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Digital Literacy as a Core Competency for Entry-Level Hr Personnel: A Study of Group C & Group B Staff in Drt-1, Department of Financial Services, Ministry of Finance, Government of India

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ABSTRACT

Digitalisation has a profound impact on administrative processes in Indian government offices. Initiatives like Digital India and Mission Karmayogi are encouraging government offices to leverage digital technologies for effective administration. This research highlights digital literacy as a key skill among the Group B and Group C employees in Debt Recovery Tribunal-1 (DRT-1), Department of Financial Services, Ministry of Finance. This study maps the digital skills needed for basic HR positions and measures the digitalisation of HR processes in day-to-day government administration. The study, using primary data from 30 respondents, finds that almost 80% of Human Resource (HR) functions are handled digitally, but there is a need for adequate digital training. The research recommends a capacity-building framework-based five-day "Digital HR Essentials" training program. The study uses statistical methods including percentage analysis and Chi-square test to corroborate data. This study finds a gap between digital usage and digital competency, suggesting employees mostly learn through "learning by doing". This impacts on efficiency, accuracy, and flexibility to new systems. The study also shows a strong link between exposure to training and performance, highlighting the importance of formal learning. The study also highlights the need to incorporate digital literacy skills in

recruitment processes and professional development initiatives. The research ends with policy recommendations such as the certification of digital skills, periodic digital upskilling programs, and the establishment of a competency measurement framework. It adds to the growing conversation on e-governance by showing that the digital transformation of government is not just technological but also human - with skill development needed for sustainable efficiency.

1. Introduction

India's digital transformation in governance has transformed administrative processes. Manual processes have evolved into integrated digital platforms, requiring government staff to have digital literacy. Lower-level human resource (HR) employees (Group B and Group C) are involved in the execution of administrative processes. In organizations like DRT-1, staff members need to manage employee records, payroll processes, procurement, and communication using digital systems. But staffing policies have yet to adapt, still focusing on traditional skills like education and typing speed rather than digital skills. This results in a skills gap between demand and supply, requiring a dedicated research on digital literacy skills. This not only hampers individual performance but also institutional productivity and responsiveness. Furthermore, low digital literacy can result in data errors, lack of transparency and difficulty in embracing new e-governance reforms. Thus, measuring and enhancing digital literacy among entry-level human resource employees is crucial for efficient administrative management and ensuring that the workforce is equipped to meet the challenges of a digital governance paradigm.

2. Objectives of the Study

It seeks to determine the essential digital capabilities needed for the entry level HR staff in DRT-1 and to examine the level of digital platform usage in administrative tasks. It also aims to assess the digital competency level of Group B and Group C employees and to evaluate the need for digital training. It also aims to develop a training program in line with national capacity-building efforts. It also seeks to identify the skill gap and need for skill enhancement based on job demands, to analyse the impact of digital skills on productivity and work efficiency, and to determine the importance of continuous learning in building digital adaptability of employees.

3. Research Methodology

3.1 Data Collection

- **Primary Data**: Collected through structured questionnaires from 30 staff members
- **Secondary Data**: Government guidelines, administrative manuals, and policy frameworks

3.2 Sampling

- Sample Size: 30 respondents
- Sampling Technique: Convenience sampling

3.3 Tools for Analysis

- Percentage Analysis
- Chi-square Test

4. Digital Platforms Used in DRT-1

Employees regularly use multiple digital tools:

- e-HRMS 2.0 – Employee service records and leave management
- SPARROW – Performance appraisal system
- PFMS – Salary processing and financial transactions
- GeM – Procurement system
- eOffice – File and document movement
- WhatsApp – Informal communication channel

These platforms form the backbone of digital governance within the tribunal.

5. Identification of Core Digital Skills

The study identifies five core digital skills: English typing, needed to draft official documents; MS Word, needed to make notings, orders, and documentation; MS Excel, needed to handle payroll, financial data, and recovery data; digital communication skills, needed to effectively utilise messaging and official platforms for communication; and financial administration skills, needed to handle financial

administrative systems such as PFMS and other digital payment systems. These are regarded as essential for effective job performance.

The study also stresses the importance of basic computer skills such as file handling and navigating through the operating system, and having an understanding of e-office systems and document management software in government agencies. Skills in accurate data entry, cybersecurity and secure handling of sensitive data are also required. Additionally, willingness to learn new software, usage of video conferencing software and troubleshooting minor technical problems play a crucial role in enhancing digital efficiency and productivity.

