Article

Pre-Digital Inertial Forces in a Digital HRM Transformation: A Case Study of a South African Government Organisation

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Abstract

Purpose: This study examines how pre-digital inertial forces constrain the transformation of digital human resource management (HRM) in a South African government organisation. It explores the persistence of legacy paper-based routines and their interaction with digital systems, highlighting why digitalisation often fails to achieve its full potential in the public sector.

Design/methodology/approach: An interpretive case study was conducted, utilising 30 semi-structured interviews with senior, middle, and operational staff. Thematic analysis, guided by Besson and Rowe's (2012) multidimensional framework, identified eight categories of inertia.

Findings: Despite the widespread acceptance of digital HRM technologies and recognition of their benefits, entrenched pre-digital practices continue to coexist with the system. Eight inertial forces (cognitive, behavioural, psychological, affective, socio-cognitive, socio-technical, economic, and political) limited integration and sustained reliance on paper-based processes.

Research limitations/implications: The findings are specific to one public sector organisation. Future studies could investigate inertial forces in other sectors or track how they evolve with advances in automation and AI-enabled HRM.

Practical implications: Reducing inertia requires reconfiguring the relationship between legacy and digital practices, strengthening system integration, clarifying human resources policies, and building trust through training and change management.

Originality/value: This study applies a multidimensional inertia framework to digital HRM for the first time. It extends information systems and HRM scholarship by demonstrating how entrenched pre-digital practices and bureaucratic routines constrain digital transformation and by offering new insights into the specific challenges of digital reform in the public sector.

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Introduction

Digital transformation is reshaping human resource management (HRM) practices worldwide; however, its successful implementation remains elusive, particularly in the public sector (Enaifoghe et al. 2024). Despite heavy investment in digital HRM technologies, many organisations continue to struggle with unlocking their full business value (Adner et al. 2019; Hinings et al. 2018). Technologies such as cloud computing, artificial intelligence, and the Internet of Things (IoT) promise to revolutionise HRM (Ashford et al. 2018; Strohmeier 2020; Thite 2020), but readiness gaps persist. While 90% of global human resources (HR) leaders recognise the urgency of digitalisation, only 55% feel prepared for large-scale transformation (Deloitte 2020). This challenge is especially pronounced in the public sector, where bureaucratic structures and legacy routines may reinforce organisational inertia (De Vries et al. 2018; Hanelt et al. 2021).

Prior studies have examined barriers such as system quality and resistance to change (Ruël and van der Kaap 2012; Wirtky et al. 2016), often drawing on behavioural models like the technology acceptance model (TAM) or the unified theory of acceptance and use of technology (UTAUT). While valuable, these perspectives primarily frame inertia as individual resistance or attitudinal barriers. They offer limited insight into how deeply embedded pre-digital practices persist alongside digital systems, constraining transformation outcomes (Bohn et al. 2023). Moreover, while traditional models such as TAM and UTAUT have been widely applied (Bhattacherjee and Lin 2015; Venkatesh et al. 2003), recent work demonstrates the continued need to account for organisational context and readiness in system adoption (van Zyl et al. 2022). Recent scholarship has also begun to recognise the importance of organisational legacies in shaping digital outcomes (Gegenhuber et al. 2022), but a systematic framework for analysing these inertial forces in HRM is lacking. Scholars also increasingly emphasise that digital transformation in the public sector follows a different trajectory compared to private organisations, as it is shaped by institutional complexity, regulation, and entrenched practices (De Vries et al. 2018; Hong et al. 2022). Despite significant investments, many government-led digital initiatives continue to experience partial or failed implementation (Kempeneer and Heylen 2023), making it essential to examine the organisational forces that constrain transformation.

To address this gap, we draw on Besson and Rowe's (2012) multidimensional framework of information systems (IS) organisational inertia, which conceptualises inertia as a set of cognitive, behavioural, affective, socio-cognitive, socio-technical, economic, political, and psychological forces that inhibit digital transformation. This framework provides a richer basis for analysing barriers in digital HRM, moving beyond individual-level resistance to encompass organisational routines, technical dependencies, and institutional constraints. Guided by this perspective, we ask: What gives rise to pre-digital inertia in digital HRM practices, and how can these inertial

forces be counteracted? To answer this question, we conducted an interpretive case study of a South African government organisation. Using qualitative data from 30 interviews, we identified how pre-digital practices persisted and coexisted with digital systems, revealing the interplay of multiple inertial forces that undermined transformation.

Our study makes three contributions. First, it extends the e-HRM literature by applying a comprehensive inertia framework to the underexplored context of the public sector. Second, it provides empirical evidence from South Africa, highlighting how bureaucratic, political, and technical legacies shape the outcomes of digital HRM. Third, it offers practical insights for managers on reconfiguring legacy-digital linkages, strengthening trust, and improving system integration to reduce inertia.

