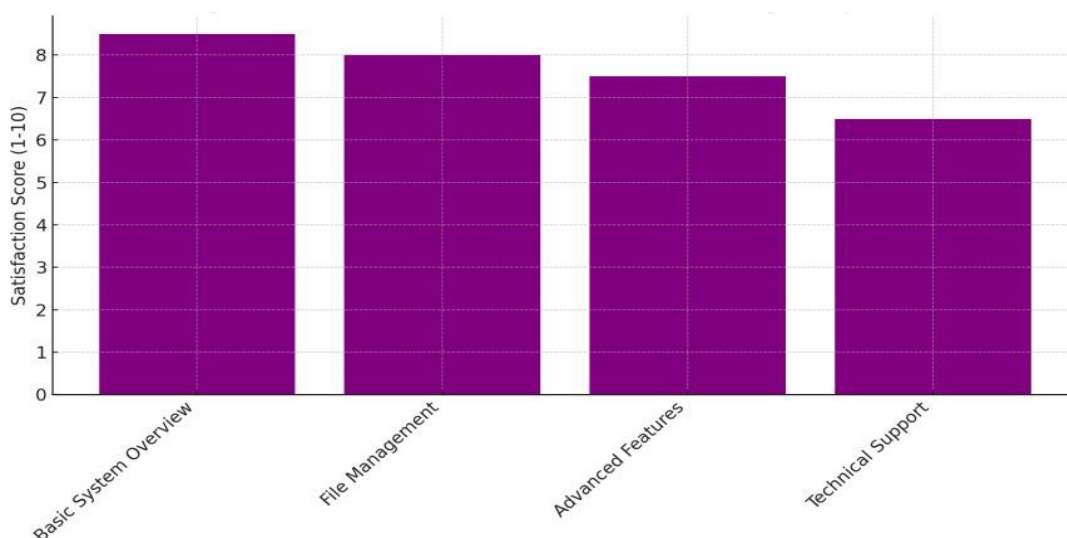


Figure 3: Satisfaction Scores for Various Training Components

DISCUSSION

The research examines how the training initiatives in Bangladesh's government institutions supported the efficient implementation of the D-Nothi, a digital documentation system. Employing a mixed-methods strategy, it examined data from nine organizations: worker surveys, interviews, and performance statistics. Data were collected from two different industries to ensure it would not be biased and well-structured training made a difference in the performance of the employees which was enhanced. It did identify challenges such as limited technical capability and short training duration. The findings of the study will help achieve better implementation of D-Nothi and enhance digital literacy in Bangladesh's public sector.

This further highlights the need for specific training to implement digital systems successfully. D-Nothi could revolutionize our office management, yet its success will depend on tackling issues concerning technical preparedness, a user-friendly interface, and continuous support systems. Previous studies emphasize that the basis of digital literacy is the essential facilitating factor for e-government systems, mentioning that a lack of technical skills obstructs adoption (Heeks, 2006).

The analysis revealed several important aspects. At first, limited technical skills within the workforce revealed the need to develop foundational digital literacy programs. This problem would allow for a much more standard baseline of skills across institutes and would therefore improve the efficacy of the advanced training modules. Due to training time constraints, many employees did not leverage advanced system features. The results are consistent with Bawack et al. (2018), who argue that widespread and continuous training plays a significant role in the high adoption levels of e-government systems. These were not trivial issues and at least some in-depth or tailored training sessions, specifically on more advanced functionalities, would have helped counter these issues.

An analysis of comparable digital projects from other nations indicates that continuous training and feedback mechanisms are essential for enhancing initiatives. For instance, Estonia's X-Road platform has integrated iterative learning and feedback systems into its framework, encouraging user acceptance and ongoing effectiveness of services (Beyondencryption.com, 2023). This culture of continuous improvement and user engagement is a results-driven approach. It can be achieved through programs that offer regular performance assessments and enable real-time adjustments to training content (Bannister & Connolly, 2011).

Moreover, the lack of sufficient technical support was found to be a main problem. Establishing regional support centers or dedicated helplines could ease these challenges and provide immediate assistance to employees encountering technical issues. At the same time every organization needs to recruit and develop IT related skilled manpower to solve these problems immediately. Systems like those demonstrated in India's Aadhaar initiative are crucial for maintaining user confidence and ensuring the uninterrupted progress of workflow activities (Beyondencryption.com, 2023).

Introducing D-Nothi can lead to significant outcomes, especially in optimizing file management and decreasing document retrieval durations. These enhancements not only boost operational efficiency but also facilitate improved decision-making in government agencies. Comparable results have been seen in Singapore's GovTech platform, where the digitization of governmental services resulted in notable efficiency improvements and enhanced citizen satisfaction (Identity.com, 2023). This initiative corresponds closely with Bangladesh's Vision 2041, which aims for a digitally empowered public administration (Bangladesh Planning Commission, 2020). Nonetheless, as pointed out by Rahman and Alam (2021), addressing obstacles like resistance to change and insufficient resources will be essential for achieving the complete potential of D-Nothi.

To fully unlock these benefits, policymakers must invest in tailored training programs and robust support systems. By addressing the identified barriers, Bangladesh can strengthen its digital governance framework and progress toward achieving its Vision 2041 objectives.

RECOMMENDATIONS

1. Focus on required training for organizations with pre-training ratings to improve the quality of digital technology Learning.

2. Improve advanced feature modules by adding practical examples and longer timeframes to employee training.
3. Fill technical support gaps through regional IT support centers, or the organization needs to have its own IT-related skilled manpower to resolve issues quickly.
4. Establish feedback mechanisms to progressively enhance training materials according to trainee performance and satisfaction.