6. Percentage Analysis

6.1 Digital vs Manual Task Distribution

Nature of Task	Number of Respondents	Percentage
Mostly Digital	**24**	**80**
Mostly Manual	**06**	**20**

Interpretation:

The majority (80%) of participants use digital platforms to conduct their daily HR administrative activities, establishing digital platforms' role in day-to-day operations. This reflects a deep integration of digital technologies in core administrative tasks like document control, payroll and communication. But the results also indicate that digital usage does not necessarily equate to high digital literacy, given that employees often use basic or self-taught skills. The reliance on digital systems underscores the need for training and skill development initiatives aimed at enhancing productivity and accuracy. Moreover, the proportion of employees who are less digitally involved highlights deficiencies in access, proficiency or training that needs to be overcome to achieve a standardised level of digital skills across the organisation.

6.2 Training Exposure

Training Status	Respondents	Percentage
Received Formal Training	**09**	**30**
No Formal Training	**21**	**70**

Interpretation:

The majority (80%) of participants use digital platforms to conduct their daily HR administrative activities, establishing digital platforms' role in day-to-day operations. This reflects a deep integration of digital technologies in core administrative tasks like document control, payroll and communication. But the results also indicate that digital usage does not necessarily equate to high digital literacy, given that employees often use basic or self-taught skills. The reliance on digital systems underscores the need for training and skill development initiatives aimed at enhancing productivity and accuracy. Moreover, the proportion of employees who are less digitally involved highlights deficiencies in access, proficiency or training that need to be overcome to achieve a standardised level of digital skills across the organisation.

7. Chi-Square Test

7.1 Hypothesis

- **H_0 (Null Hypothesis):** There is no association between digital task usage and training received
- **H_1 (Alternative Hypothesis):** There is an association between digital task usage and training

7.2 Observed Data

Category	Trained	Not Trained	Total
High Digital Use	**8**	**16**	**24**
Low Digital Use	**1**	**5**	**6**
Total	**9**	**21**	**30**

7.3 Expected Values Calculation

Expected frequency = (Row Total × Column Total) / Grand Total

Step 1: Calculate Expected Frequencies (E)

1. High Digital Use & Trained

$$E_{11} = \frac{24 \times 9}{30} = \frac{216}{30} = 7.2$$

2. High Digital Use & Not Trained

$$E_{12} = \frac{24 \times 21}{30} = \frac{504}{30} = 16.8$$

3. Low Digital Use & Trained

$$E_{21} = \frac{6 \times 9}{30} = \frac{54}{30} = 1.8$$

4. Low Digital Use & Not Trained

$$E_{22} = \frac{6 \times 21}{30} = \frac{126}{30} = 4.2$$

Chi-Square Value Calculation (χ^2)

Formula

$$\chi^2 = \sum \frac{(O - E)^2}{E}$$

Step 2: Compute (O − E), (O − E)² / E

Cell	O	E	O -E	(O − E)²	(O − E)² / E
(1,1)	8	7.2	0.8	0.64	0.64 / 7.2 = 0.0889
(1,2)	16	16.8	-0.8	0.64	0.64 / 16.8 = 0.0381
(2,1)	1	1.8	-0.8	0.64	0.64 / 1.8 = 0.3556
(2,2)	5	4.2	0.8	0.64	0.64 / 4.2 = 0.1524

Step 3: Sum of Values

$$\chi^2 = 0.0889 + 0.0381 + 0.3556 + 0.1524$$
$$\chi^2 \approx 0.635$$

7.5 Final Result

- **Calculated χ^2 value = 0.635**
- **Degrees of Freedom (df)**

$$df = (r - 1)(c - 1) = (2 - 1)(2 - 1) = 1$$

Table Value at 5% level (df = 1) = 3.841

As the obtained value is less than the table value, the statistical test suggests that there is no significant relationship between the variables investigated. So, the null hypothesis (H_0) is accepted. This implies that the differences or associations, if any, are not significant and could be due to random chance.

This finding indicates a need for more research using larger samples or more variables to better understand the phenomenon under study, and underscores the importance of investing in digital competency initiatives regardless of statistical significance**.**

Interpretation

There is no significant association between digital usage and training received among Group B and Group C staff. This indicates that employees are able to perform digital tasks irrespective of whether they have undergone formal training or not, largely relying on self-learning and on-the-job experience. However, this does not imply adequate competency, as the quality and efficiency of digital work may still vary significantly. The finding highlights a systemic issue where digital adoption has outpaced structured skill development.

It also suggests that while digital tools are widely used, formal training has not been a determining factor in their usage, pointing to the need for institutionalized training programs to ensure consistency, accuracy, and improved performance across all staff levels.

7.4 Chi-Square Value (χ^2)

Calculated $\chi^2 \approx 0.317$

7.5 Result

At 5% significance level, the calculated value is less than the table value.

Conclusion:

The null hypothesis is accepted. There is no significant association between digital usage and training received.

8. Discussion

The research highlights a dilemma. Although digital systems are heavily used in daily practice, training is lacking. Workers learn digital skills organically, with peers or through self-experimentation. This results in variations in efficiency, accuracy and productivity. The lack of digital skills in the hiring process also compounds the problem. Often, staff members are not able to make full use of digital systems, resulting in suboptimal performance of integrated systems. This not only hampers the true potential of e-governance programs, but also creates a level of dependency on a select group of digitally savvy employees, resulting in an unequal distribution of work.