Literature Review

Behavioural and System Approaches to Adoption and Use

For nearly four decades, IS research has relied on behavioural models to explain technology adoption, diffusion, and continuance. Well-known examples include the TAM (Venkatesh et al. 2003), innovation diffusion theory (Yusliza and Ramayah 2012), and the technology readiness model (Erdoğmuş and Esen 2011). These models highlight individual-level factors such as perceived usefulness, ease of use, attitudes, and behavioural intentions (Bhattacherjee 2001; DeLone and McLean 1992). Later extensions, such as UTAUT and IT continuance models, added further variables to increase explanatory power (Bhattacherjee and Lin 2015), often at the expense of parsimony and practical utility (Turner et al. 2010). Applied to HR systems, these models emphasise user satisfaction and system quality as predictors of adoption (Alshibly 2014). However, they typically assume pro-technology behaviour as the rational default, framing resistance as an individual deviation shaped by technological or contextual barriers. This perspective underplays the persistence of legacy organisational practices that may coexist with, and even undermine, digital systems.

Recent reviews and comparative studies highlight both the drivers and barriers to digital innovation in public organisations (De Vries et al. 2018; Hong et al. 2022; Neumann et al. 2024). While these studies identify leadership, organisational readiness, and institutional trust as critical determinants, less is known about how pre-digital practices persist and interact with digital systems in specific functional domains, such as HRM. Moreover, analyses of failed or partial digital transformations underscore the importance of examining the organisational routines and material elements that anchor legacy practices (Kempeneer and Heylen 2023). By applying the inertia framework to digital HRM, this study addresses these gaps and offers new insights into the persistence of pre-digital practices in the public sector.

Organisational Inertia in Transformation Contexts

Beyond individual adoption models, organisational change research has long recognised the role of inertia in constraining transformation. Rumelt (1995) defined organisational inertia as "the strong persistence of existing form and function," most evident in the continuation of inefficient practices. Sull (1999) introduced the concept of active inertia, in which organisations double down on ineffective routines despite environmental changes. These insights highlight that resistance is not always inaction; it may instead take the form of entrenched behaviours, resource commitments, and institutional legacies.

In the IS domain, scholars have expanded these ideas to examine inertia in IS-enabled transformations. Research links digital transformation challenges to various forms of inertia, including behavioural, socio-cognitive, negative psychological, socio-technical, economic, and political factors (Polites and Karahanna 2012; Haag et al. 2013; Mikalef et al. 2021). For example, Polites and Karahanna (2012) describe inertia as user attachment to, and persistence in, using an incumbent system, even if better alternatives exist. This work suggests that inertia is not merely attitudinal but is also embedded in organisational structures, technical systems, and power relations.

A Multidimensional Inertia Framework

To consolidate these insights, Besson and Rowe (2012) developed a multidimensional framework of organisational inertia. Their framework identifies eight types of inertial forces that interact to impede transformation: cognitive, behavioural, affective, negative psychological, socio-cognitive, socio-technical, economic, and political. This typology provides a comprehensive lens to examine how organisational routines, technical dependencies, institutional norms, and emotional or cognitive biases can combine to hinder change. Unlike traditional adoption models that emphasise individual decision-making, the inertia framework highlights the interplay of social, technical, and organisational legacies in shaping transformation trajectories. Recent work has further reinforced the value of this perspective by demonstrating how digital transformation processes can be understood and managed through the lens of organisational inertia (Kaganer et al. 2023). This makes it particularly relevant to public sector digital HRM, where bureaucratic traditions, regulatory constraints, and resource commitments often sustain pre-digital practices (De Vries et al. 2018; Hong et al. 2022; Kempeneer and Heylen 2023; Neumann et al. 2024).

Table 1 summarises eight forms of organisational inertia that constrain digital transformation, drawing on foundational studies in IS and organisational change alongside more recent public sector and digitalisation research. The definitions capture how each type of inertia has been conceptualised in prior literature, while the examples illustrate how these dynamics were manifested in the case organisation. Together, the table provides the conceptual foundation for analysing how legacy paper-based practices persist and interact with digital HRM systems in the public sector.

Table 1: Pre-digital inertial forces in digital-enabled organisational transformation research

