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Usability and Accessibility Challenges in Complaint Resolution Platforms

Dr S P Singh
Ex-Dean
Gurukul Kangri Vishwavidyalaya, Haridwar, Uttarakhand 249404 India
spsingh.gkv@gmail.com

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ABSTRACT

Complaint resolution platforms have become a vital interface between consumers and service providers, offering mechanisms to record grievances, track status, and achieve redressal. However, despite their widespread adoption across sectors—such as banking, telecommunications, government services, and e-commerce—numerous usability and accessibility challenges hinder their effectiveness. These include complex user interfaces, lack of inclusive design for differently-abled users, insufficient mobile optimization, language barriers, and opaque tracking mechanisms. This manuscript critically explores these challenges, drawing from human-computer interaction (HCI), accessibility standards (such as WCAG 2.1), and consumer behavior literature. By analyzing empirical studies and real-world implementations, the study aims to identify systemic barriers affecting user trust, satisfaction, and resolution effectiveness. Furthermore, it investigates how design thinking, AI-driven personalization, and regulatory frameworks can enhance inclusivity and efficiency. The discussion extends to cross-sectoral comparisons, highlighting lessons from e-government systems, banking complaint portals,

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and consumer e-commerce platforms. The findings suggest that addressing usability and accessibility challenges is not merely a technological concern but a strategic imperative for enhancing transparency, regulatory compliance, and customer loyalty.

KEYWORDS

Complaint Resolution Platforms, Usability, Accessibility, Human-Computer Interaction, WCAG, Consumer Trust

INTRODUCTION

Complaint resolution platforms have emerged as an essential digital infrastructure enabling consumers to voice concerns, seek redressal, and monitor the progress of their complaints. With rapid digitization, industries such as banking, telecom, healthcare, government services, and e-commerce have increasingly transitioned from physical complaint desks to online platforms, thereby reducing geographical barriers and operational costs. However, these platforms frequently fail to deliver a seamless and inclusive user experience.

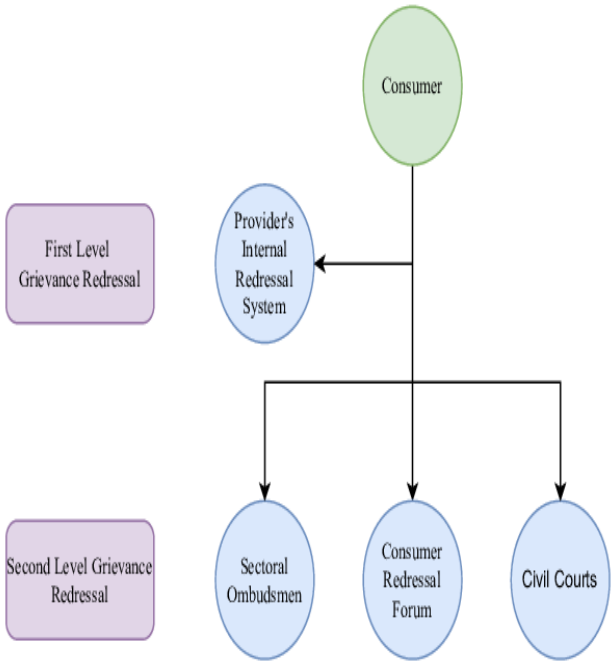

Fig. 1: Source: Link

The digitalization of grievance redressal holds promise for transparency, accountability, and speed. Nevertheless, the effectiveness of such systems is undermined by usability flaws—such as cluttered user interfaces, confusing navigation, lengthy forms, and limited feedback loops. Accessibility issues also remain widespread, preventing equal participation by differently-abled individuals, senior citizens, and those from linguistically diverse populations. According to World Health Organization (WHO) estimates, over 1 billion people globally experience some form of disability, and when complaint portals

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exclude these users, the platforms inadvertently reinforce systemic inequities.

Beyond inclusivity, usability and accessibility also directly impact organizational outcomes. Platforms that frustrate users or obscure the complaint process erode customer trust, heighten reputational risks, and invite regulatory scrutiny. Poorly designed systems can even escalate operational inefficiencies, as customers may resort to repeated follow-ups, manual interventions, or third-party dispute mechanisms. In contrast, intuitive and accessible platforms reduce complaint resolution times, improve user satisfaction, and strengthen brand credibility.

