

## Designing an HR Webpage to Streamline Inquiries and Information Access

Sharmila De<sup>a\*</sup>, Ruchi Gaur<sup>b\*</sup>

<sup>a</sup> Student, Department of UX & DPD, School of Design, World University of Design, Sonipat

<sup>b</sup> Assistant Professor, Department of UX & DPD, School of Design, World University of Design, Sonipat  
[desarmila1@gmail.com](mailto:desarmila1@gmail.com), [Ruchi@wud.ac.in](mailto:Ruchi@wud.ac.in)

\*\*\*

**Abstract - Purpose** – This study outlines the development of a user-centric webpage for the Human Resource Development (HRD) department at a premier Mini Ratna public sector enterprise. The primary objective was to reduce the high volume of telephonic inquiries regarding internships by providing a dedicated, self-serve digital information hub, while simultaneously centralizing the training calendar for current employees.

**Design/methodology/approach** – A comprehensive UI/UX design process was utilized, beginning with information architecture to logically organize internship details and internal training schedules. The interface was developed in Figma. The design prioritized clear content cards and responsive adaptation to ensure the information was easily accessible across mobile, tablet, and desktop devices.

**Findings** – The study demonstrates that strategically migrating frequently requested information into a highly accessible digital format effectively addresses administrative bottlenecks. By creating a clear visual hierarchy for internship guidelines and training dates, the HR department can confidently redirect repetitive phone inquiries to the webpage.

**Practical implications** – The project resulted in a fully responsive, high-fidelity prototype accompanied by comprehensive developer handoff documentation. This digital asset provides the enterprise with a practical solution to minimize manual inquiry handling, freeing up administrative time while proactively informing prospective interns and current staff.

**Originality/value** – This research highlights how targeted user experience interventions can solve specific, real-world communication challenges within a major public sector enterprise.

**Keywords:** Digital Interface, Inquiry Management, Information Portal

### 1. Introduction

Historically, the management of administrative and educational requests within this premier Mini Ratna public sector enterprise was highly traditional and manual. The Human Resource Development (HRD) department routinely handles a high volume of inquiries concerning student internships and internal employee training. Prospective interns and students relied almost entirely on direct telephonic inquiries or physical visits to the corporate headquarters to gather fundamental details regarding application procedures, eligibility criteria, and availability.

The enterprise initiated broad digitalization efforts across various departments to modernize operations. Implementing

systems like eOffice applications and corporate portals aimed to streamline internal workflows and transition away from verbal administrative management. Despite these initiatives, the HRD department encountered persistent operational bottlenecks. The initial digital transition was fragmented; while top-level corporate data was available, specific, user-focused workflows for external interns and internal training schedules were not centralized.

Technical instability within the newly implemented corporate network severely compounded this friction. The eOffice applications suffered from frequent shutdowns, system crashes, and periods where the platform completely failed to work. Consequently, the high volume of repetitive telephonic inquiries did not diminish, leaving HR administrative staff heavily burdened with answering routine, identical questions from students regarding internships. Furthermore, the information that was available online was often buried in dense corporate text, making it highly difficult for users to independently navigate and find the answers they needed.

This ongoing friction highlighted a critical need for a targeted communication intervention: a dedicated, self-serve digital hub that could proactively empower users to find their own answers. My role during the internship was to resolve this communication bottleneck by spearheading the UI/UX design of a dedicated HRD webpage. Applying user-centric design principles, I restructured heavy administrative text into easily scannable content cards and logically integrated the employee training calendar. Through a rigorous process of information architecture mapping, wireframing, and responsive digital prototyping, I developed a high-fidelity interface that serves as a functional, accessible resource. This digital intervention directly alleviates the department's manual inquiry burden by providing a clear, modernized touchpoint that allows HR staff to reclaim valuable time.

### 2. Literature Review

#### 2.1 E-HRM Implementation in Public Organizations

Governments in developing countries are increasingly turning to electronic service delivery to address persistent operational inefficiencies. This research investigates the factors influencing the implementation of electronic human resource management (e-HRM) in public organizations within an emerging economy, utilizing both the technology acceptance and innovation diffusion models. Currently, there is a lack of deep understanding regarding the dual influence of both technology features and employees' capabilities on e-HRM adoption in public sectors. Findings indicate that perceived simplicity of usage, usefulness, self-efficacy, compatibility, and facilitating conditions show significant positive effects on e-HRM implementation intentions. To resolve this, governments

must pay equal attention to upgrading technological infrastructure and enhancing employee technological capabilities to ensure successful digitalization. Future research should extend the integration of technology acceptance models to assess e-government implementation across wider emerging contexts (Amoako et al., 2022).