Concepts	Definition	Examples from the case	Key references
Cognitive inertia	Persisting with pre-digital practices even when digital alternatives are available and more effective.	Managers insisted on filing copies of leave applications and printing performance reports, despite the system capturing them electronically.	Polites and Karahanna (2012); Haag et al. (2013); Kempeneer and Heylen (2023)
Behavioural inertia	The persistence of established routines, "the way things are done," even when processes can be streamlined.	Paper-based approvals continued as part of normal routines, which delayed system-based processing.	Polites and Karahanna (2012); Haag et al. (2013); De Vries et al. (2018)
Negative psychology inertia	Resistance caused by denial, fear, or reluctance to learn new systems.	Users complained about the complexity of the interface and avoided engaging with the system functions.	Besson and Rowe (2012); Neumann et al. (2024)
Affective inertia	Emotional discomfort or stress associated with abandoning pre-digital practices.	Employees found completing scorecards online to be tedious and described performance review negotiations in digital format as uncomfortable.	Polites and Karahanna (2012); Strohmeier (2020)
Socio-cognitive inertia	The endurance of organisational norms, values, and cultural expectations tied to legacy practices.	Norms and values supporting paper-based recordkeeping persisted across units.	Besson and Rowe (2012); Haag et al. (2013); Mikalef et al. (2021); De Vries et al. (2018)
Socio-technical inertia	Resistance arises from the misalignment between technical systems and organisational or social contexts.	Underutilisation of SAP's functions, weak integration with biometrics, and peak-time connectivity issues undermined adoption.	Besson and Rowe (2012); Haag et al. (2013); Mikalef et al. (2021); van Zyl et al. (2022)
Economic inertia	Sunk costs and prior investments in legacy systems or processes discourage change.	Paper-intensive practices were maintained despite the duplication of effort, reinforced by conflicting policies.	Besson and Rowe (2012); Haag et al. (2013); Hanelt et al. (2021)
Political inertia	Resistance is rooted in vested interests, power dynamics, or hierarchical control.	Leadership insisted on manual approvals, and interdepartmental dependencies caused delays in system use.	Besson and Rowe (2012); Haag et al. (2013); Hong et al. (2022)

Research Approach

Case Study Site

The research site was GovFin (a pseudonym), a government-run insurance agency in the South African public sector, and its systems, applications, and products in data processing (SAP)-based digital HRM solution. GovFin compensates victims of motor vehicle accidents. GovFin delivers on its core mandate through the Operations and Strategy department, supported by the Financial Services, Marketing, Human Capital, and Information and Communication Technology divisions. The organisation employs close to 3,000 employees across these functional areas. GovFin has a head office, nine regional offices, and 11 customer service centres. Regional offices have operations teams and a few support personnel providing business support services. It makes payments to claimants and vendors through a legacy claims system, supported by back office and HR functionality in SAP. The claims process is largely paper-based. A typical case file for a claimant could include claim forms, hospital records, police accident reports, the claimant's affidavit, hospital/medical accounts, accident sketch plans, x-rays, medical expert reports, letters from the claimant's attorneys, and medico-legal reports.

In GovFin's SAP environment, the modules include SAP Finance, SAP Material Management, SAP Plant Management, SAP Portals, SAP BW, SAP Performance Management, SAP SRM, SAP HR, and SAP Payroll (Figure 1). GovFin has a licence base of 600 active SAP users. However, our study focuses on SAP HR and related technologies. The HR function is performed in all regions. However, the regional teams only provide support services, while the head office team formulates and implements the HR strategy. GovFin's first module, a leave management module, has been implemented. This module allows employees to perform all leave-related activities electronically. GovFin later implemented a performance management module. This module enables the capture of performance contracts and scores. Recently, GovFin implemented additional modules, such as compensation management. We focus on the leave management and performance management modules. Although GovFin implemented the two key modules several years ago, these modules were still prone to

inertial elements. The case explores how inertia unfolded within these two digital HRM practices.