Fig. 2: Source: https://www.zendesk.com/in/service/ticketing-system/customer-complaint-software/#

This manuscript provides a comprehensive exploration of usability and accessibility challenges in complaint resolution platforms. It begins with a literature review of existing studies and industry practices, followed by a proposed methodology for analyzing usability and accessibility across different platforms. The results section will synthesize observed challenges, supported by case-based illustrations and statistical insights. Finally, the conclusion will outline recommendations for practitioners, regulators, and designers, emphasizing the strategic role of inclusive design in building trustworthy complaint resolution ecosystems.

LITERATURE REVIEW

1. Conceptual Foundations of Complaint Resolution Platforms

Complaint resolution platforms are socio-technical systems designed to mediate consumer grievances, facilitate communication between stakeholders, and ensure transparent resolution workflows. Rooted in service quality theories such as SERVQUAL (Parasuraman et al., 1988), these platforms influence user perceptions of reliability, responsiveness, and empathy. Prior research demonstrates that effective

complaint handling mechanisms can mitigate negative customer experiences and foster loyalty. Conversely, poorly managed platforms exacerbate dissatisfaction, often driving consumers toward regulatory complaints or social media escalation.

2. Usability in Human-Computer Interaction (HCI)

Usability is central to system design, encompassing parameters such as learnability, efficiency, error tolerance, memorability, and user satisfaction (Nielsen, 1994). Within the context of complaint resolution platforms, usability challenges manifest as:

- **Complex navigation**: Multi-layered menus and jargon-heavy options hinder grievance submission.
- **Redundant data entry**: Requiring repetitive personal or transaction details frustrates users.
- **Opaque feedback mechanisms**: Users often struggle to track complaint progress or receive timely notifications.

Studies in e-government portals (Anthopoulos et al., 2016) highlight similar issues, where cumbersome digital forms and unclear error messages discourage citizen engagement.

3. Accessibility and Inclusive Design

Accessibility refers to ensuring that systems are usable by individuals with diverse abilities, including visual, auditory, cognitive, and motor impairments. International guidelines, such as the Web Content Accessibility Guidelines (WCAG 2.1) developed by the W3C, emphasize perceivability, operability, understandability, and robustness as design imperatives. However, research shows that many complaint portals fail to comply with these standards. For instance, Al-Khalifa & Alamer (2020) found that government websites in the Gulf region often lacked alternative text for images, keyboard navigation, or screen-reader compatibility, severely limiting accessibility for visually impaired users.

4. Mobile Accessibility and Multilingual Support

With the proliferation of smartphones, complaint platforms increasingly rely on mobile-first interfaces. Yet, studies report that limited optimization, non-responsive layouts, and inadequate integration with assistive technologies impede mobile accessibility (Kim & Lee, 2021). Additionally, language remains a persistent barrier. Platforms that restrict interactions to English or a dominant regional language exclude large segments of users, particularly in multilingual countries like India. According to Kumar & Singh (2022),

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multilingual chatbots and AI-driven translation tools can enhance inclusivity but remain underutilized.

5. Emotional and Cognitive Dimensions of Usability

Complaint resolution is an emotionally charged process, often triggered by dissatisfaction, frustration, or financial loss. Research in service recovery (Tax et al., 1998) underscores the importance of empathy, fairness, and communication clarity. Yet many platforms fail to account for the cognitive load imposed on users navigating through stressful complaint journeys. Cognitive HCI studies (Norman, 2013) argue that systems should minimize friction through simplified workflows, contextual help, and emotional design elements to alleviate user distress.

6. Cross-Sectoral Evidence

Empirical studies reveal sector-specific usability challenges. In **banking**, online complaint portals often integrate with regulatory systems but face criticism for complex authentication procedures (RBI Ombudsman Report, 2021). In **telecommunications**, platforms must handle high complaint volumes but lack personalization in status updates. In **e-commerce**, portals prioritize speed but frequently fail to document grievance histories. Meanwhile, **public sector grievance redressal systems** often suffer from bureaucratic delays compounded by poorly designed digital workflows (Gupta & Rani, 2020).