### **2.2 Trust Dynamics in Information Systems Adoption**

The successful adoption of digital information systems at work relies heavily on the end-users' trust in the technology. This study aims to longitudinally examine the dynamics, antecedents, and outcomes of trust during the adoption of information systems in the workplace. Previous research lacks longitudinal assessments of how technology trust evolves over time and influences long-term system usage and acceptance. It was found that trust dynamics play a critical role in user acceptance, directly impacting the successful integration of human resource information systems and other enterprise technologies. Consequently, organizations should implement strategies that actively build and sustain technology trust through transparent communication, reliable systems, and dedicated user support. Further research should investigate additional antecedents of trust and how they interact with specific technological features in diverse, remote workplace environments (Müller et al., 2023).

### **2.3 E-Government and User-Centricity Conflicts**

E-government utilizes information technology to deliver faster public services, with a growing focus on user-centric digital design. The objective is to analyze academic literature on user-centricity and public values to understand its role and effects in e-government platforms. The inherent conflicts between creating highly tailored digital services, the resulting cognitive burden on non-technical users, and the widening digital divide are not fully resolved. While user-centricity is ideal, it can create conflicts in citizen representation, accountability, and pluralism, especially within highly institutionalized government environments. This requires balancing tailored, user-friendly citizen services with broad public values and considering the diverse realities of society when designing digital governance portals. Exploring the impact of rapid technological innovations like trust infrastructures on resolving e-government accessibility conflicts represents an important area for future study (Caposino, 2026).

### **2.4 Artificial Intelligence and Automation in HR Communication**

The integration of artificial intelligence (AI) and automation is fundamentally reshaping electronic human resource management and HR communication. This work examines the role, operational opportunities, and ethical challenges of AI and automation in HR communication across both public and private organizations. The ethical implications and potential biases embedded within automated HR processes are frequently overshadowed by the drive for operational efficiency. While AI significantly enhances the speed, accuracy, and consistency of HR communication, it raises valid concerns about algorithmic bias and diminished relational communication between staff. Developing ethically guided implementation strategies and human oversight frameworks is necessary to safeguard fairness and organizational integrity. Long-term assessments are needed to determine how AI integration impacts the quality of human

interaction and collaboration during the early stages of e-HRM implementation (Oktaviannur & Kindiasari, 2024).

### **2.5 Cognitive Load in User Interface Design**

Cognitive load refers to the total mental effort required for a user to process information when operating a digital interface. The goal is to evaluate how cognitive load principles influence the usability, navigation, and task efficiency of enterprise software interfaces. Many digital tools lack a focus on reducing extraneous information, leading to overwhelmed users, increased decision fatigue, and high task abandonment rates. Designing with limited working memory capacity in mind—and utilizing tools like progressive disclosure and clear visual hierarchy—directly improves task completion rates. This involves minimizing unnecessary cognitive load through clear affordances, familiar interaction patterns, and chunking complex content into smaller, manageable parts. Analyzing the effects of specific micro-interactions and emotional design triggers on intrinsic cognitive load in complex administrative software will be crucial moving forward (Quiroga et al., 2004).

### **2.6 E-HRM Systems and Organizational Innovation**

Electronic Human Resource Management represents an evolutionary advancement, acting as a strategic resource that transforms HR functions through digital technologies. This research investigates the role of e-HRM systems in fostering organizational innovation and assesses the moderating effect of employee digital competency. The empirical connection between the deployment of digital HR tools and their specific impact on organizational adaptability and innovation outcomes is still developing. E-HRM systems have a significant positive effect on organizational innovation by streamlining administrative processes and facilitating data-driven decision-making, an effect that is strengthened by high employee digital competency. Investing simultaneously in advanced e-HRM platforms and the continuous digital skills training of employees helps to optimize human capital deployment. Future research should assess how e-HRM supports knowledge sharing and agility across varied organizational units in a post-digitalization era (Aalto, 2022).