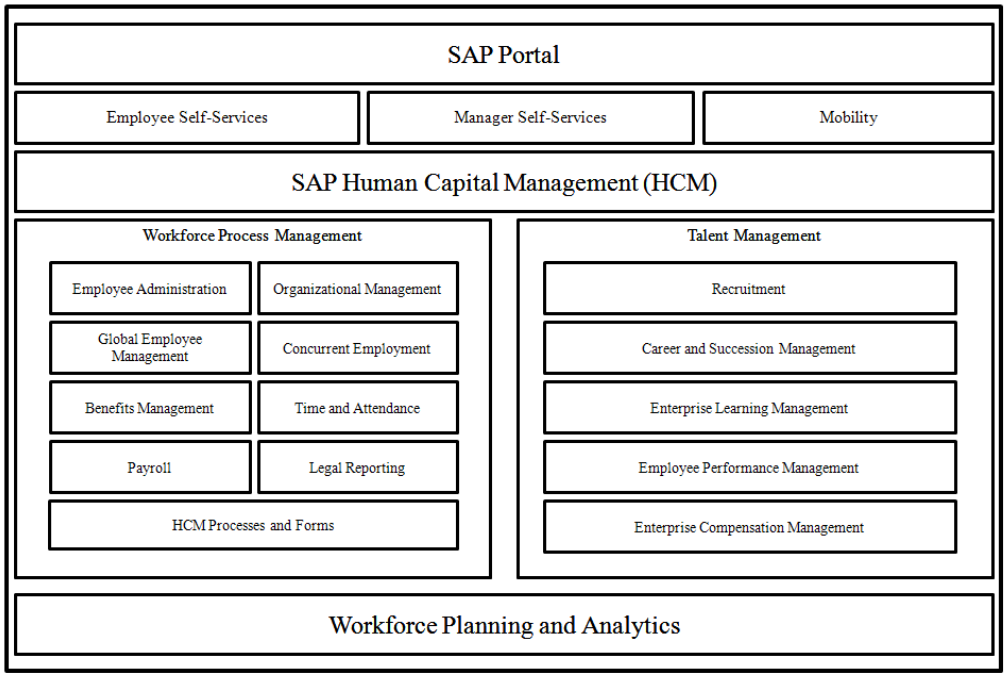

Figure 1: GovFin's SAP digital HRM application architecture

Data Collection

We collected both primary and secondary sources. Primary data collection consisted of interviews conducted over a four-month period. A typical interview lasted 45 minutes, although we also had interviews that lasted up to one hour. Interviews were conducted using a semi-structured approach. We utilised an interview guide (not provided here for space reasons) to ask informants about their experiences with digital HRM and related topics. All the interviews conducted were audio recorded and professionally transcribed. Table 2 shows that a total of 30 interviews were conducted. The sample included three senior managers, nine middle managers, and 18 operations staff members. Ten informants were from the head office, and 20 were from the regional offices. Observations and informal face-to-face discussions complemented our interviews. Also, for triangulation purposes, secondary data from internal and external document sources were collected and analysed. Functional area, seniority level, and tenure were considered in selecting informants. Triangulation was ensured by comparing interviews to confirm the identified themes and to shed more light on the entrenched practices that were impeding the digital HRM transformation.

Table 2: Summary description of participants

Functional area	Position	Location
Internal Audit (1)	Senior managers (3)	Head office (10)
Finance (3)	Managers (18)	Regional offices (20)
Information and telecommunications technology (5)	Officers (9)	
Marketing and communications (2)		
Operations (16)		
Forensics (1)		
Human resource management (1)		
Learning and development (1)		

Note: Numbers in parentheses represent the number of participants (*n*).

Data Analysis

Our analysis followed a multi-step, iterative process to examine how pre-digital inertial forces constrained the use of digital HRM practices. We selected two HR practices—leave management and performance management—as the primary units of analysis. Following prior adoption research that has employed structured frameworks to examine contextual barriers to technology uptake (e.g., van Zyl et al. 2022), we used Besson and Rowe's multidimensional inertia framework as a sensitising device to guide our data analysis. We began by developing a coding template (Crabtree and Miller 1992) informed by the IS literature on organisational inertia, with particular reference to Besson and Rowe's (2012) multidimensional framework. This template includes eight sensitising categories of inertia: cognitive, behavioural, negative psychological, affective, socio-cognitive, socio-technical, economic, and political (see Table 1). Interview transcripts were then coded by assigning data segments to these categories. For example, mentions of "legacy systems" and "paper-based practices" were coded under socio-technical inertia, while comments reflecting "status quo bias" or denial were coded as negative psychological inertia. We remained open to emergent subthemes within each category to capture context-specific nuances. Following Braun and Clarke's (2006) guidelines for thematic analysis, both authors independently reviewed the data multiple times to generate initial codes. We independently reviewed the data multiple times and generated initial codes, consistent with recent studies that have successfully applied thematic analysis to explore the human dimensions of technology adoption (Seyitoğlu and Ivanov 2024).

We then compared interpretations and refined the categories through collaborative discussion. This iterative process enabled us to identify recurring patterns that revealed how pre-digital practices persisted alongside digital tools. To enhance trustworthiness, we cross-checked themes against the full dataset to ensure consistency and representativeness (Klein and Myers 1999). We also incorporated multiple participant quotations under each theme to preserve the richness of lived experiences and ground interpretations in the data. The final set of eight themes aligns directly with the inertia

framework, providing a structured theoretical lens through which to interpret the findings.

Results

The purpose of this study was to examine how pre-digital inertial forces constrain the implementation of digital HRM practices in a South African government organisation. Our analysis focused on two core HR practices—leave management and performance management—which were selected because they represent critical points of interaction between employees, line managers, and the digital HRM system. Using Besson and Rowe's multidimensional framework of organisational inertia as a sensitising lens, we identified eight interrelated forces that explain why digital HRM practices were only partially adopted at GovFin (see Table 1).

Theme 1: Digital Systems Welcomed but Paper Practices Persist

Interviews revealed widespread acceptance of digital HRM technologies, with participants highlighting their perceived benefits and ease of use. Line managers and employees described these technologies as transformative, allowing for seamless access to self-service tools, payroll information, and time tracking. One employee noted: "I can be sitting at home, and I can access my payslip. … It just allows me to do things I need to do without necessarily having to come to the office." Digital HRM systems, particularly the SAP platform, have been credited with improving transparency and efficiency. For example, a line manager shared: "We were manually approving performance management way back, and it was easy to manipulate. Now you cannot manipulate it. There are more controls in place because it is electronic." Similarly, employees appreciated the automated leave approval process, which reduced their reliance on HR personnel. These positive experiences suggested that the system's technical capabilities met end-user expectations. However, they were consistently overshadowed by inertial forces rooted in organisational practices. Although employees and managers recognised the value of digital HRM tools, deeply ingrained traditional practices—particularly paper-based workflows—persisted. The coexistence of digital and manual processes created tensions that undermined the system's potential value.