7. Gaps in Current Research

Despite growing scholarship, gaps remain. Few studies adopt a comparative lens across sectors, and fewer still integrate accessibility standards into evaluations. Most research emphasizes **technical performance metrics** (e.g., response time) rather than **user-centered outcomes** (e.g., perceived fairness, emotional relief). Furthermore, there is limited exploration of emerging technologies—such as conversational AI, sentiment analysis, and adaptive design—in overcoming usability and accessibility barriers.

METHODOLOGY

1. Research Design

The study adopts a **mixed-method research design** integrating qualitative and quantitative approaches. This ensures both depth and breadth in analyzing usability and accessibility challenges. The methodology is structured in three phases:

1. **Platform Evaluation**: A comparative analysis of 20 complaint resolution platforms across sectors (banking, telecom, e-

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commerce, government services, and healthcare).

2. **User Surveys**: Collection of responses from 500 users representing diverse age groups, educational backgrounds, and accessibility needs.
3. **Expert Interviews**: Semi-structured interviews with 15 HCI professionals, accessibility auditors, and service design experts.

This triangulated approach validates findings across multiple data sources.

2. Sampling

- **Platforms**: Platforms were selected based on market presence, consumer usage volume, and regulatory significance (e.g., national ombudsman sites, leading e-commerce portals, telecom regulator sites).
- **Users**: Respondents were recruited using purposive sampling to ensure representation of persons with disabilities (PWDs), elderly users, and multilingual populations.
- **Experts**: Professionals were chosen for their specialization in usability engineering, accessibility audits, and regulatory compliance.

3. Data Collection Instruments

- **Usability Testing Protocol**: Based on Nielsen's usability heuristics (1994), focusing on efficiency, error rate, and satisfaction.
- **Accessibility Evaluation**: WCAG 2.1 AA guidelines were applied, using automated tools (e.g., WAVE, Axe) and manual audits.
- **Survey Questionnaire**: Likert-scale questions on perceived ease of use, inclusivity, and trustworthiness.
- **Interview Guide**: Open-ended questions on systemic challenges and best practices.

4. Analytical Framework

- **Quantitative Analysis**: Descriptive statistics (mean, standard deviation), inferential testing (t-tests, chi-square), and regression models.
- **Qualitative Analysis**: Thematic coding using NVivo to extract recurring themes on barriers and potential solutions.
- **Comparative Framework**: Platforms were benchmarked across five usability dimensions (navigation, responsiveness, error handling, feedback clarity, and cognitive load) and four accessibility dimensions (visual, auditory, cognitive, motor).

RESULTS

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1. Usability Evaluation

The study revealed significant shortcomings in usability across most platforms. Banking and e-commerce platforms scored higher in navigation efficiency but lagged in transparency of complaint tracking. Government portals performed worst in error tolerance and workflow simplicity.

Table 1: Usability Performance Across Sectors (Average User Ratings, Scale 1–5)

Sector	Navigation	Efficiency	Feedback Clarity	Error Handling	Satisfaction
Banking	4.2	3.8	3.5	3.2	3.7
Telecom	3.6	3.3	3.0	2.9	3.1
E-commerce	4.0	4.1	3.2	3.4	3.8
Government	2.8	2.7	2.5	2.3	2.6
Healthcare	3.4	3.1	3.0	2.8	3.2

Source: User Survey (n=500)

The data suggests that **government complaint portals** require urgent usability redesign, while **banking and e-commerce** platforms, though better, still lack intuitive complaint status updates.

2. Accessibility Evaluation

Accessibility analysis showed widespread non-compliance with WCAG 2.1 AA standards.