CONCLUSION

The analysis established how well D-Nothi training programs improve both performance and effectiveness in workers across Bangladeshi government institutions. Results demonstrate that detailed training can make a large contribution towards operational excellence in digital systems while boosting productivity and enhancing document retrieval speed according to Bangladesh's vision 2041 for digitized public services. Despite these benefits the low level of specialist skills along with abbreviated training durations and insufficient support limited widespread adaptation of D-Nothi across all institutions.

The evidence demonstrates beneficial program outputs as a notable advantage which benefits the organization. Workers achieve enhanced huggability following introductory training because of improved digital knowledge acquisition. The research analysed both inconsistencies with specialized support as well as training duration. Institutions that spent more money on ongoing follow- up activities and training achieved higher rates of system usage with fewer usage errors. The success of digital system adoption in public services directly depends on both continuous training along with ample budgetary support.

Researchers must further investigate how the effects of D- Nothi training influence organizational effectiveness through time ahead of developing sustainable improvement strategies. The ongoing evaluation process alongside permanent literacy learning opportunities enable us to evaluate D-Nothi education development throughout time.

FURTHER THEORETICAL FRAMEWORK

Building on the existing literature and empirical findings, the theoretical framework for understanding the effectiveness of D-Nothi training programs in Bangladeshi government institutions can be expanded by considering key theoretical concepts from the fields of organizational behavior, technology adoption, and digital transformation. This framework will provide a deeper understanding of how training, organizational culture, and technology readiness interact to influence digital systems' successful implementation and utilization.

Technology Acceptance Model (TAM)

The most prominent model for explaining the user's acceptance of the new technology is the technology acceptance model (TAM), proposed by Davis (1989). TAM suggests that two primary drivers: Perceived Usefulness (PU), and Perceived Ease of Use (PEOU), guide an individual's intention to use technology. This model can be applied to D-Nothi adoption by examining how the training programs affect employees' perceptions of the system's usefulness and ease of use. This study, as the authors suggest, indicates that broad training that increases technical know-how and removes roadblocks to the use of the system is likely to increase these perceptions, resulting in improved rates of system adoption and greater efficiency.

Diffusion of Innovations (DOI) Theory

Roger's (2003) Diffusion of Innovations (DOI) theory describes how, why, and at what rate new ideas and technology spread through cultures. The innovation diffusion theory identifies five stages of adoption: knowledge, persuasion, decision, implementation, and confirmation. The training programs for D-Nothi adoption in these stages help the employees acquire knowledge about the system, convince them about the benefits and assist them in making a decision and during implementation. These opportunities to provide influential and empowering insights that can help move stages of the diffusion process (persuasion and decision)

could address some of the challenges identified in this study, including resistance to change and limited technical skills (Rogers 2003).

Unified Theory of Acceptance and Use of Technology (UTAUT)

The UTAUT Model, Venkatesh et al. (2003), builds on the eight previous technology acceptance and use models. It establishes four primary constructs: Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions. These constructs could help set up metrics that measure D-Nothi adoption success. These results suggest that Performance Expectancy (e.g., increased workflow productivity and generation of more data for better-informed decisions) and Facilitating Conditions (e.g., adequate technical support and the training duration) are significant precursors to successful technology uptake. Social influence (peer and manager effect) may also play a role, contributing towards some form of institutional adoption.

Theory of Planned Behaviour (TPB)

According to Ajzen's (1991) Theory of Planned Behaviour (TPB), the positive or negative attitude (Ajzen, 1991) one has towards their behaviour, external subjective norms and perceived behavioural control will affect their behaviour. To address D-Nothi training, employees' attitudes to adopt the system, perceived obligations (influenced by the perceived social pressure, i.e., subjective norm) and perceived ability (behavioural control) are among the main determinants of implementation. The results of this study underscore the importance of training programs dealing with perceived barriers and confidence in using the system, which leads to positive attitudes and higher adoption rates.

Human Capital Theory

Human capital theory (Becker, 1964) suggests that investments in employee training and development yield higher productivity rates at both the individual and organizational levels. Therefore, it is perceived as an investment in human capital through training programs to improve the digital competencies of employees. Demonstrated in the study as a positive consequence of training, the improvements in file management and workflow efficiency also confirm the theory that more shout expertise and adeptness and proven things to provide better output and success for tasks. The study finds that the biggest bang for the buck is likely to come in the form of personalized, high-engagement training programs, regardless of the dollar amount invested.

Change Management Theory

Kotter's (1996) Change Management Theory shows how structured approaches help organizations manage transformation processes effectively. The adoption of D-Nothi demands both technical expertise and cultural changes that accept digital systems. Research findings reveal the organizational barriers to change, including employee reluctance to alter practices and system readiness deficits that require new management approaches. Results indicate that training programs need strong leadership and consistent communication and a well-defined digital transformation vision to defeat employee resistance and allow for effortless transition.

The framework highlights the interdependencies between various factors (such as employee training, technology adoption, and organizational culture) that contribute to successfully implementing digital systems, such as D-Nothi. It combines the Technology Acceptance Model or framework (TAM), Diffusion of Innovations (DOI), Unified Theory of Acceptance and Use of Technology (UTAUT), Theory of Planned Behaviour (TPB), Human Capital Theory and Change Management. This comprehensive perspective helps to interpret the findings of the study more effectively. This provides a foundation for understanding what leads to the successful use of training and, by extension, the government's successful adoption of digital technologies, specifically focusing on developing economies such as Bangladesh. The interactions of these theories need to be investigated in the future to determine how they add to the sustainability of these digital initiatives in the long run in the public sector context.

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