Theme 2: Keeping Paper Records as Backups

A persistent reliance on paper-based practices emerged as a significant barrier to full digital adoption. Participants frequently described retaining physical records as a necessary safeguard, even when the digital system provided equivalent or superior functionality. One participant explained: "My scores are kept in the paper-based as well as ESS [employee self-service]. I always check with ESS. If I have scores on ESS, I print them out and keep them in a drawer so that if ever one day it says my scores are different, I have got a record that I always keep." This tendency to duplicate records reflected limited confidence in the system's accuracy and durability, reinforcing behaviours that left the digital transformation incomplete. Similar patterns were

observed in leave applications, which continued to be printed despite being processed electronically. As one participant commented: "You do not need the hardcopy because the manager will not approve leave on hardcopy. They approve leave on the system." Many participants maintained parallel paper records or personal audits to verify system information. Screenshots, handwritten leave tallies, and printed forms were used as safeguards against perceived errors or late updates, reflecting a limited trust in data accuracy. One employee stated, "Every time I fill in leave, I have a book whereby I add or subtract the number of days according to what is on the ESS, just to check and balance my days." Similarly, another employee mentioned, "Honestly, I check that every month. … I take a screenshot because I do not trust ESS." These practices illustrate how a lack of trust in digital processes sustained redundant paper-based methods and constrained the transition to fully digital HRM.

Theme 3: Still Waiting for Permission

Behavioural inertia reflected entrenched routines that resisted change, even when digital solutions provided clear benefits. Participants highlighted the approval processes as a key example. One participant shared, "You need a supervisor to tell you that you can load now; that is what causes the delay." This reliance on hierarchical instructions mirrored pre-digital workflows, where manual oversight dictated the pace of work. Despite the efficiency gains offered by the digital system, employees continued to follow traditional practices. Another participant stated, "At the end of the quarter, when you should be doing reviews, you are finalising a quarter. Those are the kinds of things that cause delays, and it is not system issues; it is people." Behavioural inertia was particularly evident in performance management, where manual approvals and legacy workflows persisted alongside digital processes. Participants described waiting for managerial prompts before submitting transactions, as well as a broader culture of last-minute processing that predated digitalisation. An employee stated, "You will wait for your manager, or you need a supervisor to tell you that you can load now; that is what causes the delay." These findings illustrate how past behaviours became embedded in the organisation's routines, creating barriers to digital transformation.

Theme 4: Persistence of Established Routines

Entrenched routines continued to shape HRM practices, even when digital systems offered clear efficiency gains. Participants described approval processes that still relied on hierarchical oversight. One participant shared: "For performance I find the process to be very tedious and extremely manual. … You cannot do it without getting an email saying that it is now open, and your manager will tell you. I think there are issues because you will wait for your manager." This dependence on managerial instructions mirrored pre-digital workflows, where manual supervision determined the pace of work. Despite the potential of the digital system to streamline processes, employees often continued to follow traditional practices. Established routines and hierarchical approvals continued to structure digital work. Similarly, another employee stated, "People like to leave things till the last minute. … It is a culture that has been created

… and it has been accepted." Such behaviours were particularly evident in performance management, where manual approvals and legacy workflows persisted alongside digital processes. These examples illustrate how deeply embedded routines create barriers to achieving the full benefits of digital HRM.

Theme 5: Emotional Resistance to Digital HRM

Participants described feelings of stress and frustration when engaging with digitalised HRM processes. In particular, the digitalisation of performance reviews was perceived as overly complex and time-consuming. One employee remarked, "Now the system required me to copy a different way and paste a different way." Beyond technical frustrations, emotional discomfort arose during performance reviews conducted on digital platforms. Employees noted the challenges of negotiating scores in this format: "It is uncomfortable because you have to disagree on other things, … and those are sometimes not easy to assemble." These accounts demonstrate how the transition from familiar, manual processes to impersonal digital systems generated emotional barriers, particularly in high-stakes interactions such as performance evaluations. Another employee stated, "You spend an hour or so copying and pasting and the system just throws you out forcing you to start again." Performance management processes were often described as uncomfortable or stressful, especially when the negotiation and justification of scores transitioned to a digital interface. Participants associated the online process with cumbersome copying, pasting, saving, and potential data loss, which intensified their frustration.