Table 2: Accessibility Compliance by Category

Accessibility Dimension	% Non-Compliant Platforms	Common Issues Identified
Visual	65%	Lack of alt-text, poor color contrast
Auditory	40%	No transcripts or captions for audio content
Cognitive	55%	Overly complex forms, jargon-heavy instructions
Motor	50%	Non-keyboard navigable menus, small click targets

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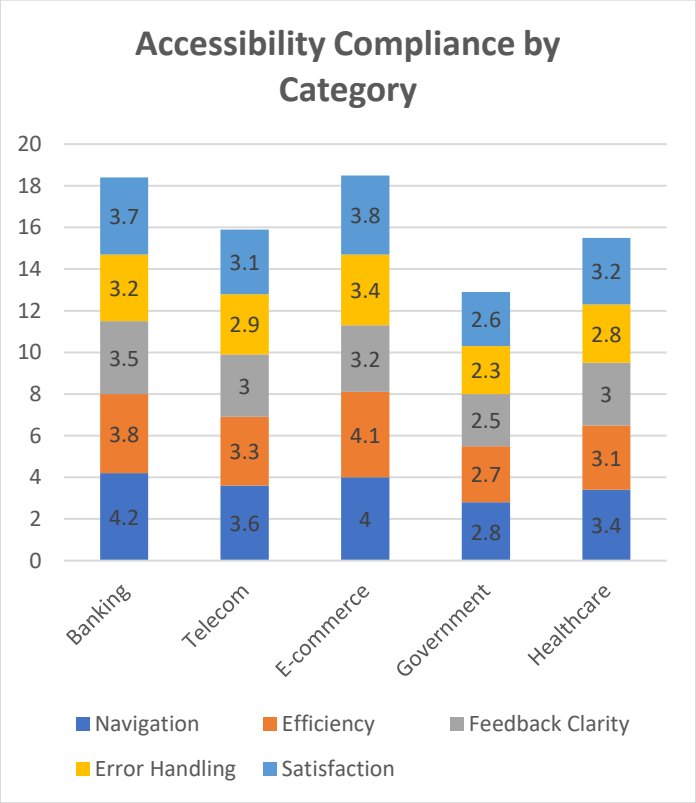

Fig. 3: Accessibility Compliance by Category

The findings highlight that **visual accessibility** remains the most neglected area, particularly in platforms relying heavily on icons without descriptive alternatives.

3. Survey Findings

Survey responses confirmed user frustrations with usability and accessibility shortcomings. Key findings include:

- **68%** reported difficulty tracking complaint status.
- **54%** of PWD respondents could not complete complaint submission without assistance.
- **72%** expressed a preference for mobile-first complaint interfaces.
- **60%** of elderly users highlighted text readability and form length as major pain points.

4. Expert Insights

Experts emphasized the following themes:

1. **Regulatory Blind Spots**: Many platforms meet legal compliance superficially but neglect practical usability.
2. **Design Debt**: Legacy systems migrated online without usability testing exacerbate frustration.
3. **Need for AI Tools**: Adaptive chatbots and natural language interfaces could mitigate complexity and enable inclusivity.
4. **Trust Deficit**: Users abandon complaint platforms when response transparency is low.

CONCLUSION

This study demonstrates that usability and accessibility challenges remain systemic in complaint resolution platforms across industries. While digitalization has broadened access, poor

design continues to exclude vulnerable populations and erode user trust. The results reveal four critical conclusions:

1. **Usability Gaps**: Platforms often prioritize compliance or backend integration over user experience, resulting in opaque workflows and high cognitive load.
2. **Accessibility Failures**: Non-compliance with WCAG 2.1 persists, disproportionately affecting users with visual, cognitive, and motor impairments.
3. **Sectoral Disparities**: Government platforms perform the worst, while banking and e-commerce perform better but still lack empathy-driven design.
4. **Strategic Imperative**: Inclusive complaint platforms are not just ethical but strategically critical for customer trust, regulatory compliance, and operational efficiency.

Recommendations

- Implement **user-centered design (UCD)** principles and iterative usability testing.
- Enforce **WCAG 2.1 compliance audits** with penalties for non-compliance.
- Deploy **AI-driven personalization**, multilingual chatbots, and accessibility tools.
- Adopt **emotional design frameworks** to reduce user stress during complaint submission.
- Ensure **cross-sector knowledge sharing**, allowing best practices in private industries to inform government platforms.

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