### **2.7 Employee Self-Service (ESS) Technology Acceptance**

Employee Self-Service (ESS) systems decentralize administrative tasks, allowing employees to access and manage their own HR data independently. The aim is to predict user satisfaction, psychological strain, and actual system usage when organizations deploy self-service HR technologies. The relationship between the perceived cognitive usability of ESS interfaces and the resultant strain or job satisfaction among corporate staff is frequently under-examined. System characteristics, perceived ease of use, and management support heavily influence employees' attitudes and their likelihood of successfully adopting ESS. Prioritizing interface usability and reducing the mental effort required to operate ESS is vital to prevent user frustration and reliance on manual HR support. Determining the long-term impacts of ESS usability on employee retention and operational efficiency in high-stress corporate sectors is recommended for future exploration (Marler et al., 2006).

### **2.8 E-HRM Evolution and Digital Transformation**

The digital age has caused a fundamental shift in HRM from highly transactional administrative tasks to strategic, data-driven operations. This explores the evolution, strategic significance, and future technological trends of e-HRM in modern organizational workplaces. There is a pressing need to understand how the integration of e-HRM mitigates data security risks while simultaneously automating core HR practices. E-HRM effectively reduces administrative burdens and improves employee engagement, though it presents ongoing challenges regarding regulatory compliance and cyber threats. Implementing robust security measures alongside user-friendly digital interfaces ensures safe, seamless, and legally compliant HR service delivery. Studying the long-term strategic alignment of e-HRM tools with organizational performance metrics in fully digitized enterprises is a key future scope (Eminent, 2023).

### 2.9 API-Driven E-Governance

Digital transformation is a prevalent feature in public administration, relying heavily on modern software architecture and interconnected systems. This explores how Application Programming Interfaces (APIs) and centralized digital platforms accelerate e-governance and administrative efficiency. The technical challenges of connecting fragmented government databases into unified, centralized citizen portals are rarely analyzed through a socio-technical lens. Centralized electronic portals and API-driven data storage significantly increase the transparency, speed, and efficiency of public administrative procedures. Deploying integrated cloud-based solutions and centralized reporting tools provides streamlined, one-stop public administration services. Evaluating the scalability of distributed file systems in managing the rapidly growing data demands of smart city governance is a necessary next step (Smith, 2005).

### 2.10 Adoption and Impact of Electronic Human Resource Management

E-HRM has become a ubiquitous practice, significantly altering the operational, relational, and transformational dynamics of modern organizations. This synthesizes and analyzes decades of research on the multi-dimensional factors impacting e-HRM adoption and its organizational consequences. There remains a lack of empirical studies fully theorizing the relationship between specific adoption factors (human, technological, organizational) and the actual strategic gains of e-HRM. The gains from e-HRM have shifted from merely operational efficiencies to highly strategic transformations, but success depends entirely on addressing all dimensions of user adoption. Adopting a holistic implementation approach that aligns technological infrastructure with organizational culture and environmental constraints is essential. Developing comprehensive theoretical frameworks that map exact relational outcomes to specific e-HRM technology deployments will be critical in the future (Nasar, 2023).

## 3. Research Objectives

The study set out to address the following objectives within the specific constraints of a public sector enterprise:

a. To evaluate the existing digital infrastructure of the organization to identify the root causes of cognitive overload

and navigation friction that lead to high volumes of manual administrative inquiries.

b. To establish a dual-audience Information Architecture (IA) that simultaneously serves the immediate daily needs of internal employees (e.g., training calendars) and the structured informational needs of external internship applicants.

c. To determine whether dense, multi-layered corporate policies and application pipelines can be translated into a streamlined, WCAG-compliant digital interface without diluting essential bureaucratic requirements.

d. To document the transition from structural wireframes to a high-fidelity, brand-aligned prototype that acts as a centralized self-service knowledge base.

## 4. Methodology

Given the secure corporate nature of the project, traditional primary user interviews were unfeasible. The research methodology instead relied on a benchmark-led approach paired with rigorous contextual workplace observation and content auditing.

The work proceeded in four distinct stages. The first phase involved a heuristic evaluation of the existing legacy website to document usability flaws and strengths. The second phase translated raw, stakeholder-provided documentation—including the mandatory 6-step internship application process and complex employee training schedules—into a strict, page-level Information Architecture. The third phase involved rapid low-to-mid-fidelity wireframing to resolve spatial layout without the distraction of visual aesthetics. The final phase applied a localized design system to generate high-fidelity interfaces, culminating in comprehensive WCAG accessibility testing.