Theme 6: System Integration Gaps and Connectivity Constraints

System readiness challenges and limited integration emerged as significant barriers to the adoption of digital HRM. Participants frequently highlighted the underutilisation of the SAP platform's full capabilities. As one employee observed: "The system has potential that we are not using, and I do not know why." A lack of integration with other systems, such as attendance biometrics, further restricted functionality and reduced confidence in the platform. In addition, connectivity issues during peak periods created delays that undermined trust in the system. As one participant explained: "At the end of the month, … it delays, and I cannot afford to be down at that time." These examples illustrate a persistent misalignment between organisational infrastructure and the demands of the digital system, limiting the effectiveness of digital HRM transformation. Participants pointed to underutilised functionality, weak integration with related systems, and slowdowns during peak times. One participant stated, "You will find that at times the system does not talk properly to other systems. … If the system is used by too many people at the same time, it may … go towards crashing." Similarly, another employee mentioned, "Payday is clogged, you cannot do anything on the ESS." Dependencies on other platforms (for example, security gateways) and intermittent delays in approvals eroded confidence and encouraged offline contingencies.

Theme 7: Entrenchment of Paper-Based Investments

Historical investments in paper-intensive workflows have created barriers to the full adoption of digital HRM practices. Participants described the ongoing duplication of effort, as paper records were still maintained alongside digital processes. One employee noted: "We still maintain the paper as well, so that is one problem. … So, you are basically duplicating the effort." Employees also pointed out contradictions between organisational policies and the system's functionality, which reinforced reliance on paper-based practices. As one participant explained: "Our policies restrict us. They conflict with what the system is capable of doing." Duplication was common when units maintained full paper trails alongside digital entries. Participants linked this to historical practices and to policy requirements that had not been realigned with system capabilities, resulting in inefficiency and mixed signals. Another participant explained: "We complete a leave on SAP and then we complete a manual form and attach the certificate and then hand it to the manager." An employee stated, "We still do ESS, and we still do the paperwork. I do not know why we do both." These examples highlight how sunk costs in traditional processes, combined with misaligned policies, generate both financial and cultural barriers to digital adoption.

Theme 8: Leadership Control and Approval Dependencies

Leadership dynamics and entrenched approval structures slowed the transition to fully digital HRM processes. Participants reported delays caused by top-down requirements that reinforced manual workflows. One participant explained: "We have to wait for [leadership] to give us that manual document. … Then you have to go to the system and capture the same onto the system again." Interdependencies with other departments further exacerbated delays, as processes were held up until related measurements were completed. As one employee described: "You are dependent on other departments, … and their measurement has to wait until the end of the month." Top-down approvals and interdepartmental dependencies slowed digital workflows, particularly in performance contracting and score moderation. Several managers noted that key steps remained contingent on a single role or unit, creating bottlenecks, and reinforcing manual interventions. One employee remarked: "For you to complete your scorecard, you are dependent on other departments. … As a result, we always do our scorecards at the last minute." Another participant explained: "There is only one person in HR that can do that step. … That is a very painful process." These accounts highlight how organisational power structures and approval dependencies perpetuate traditional practices, constraining the efficiency of digital HRM systems.

Discussion

Our findings demonstrate that while digital HRM systems were widely accepted and appreciated for their convenience, transparency, and efficiency, pre-digital inertial forces remained deeply embedded in organisational practices. This tension between facilitation and inertia explains why digital transformation in HRM often delivers only

partial value in the public sector. In this section, we interpret the results through Besson and Rowe's (2012) multidimensional framework of organisational inertia and discuss their theoretical and practical implications.

Consistent with prior research on IS adoption and continuance (Bhattacherjee and Lin 2015; DeLone and McLean 1992), the participants recognised clear benefits in digital HRM. However, these benefits were diluted by the persistence of paper-based practices. This finding reinforces calls to move beyond individualistic adoption models (Venkatesh et al. 2003) and to examine how legacy processes continue to shape digital outcomes (Hanelt et al. 2021).

Our findings also reinforce earlier observations that digital transformation in government organisations is often undermined by institutional complexity, hierarchical structures, and cultural resistance (De Vries et al. 2018; Hong et al. 2022). The persistence of hybrid paper–digital practices in our case resonates with Kempeneer and Heylen's (2023) argument that many digital reforms result in partial or failed implementation when legacy routines are not adequately addressed. At the same time, the insights on managerial distrust and approval dependencies extend current work on public sector digital adoption (Neumann et al. 2024), suggesting that inertia provides a useful conceptual lens for understanding why even well-accepted systems remain constrained in practice.

Figure 2 illustrates how facilitating forces and pre-digital inertial forces coexist within the organisation's digital HRM environment, offering a useful lens for understanding why even well-accepted systems remain constrained in practice. Our case shows that paper elements were not simply redundant; rather, they were recombined with digital workflows, creating hybrid practices that undermined transformation. The reliance on paper backups illustrates cognitive inertia rooted in distrust of digital systems. Similar findings have been reported in studies on status quo bias (Polites and Karahanna 2012). Behavioural inertia, evident in hierarchical approval routines (persistence of established routines), echoes prior research on the "stickiness" of organisational habits (Haag et al. 2013). Together, these findings suggest that cognitive doubts and habitual routines reinforce one another, creating enduring obstacles to digital adoption.