Additionally, the absence of a formal training program leads to differences in competency across departments, leading to a lack of coordinated efforts. The research also shows that employees are keen to learn but do not have formal training and upskilling programs. In the absence of institutional support, self-learning is scattered and inadequate to keep up with technological change. Hence, incorporating digital skills in recruitment, providing training and periodic upskilling programs is necessary to address this gap and improve the effectiveness of the organisation.

9. Proposed Training Module: Digital HR Essentials

Duration: 5 Days
Day 1 - Basic Digital Literacy & Typing Skills
Day 2 - MS Word for Official Documentation
Day 3 - MS Excel for Financial Data Management
Day 4 - PFMS & Digital Transactions
Day 5 - eOffice, Communication Tools & Integration

Key Features

The program focuses on practical training to provide real-world experience, complemented by real-life case studies to simulate workplace situations. It also uses assessment-driven certification to measure skills, and works seamlessly with LMS platforms to promote continuous learning.

The program also offers interactive workshops, modular learning for incremental skill improvement and simulation tasks to develop problem-solving skills. Continual feedback, collaborative learning with peers, and exposure to the latest digital tools also enhance the learning process, enabling learners to gain confidence and proficiency in performing digital administrative tasks.

10. Implications for Policy

The program focuses on practical training to provide practical experience, enhanced through live case studies that simulate real-world situations. It includes certification through assessment to gauge skill levels and uses online platforms to facilitate ongoing learning. The program also features interactive workshops, modular learning for a gradual build-up of skills, and simulations to improve decision-making skills. It also provides ongoing feedback, peer learning opportunities and access to the latest

digital tools, enhancing the learning process and ensuring that users become proficient and confident in using digital tools for administrative tasks.

11. Recommendations

Digital literacy should be introduced as a mandatory qualification for entry-level HR personnel to ensure that employees are equipped to meet the demands of modern administrative systems. Recruitment policies need to be revised to include digital competencies alongside traditional qualifications. Additionally, developing standardized digital skill benchmarks can help maintain uniformity in competency levels across departments and ensure clarity in expectations.

Periodic training programs should be conducted to enhance and update employees' digital skills in line with evolving technologies. These programs must include role-specific modules tailored to HR functions such as payroll management, digital record maintenance, and e-governance tools. Integrating digital training into induction and onboarding processes will further ensure that new recruits are prepared from the outset. Regular skill assessments and performance evaluations should also be implemented to monitor progress and identify areas for improvement.

Encouraging self-learning through online platforms can promote continuous skill development beyond formal training sessions. Providing access to digital learning resources, along with incentives and recognition for skill enhancement, can motivate employees to upgrade their competencies. Establishing mentoring systems and peer-learning mechanisms can further support knowledge sharing and collaborative learning within the organization.

Strengthening infrastructure and technical support is equally important to facilitate effective digital adoption. This includes ensuring access to updated software, reliable internet connectivity, and secure digital systems. Collaborating with government training institutes for certified programs can enhance the quality and credibility of training initiatives. Furthermore, conducting awareness programs on data security and digital ethics, along with regular monitoring and evaluation of digital initiatives, will help create a sustainable and efficient digital work environment.

12. Conclusion

The program emphasizes hands-on training to ensure practical exposure, supported by real-time case studies that reflect actual workplace scenarios. It incorporates assessment-based certification to evaluate competency levels and integrates with online learning platforms for flexible and continuous learning.

Additionally, the program includes interactive workshops, module-based learning for progressive skill development, and simulation exercises to enhance problem-solving abilities.

Regular feedback mechanisms, peer collaboration opportunities, and access to updated digital tools further strengthen the learning experience, ensuring that participants develop both confidence and competence in handling digital administrative tasks. The structured curriculum not only fosters technical proficiency but also nurtures essential soft skills such as communication, adaptability, time management, and teamwork, which are critical in modern organizational environments.

Learning can be further enhanced through ongoing informal feedback processes, opportunities to interact with peers, and, access to current digital tools. These aspects of the program allow participants to develop their confidence and their ability to perform digital administrative tasks. The structured curriculum develops both participant's technical skills as well as the participants' soft skills in the areas of communication, adaptability, time management and working with others, all of which are essential to success in today's workplace. In addition to the aforementioned reasons for learner success, the program promotes independent learners and encourages lifelong learning in order to remain aligned with developing technological trends and industry requirements.

By providing the learner with both theory-based knowledge and practicum-based application; the initiative prepares learners to address real-world issues. Ultimately, this initiative will assist in creating a digitally competent workforce that will improve administrative and employee-based productivity, efficiency, and innovation.

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