### 4.1 Contextual Audit and Website Analysis

Before proposing a new interface, the existing corporate website was audited to understand its baseline performance. The analysis revealed a platform that possessed robust foundational accessibility features but suffered from severe architectural flaws.

**Positive Aspects (+ve):** The legacy system explicitly prioritized accessibility, featuring highly visible tools for text resizing, high-contrast theme toggling, and screen reader access. It also catered to a localized demographic through prominent English/Hindi bilingual toggles and successfully established institutional trust through the immediate visibility of its "Mini Ratna" affiliations and ISO accreditations.

**Negative Aspects (–ve):** The primary failure of the interface was severe cognitive overload. The homepage utilized multiple redundant menus (e.g., Main Navigation, Important Links, Related Links, Footer Menu), which created intense decision fatigue. This was exacerbated by distracting motion elements—such as auto-playing carousels and scrolling text marquee—for "Latest News"—that disrupted initial user focus. Furthermore, deep, multi-layered nested menus required precise cursor control, translating poorly to touch interfaces and creating severe friction for mobile users.

This evaluation confirmed that the existing platform's visual density was actively driving users to abandon the digital journey and resort to telephonic inquiries.



**Fig 1: Existing website**

## 4.2 The Central Tension: Designing for Dual Audiences

A fundamental conflict surfaced during the discovery phase: the client required a single digital portal to serve two entirely distinct user groups with competing priorities.

**Internal Workforce:** Existing staff required rapid, daily access to mandatory corporate compliance mechanisms (e.g., She-Box portal, RTI Act) and the HRMS portal for performance appraisals. Crucially, they needed immediate visibility of a multi-disciplinary "Employee Training Calendar."

**External Applicants:** University students and young professionals required a structured pipeline detailing internship constraints (e.g., 4 to 8 weeks, no TA/DA), distinctions between standard training and the PM Internship Scheme, and a rigid list of required documentation (e.g., institution application letter, medical fitness certificate).

The design problem was therefore not just cosmetic; it required structuring the page so that an internal employee could find their daily schedule in seconds, without having to scroll past lengthy internship eligibility requirements, while ensuring an external student still encountered a clear, unbroken application narrative.

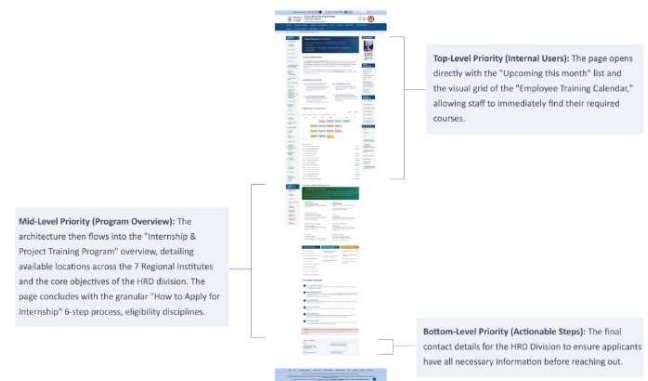
## 4.3 Information Architecture and Content Strategy

To resolve the dual-audience tension, the Information Architecture was structured with a strict, non-negotiable vertical hierarchy based on user urgency and frequency of access.

**Top-Level Priority (Internal Users):** The page opens directly with an "Upcoming this month" list and the visual grid of the Employee Training Calendar. This ensures that daily staff users face zero navigational friction to reach their required courses.

**Mid-Level Priority (Program Overview):** The architecture then flows into the "Internship & Project Training Program" overview, detailing available locations across the 7 Regional Institutes and the core objectives of the HRD division.

**Bottom-Level Priority (Actionable Steps):** The page concludes with the granular "How to Apply" 6-step process and eligibility disciplines. By placing contact details at the very bottom, the architecture forces applicants to scroll past all prerequisites, ensuring they have the necessary information before reaching out to the department.



**Fig 2: Page-level Information Architecture mapping**

## 5. Wireframe Directions and Interface Resolution

The structural blueprint was developed through progressive stages of fidelity to isolate functionality from aesthetics.