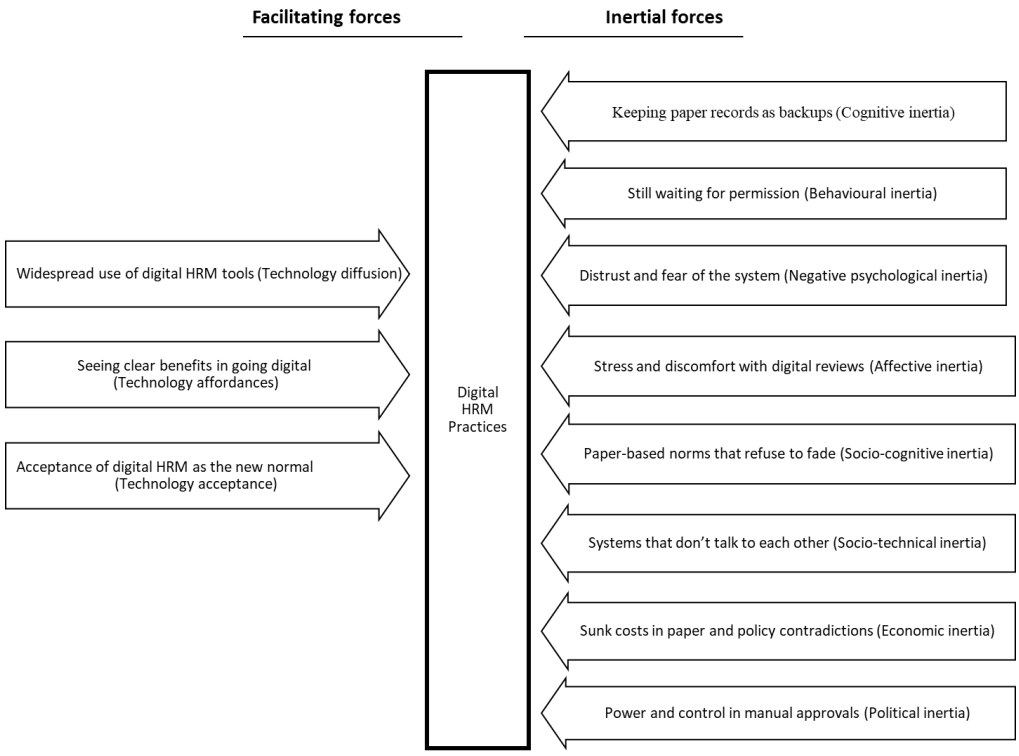

Figure 2: Facilitating and inertial pre-digital forces in digital HRM transformations

Distrust of the system and emotional resistance highlight the role of negative psychological and affective inertia. These findings extend prior e-HRM studies that focus on system quality and user satisfaction (Ruël and van der Kaap 2012) by demonstrating that digital resistance is not only rational but also emotional. In particular, the discomfort of digitalised performance reviews reveals how interpersonal dynamics and affective responses constrain digital HRM. System integration gaps and infrastructure constraints illustrate socio-technical inertia, where technical limitations reinforce resistance. Prior research emphasises the importance of system readiness in

digital adoption (Mikalef et al. 2021), and our case confirms this in the HRM context. Similarly, the entrenchment of paper-based investments demonstrates economic inertia driven by sunk costs and misaligned policies. These findings highlight how material and policy legacies continue to weigh heavily on transformation efforts. Approval bottlenecks and interdepartmental dependencies reveal political inertia within the organisation. This finding echoes earlier work on vested interests in organisational transformation (Besson and Rowe 2012) and extends it to the HRM domain.

While our findings emphasise how multiple inertial forces constrained digital HRM adoption, they also resonate with recent work highlighting that inertia is not only a barrier but also a process that can be managed. Kaganer et al. (2023) argue that digital transformation unfolds through cycles of inertia and adaptation, where legacies shape but do not fully determine outcomes. This perspective posits that understanding and working with inertia, rather than viewing it solely as resistance, may enable public sector organisations to navigate the tensions between legacy practices and digital reform more effectively.

Conclusion

This study examined how pre-digital inertial forces constrain the adoption and effectiveness of digital HRM practices in a South African government organisation. While the digital systems were widely accepted and valued for their efficiency, transparency, and convenience, deeply embedded paper-based practices continued to persist. Drawing on Besson and Rowe's multidimensional inertia framework, the study highlighted how eight interrelated forces—cognitive, behavioural, psychological, affective, socio-technical, socio-cognitive, economic, and political—undermined the full realisation of digital transformation.

