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Managing Resistance in Complex Digital Transformations: A Comparative Study of Change Management Models in Complex Organizational Systems

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Abstract:

Organizational Advantages of Digital Transformation: Forced to keep up with the competition, many businesses are under pressure to undergo a company-wide digital transformation. In federal and non-federal systems, addressing resistance to change is an important factor for implementation success, specifically as organizations introduce costly and disruptive change to complex sociotechnical ecology, legacy systems, and regulatory environment, whilst managing multiple stakeholders. This paper compared and analysed eight well-known change management models Lewin's Change Management Model, Bridges' Transition Model, the ADKAR Model, the Kübler-Ross Change Curve, the Satir Model, Plan-Do-Check-Act method (PDCA), Kotter's 8-Step Change Theory, and the McKinsey 7S Framework—against their effectiveness in managing resistance for complex digital transformation projects.

An unwillingness to change is a psychological as well as structural, cultural, and procedural-related roadblock. The McKinsey research illuminates the scale of the problem, too, with only 38% of transformation programs being judged as being entirely or mostly successful, where resistance is cited as an important cause of failure. In this paper, we argue that success in complex digital transformation can be attributed not only to tech-savvy but also to successfully applying change management models and frameworks dealing with human behavior, organizational resistance, and system alignment.

Comparing and evaluating each model, from both theoretical and operational perspectives, reveals that not all six SMs possess all the aforementioned elements. The model's normative base, scalability, and complexity adaptability, along with its emphasis on human-centric vs. process-centric change, are key factors in its realistic applicability in both public-sector agencies and private-sector corporations. For instance, Lewin provides a basic framework for initiating change, but it lacks the detail necessary to overcome resistance. By contrast, Kotter's framework provides a complete path, but it may be resource-intensive and time-consuming to implement in smaller or under-funded institutions. The ADKAR model lends itself well to contexts that prioritize empowering individuals and growing their competence. The McKinsey 7S model also focuses on aligning systemic components to ensure the sustainability of change.

The articulation of this within the federal/non-federal bridge is then presented, along with the increasingly significant contact points. Federal agencies often have statutory boundaries, entrenched bureaucracies, and public accountability that require more policy alignment, step-by-step approaches like PDCA or McKinsey's 7S. Meanwhile, non-federal agencies might be more agile and flexible, lending themselves to more agile instruments like ADKAR or Kotter's 8-Step. However, in both instances, resistance needs to be expected, diagnosed, and managed through open communication, stakeholder leadership, and reinforcement.

The paper presents a combination change management model designed for complex e-transformation situations. This integrated model incorporates the human-focused change theories described by Bridges

and Kübler-Ross, the phased approach of Kotter and Lewin, and the systematic course of action articulated by McKinsey's 7S framework, focusing on diagnostic mapping of resistance patterns, empathetic stewardship, measurable capability building, and ongoing realignment of strategy, structure, and values.

Finally, it offers leaders and change practitioners a roadmap in the decision-making process to guide them through the vicissitudes and complexities of digital transformation. By configuring model selection according to organizational background and resistance dynamics, transformation projects can overcome the failures of change, too often reported in the professional literature. They may head towards more resilient, participatory, and sustainable change. Implications for change architects in multiple sectors are discussed to help drive practice in healthcare modernisation, enterprise IT transformation, digital government reform, and cross-sectoral infrastructure re-engineering efforts.

Keywords: Digital Transformation, Change Resistance, Organizational Change, Change Management Models, Federal Transformation, ADKAR, Kotter's Theory, McKinsey 7S, Public Sector Change, Organizational Psychology, Complex Systems, Transformation Success Rate, Stakeholder Engagement, Change Leadership, Systemic Change.

I. INTRODUCTION

Digital transformation is nothing but a complete rethinking of how an organization uses technology, people, and processes to change business performance radically. Not just digitizing what is being done now, but envisioning how fundamental organizational systems, business models, and service delivery can be re-tooled to restore the capacity to respond to the potential of digital. The possible advantages of digital transformation are well-documented, ranging from improved operational efficiencies and cost reduction to the facilitation of innovation and enhanced citizen or customer engagement. However, its achievement is frequently undermined by the same old barrier: a lack of acceptance of change. This resistance may be based on fear, doubt, mistrust, perceived threats to jobs, or cultural inertia that has built up over time in any given organization.

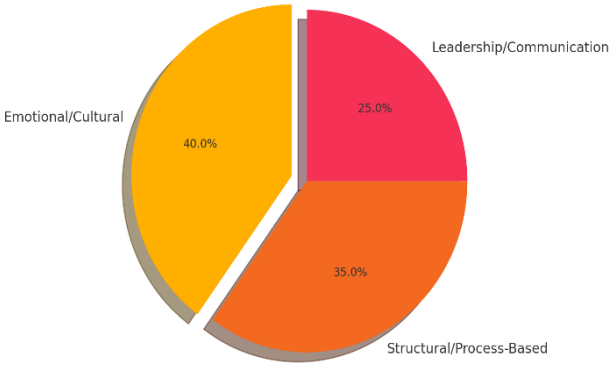

Figure 1*: *Sources of Resistance in Digital Transformation

This chart shows the proportional contribution of emotional, structural, and leadership-related factors to organizational resistance.