### 5.1 Low-Fidelity Structuring

The initial phase utilized a strict grayscale palette and basic geometric shapes to block out major content zones. This skeletal approach was crucial for logically mapping out the dense

corporate data. By stripping away brand colors and typography, stakeholder reviews were forced to focus entirely on user flow, spatial hierarchy, and the logic of the extensive left-hand navigation menu reserved for mandatory compliance links.



**Fig 8.1: Low-fidelity grayscale structural blueprint**

## 5.2 Mid-Fidelity Grid Alignment

Transitioning to mid-fidelity, the approved blueprint was refined by introducing a standard 12-column grid system. This stage acted as a vital bridge, bringing critical clarity to the dense informational content. Preliminary typographic scales were introduced to establish visual weight and create distinct section dividers. Complex data structures, such as the multi-disciplinary training schedules and the multi-step internship criteria, were transformed from basic text blocks into organized, readable data grids. This allowed for the evaluation of realistic spacing and component alignment to ensure the interface remained uncluttered.



**Fig 8.2: Mid-fidelity wireframe**

## 5.3 High-Fidelity and Accessibility Refinement

The final phase established a local design system in Figma to ensure the new webpage aligned with the broader corporate branding of the enterprise. Typography scales utilized readable, web-safe sans-serif fonts, while the corporate color palette integrated standard blues and clean whites. To enhance scannability and reduce cognitive load, dense textual information was transformed into structured visual cards paired with custom iconography. Finally, a comprehensive contrast check was conducted across the interface to ensure all text and background colors met WCAG standards, guaranteeing readability and legal compliance for all users.



**Fig 8.3: High-fidelity final interface**

## 6. Conclusion

This study examined how a dedicated, user-centric webpage can address a persistent operational bottleneck within the Human Resource Development department of a major public sector enterprise. A heuristic evaluation of the existing corporate website confirmed that redundant navigation structures, dense unstructured text, and distracting motion elements were actively driving users to abandon the digital platform and revert to telephonic inquiries.

The core design challenge was not cosmetic but structural: a single page had to serve two entirely distinct audiences with competing priorities. Internal employees needed immediate access to training schedules and compliance portals without

scrolling past internship content, while external applicants needed a clear, linear pathway through eligibility criteria, required documentation, and the six-step application process. The Information Architecture resolved this by ordering content strictly by frequency and urgency of access, placing the employee training calendar at the top and the granular application steps at the bottom.

The progressive wireframing approach, moving from low-fidelity structural blocking through mid-fidelity grid alignment to a high-fidelity branded prototype, proved effective in separating layout decisions from visual decisions. Each stage invited a different kind of stakeholder feedback: the grayscale phase tested information hierarchy, the grid phase tested density and spacing, and the final phase tested brand alignment and accessibility compliance.

The limitation is worth stating plainly. The secure corporate environment prevented direct user interviews, so the design rests on contextual observation, content auditing, and heuristic evaluation rather than on measured user behaviour. The proposed interface is a considered solution, not a validated one. Usability testing with both internal staff and prospective interns, measuring task completion time for finding a training date and completing an internship application respectively, would be the natural next step. This study establishes the groundwork for that evaluation.

## 7. References

- Aalto, E. (2022). E-HRM systems and organizational innovation: The moderating effect of employee digital competency. *Journal of Organizational Change Management*.
- Amoako, R., et al. (2022). Factors influencing e-HRM implementation in public organizations within emerging economies. *International Journal of Human Resource Management*.
- Caposino, M. (2026). E-government and user-centricity: Conflicts and considerations in digital governance. *Government Information Quarterly*.
- Eminent, S. (2023). E-HRM evolution and digital transformation in modern organizations. *Human Resource Management Review*.
- Marler, J. H., et al. (2006). Employee self-service technology acceptance: Predicting satisfaction and system usage. *Journal of Information Technology*.
- Müller, T., et al. (2023). Trust dynamics in information systems adoption: A longitudinal study. *Information Systems Journal*.
- Nasar, A. (2023). Adoption and impact of electronic human resource management: A multi-dimensional review. *International Journal of e-HRM*.
- Oktaviannur, M., & Kindiasari, R. (2024). Artificial intelligence and automation in HR communication: Opportunities and ethical challenges. *AI & Society*.
- Quiroga, L. M., et al. (2004). Cognitive load in user interface design: Implications for usability and task efficiency. *Human-Computer Interaction*.



- Smith, J. (2005). API-driven e-governance and centralized digital platforms. Journal of Public Administration Research.