Implications for Theory

The findings of this study contribute to the literature on IS and HRM in several important ways. First, the study extends research on digital HRM transformation by applying Besson and Rowe's (2012) multidimensional inertia framework to demonstrate how different forms of inertia coexist and interact within a single organisational setting. This perspective moves beyond prior work that has tended to examine isolated barriers to adoption or single dimensions of resistance (Polites and Karahanna 2012; Mikalef et al. 2021). By demonstrating how cognitive, behavioural, psychological, affective, socio-technical, socio-cognitive, economic, and political inertias emerge simultaneously, our study underscores the need for a more integrated account of transformation processes. Moreover, we extend research on digital HRM transformation by applying a multidimensional inertia framework, demonstrating how multiple forms of inertia coexist and interact. This builds on recent work suggesting that digital transformation is shaped by cycles of inertia and adaptation rather than by linear change (Kaganer et al. 2023).

Second, the study enriches the IS adoption literature by shifting attention away from individual acceptance models, which typically focus on perceptions of usefulness, ease of use, and behavioural intention (Bhattacherjee and Lin 2015; Venkatesh et al. 2003), toward the persistence of legacy practices that continue to shape outcomes even after digital systems are in place. In particular, the findings highlight how paper-based processes did not simply disappear; instead, they recombined with digital systems to form hybrid paper–digital workflows. This emphasis on hybridisation offers an alternative to binary adoption–resistance narratives and aligns with recent practice-based studies that stress the coexistence of traditional and digital routines (Berente et al. 2019; Orlikowski and Scott 2023).

Finally, the study contextualises inertia within the public sector, a domain where bureaucratic structures, regulatory requirements, and entrenched authority relations are particularly influential. The findings illustrate how hierarchical approval processes, rigid policy frameworks, and institutionalised routines reinforced the persistence of pre-digital practices despite the broad acceptance of digital HRM technologies. This perspective extends prior digital transformation research that has largely focused on private-sector organisations (Hanelt et al. 2021; Hinings et al. 2018) and highlights the importance of situating inertia within specific institutional and regulatory contexts.

Implications for Practice

The findings also carry important implications for practice. They suggest that digital transformation in HRM requires much more than the introduction of new technologies. Successful implementation depends on building trust in digital systems so that employees and managers no longer feel the need to rely on paper backups. Clearer communication of HR policies is equally important to reduce confusion and ensure that digital processes are perceived as credible and reliable. Training and ongoing support play a critical role in addressing the psychological and emotional resistance that many employees experience when transitioning from familiar manual processes to less familiar digital workflows.

At the technical level, efforts must focus on system integration and infrastructure readiness to ensure that employees are not forced to duplicate work across digital and paper-based systems. These measures are essential to prevent frustration, inefficiency, and the erosion of confidence in digital HRM. Equally important is the role of leadership. Visible commitment from senior managers is essential to dismantle political and policy-related barriers that reinforce traditional workflows and delay adoption. By recognising and proactively addressing these different inertial forces, HR and IT leaders in government organisations can move closer to unlocking the full potential of digital HRM and creating the conditions for more efficient, transparent, and trusted HR processes. HR and IT leaders can unlock the full potential of digital HRM in government organisations by addressing these forces proactively, ensuring that legacy practices are

not merely displaced but reconfigured in ways that support long-term digital transformation.

Recent industry research also highlights the need for structured and deliberate implementation strategies to limit organisational inertia. Leading advisory reports from Gartner (2025), Deloitte (2023), and McKinsey & Company (2023) emphasise that effective digital transformation is achieved when change management is integrated with system design and rollout. Strategies that combine clear communication, user-centred design, agile implementation, and continuous feedback help to reduce behavioural and socio-technical resistance (Deloitte 2023; Gartner 2025; McKinsey & Company 2023). In the context of digital HRM, this means aligning policy reform, leadership engagement, and workforce capability-building with phased integration plans. Embedding these principles into transformation initiatives allows organisations to convert inertia from a constraining force into a managed variable that maintains stability without compromising the pace of change, thereby supporting sustainable digital maturity (Zhang and Chen 2024).

Limitations and Future Research

This study has several limitations that should be acknowledged. It was based on a single case study of a South African government organisation, which provided valuable contextual insights but limited the transferability of the findings. The unique characteristics of the organisation, including its bureaucratic structures, regulatory environment, and workplace culture, shaped the ways in which pre-digital inertial forces were experienced. As such, caution should be exercised when applying these findings to other sectors or national contexts.

Future research could extend this work by examining inertial forces in a broader range of organisations, including the private sector and cross-country settings, to determine whether the dynamics observed here are specific to the public sector or more widely applicable. Another fruitful avenue would be to investigate how digital-native employees respond to the persistence of pre-digital practices, as generational differences may influence the ways in which inertia is experienced and negotiated. Research could also explore the role of inertial forces in shaping emerging forms of human–automation collaboration, where employees increasingly work alongside digital agents and robots. Understanding how legacy practices persist or evolve in these settings would shed further light on the challenges of digital transformation in HRM.

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