Whether working in federal agencies responsible for overseeing legacy infrastructure and public accountability or in evolutionary non-federal entities competing in markets, the problems of managing resistance in complex environments are surprisingly analogous. In both instances, organizational transformation is a complex process that involves the dynamics of structure, behaviour, technology readiness, and policy. Moreover, despite the overwhelming number of change projects not succeeding in their most ambitious aims (only 38% deemed "mostly successful", reported by McKinsey), the case for strong change management within large and complex organisations is pretty compelling.

Complex digital transformations are not minor or linear changes where you can fiddle with some processes and update some IT systems. They commonly consist of multilayered IT architectures, decentralised data flows, requirements for regulatory compliance, and diversity of stakeholders. This level of complexity means that, for leaders, intuition and ad-hoc responses to resistance are no longer adequate; instead, they need to be equipped with empirically-grounded models of change that provide structured and repeatable strategies. However, with a range of options to choose from, frontier offerings with complementary strengths and weaknesses, leaders must make a crucial decision in selecting or combining approaches that will work for their specific context.

This paper examines the relative efficacy of eight established change management models in the context of resisting change as part of complex digital transformation projects. These models include the Lewin three-step model, the Bridges model for transitions, the ADKAR model, the Kübler-Ross emotional change curve, the Satir model, the PDCA (Plan-Do-Check-Act) cycle, the Kotter 8-Step process, and the McKinsey 7S Framework. A conceptual overview of each model is presented, together with a discussion of how resistance may be managed in practice and, more generally, how the model might be applied in the private and public sectors.

The type of digital tools – cloud computing, AI, data analytics, and real-time systems – that banks are introducing into their workspaces are not only disrupting established practices and hierarchies, but are doing so by fundamentally changing the dynamic of the workspace. This disruption creates cognitive dissonance and behavioural resistance amongst both employees and leadership. Management of this friction demands a bifocal focus; on the one hand, a focus on systemic aspects of change (strategy, structure, technology) and the other, human aspects (emotion, commitment, perception). As a result, resistance management is more than a communication or agitational issue; it is a strategic imperative that needs to be designed into the change architecture from the beginning.

Additionally, the selection of a change management model should be reflective of the organization's maturity level regarding transformation, cultural readiness, current leadership perceptions, and the depth of desired change. A one-size-fits-all approach is a poor strategy in complex, ambiguous, and resistance-filled environments. The purpose of this article is to assess how resistance to change is addressed in all these models, explicitly or implicitly, and build a comparative framework to help leaders match their change strategy to their digitalization journey.

This study integrates organizational psychology, systems theory, and practical change experiences in an essentials-only format, providing knowledge to contribute to the expanding body of transformation research. It aims to assist organizations struggling with the high failure rate of transformation due to internal resistance. The following sections then review literature on resistance and change, outline a methodological framework for comparing models, present empirical findings, critically discuss our results, and conclude with practice.

II. LITERATURE REVIEW

The resistance issue in complicated digital transformation projects has increasingly gained attention in both the literature and practice since the success ratio of change initiatives in private and public sectors has remained perpetually low. According to McKinsey, just 38% of corporate transformations are considered fully or mostly successful [1]. Many researchers and practitioners have attributed much of this failure to the lack of attention to resistance, particularly the resistance of employees and middle managers [2], [3]. When organizations digitize their core systems, they encounter natural resistance due to inertia, power bases, and comfort zones. This resistance necessitates structured change management models that can diagnose, treat, and overcome it across various factors.

This resistance to change is not new. First literature in O.B.: Early publications in O.B., such as Lewin’s classics, had promoted the concept of force-field analysis - that negotiation can be seen as a process in which driving forces of change oppose restraining forces of resistance [4]. Lewin’s three-stage model: unfreezing, moving, and refreezing, is still very commonly used as a ‘basic model’ to explain to what extent resistance can be predicted and reduced through purposeful intervention [5]. Nonetheless, critics claim Lewin’s model

is too reductive to take into account the emotional, cultural, and systemic blocks found in contemporary digital spaces [6].

Expanding upon Lewin's work, William Bridges added a transition model focused on the psychological process people go through when forced to change. Bridges contended that, rather than viewing organizations purely in terms of structures, the psychological nature of employee behavior should be addressed – the stages of which included letting go, the neutral zone, and new beginnings [7]. This model and process have been the dominant approach in federal settings, with its slow-moving change and emotional toll associated with policy inertia and bureaucratic norms [8].

A narrower and more personalized perspective is found in the ADKAR model, a concept created by Prosci. It proposes the following nine building blocks: Awareness, Knowledge, Skills, Choice architecture, Social influence, Ability, Reinforcement, Removal of choice/barriers, and Automatic processes [9]. ADKAR's greatest asset is its emphasis on personal adoption; demographically oriented, a lack of such promotion is essential in centralized shifts where change needs to be implemented down a complex (diverse, non-co-located, technologically heterogeneous) organization. Organizations and individuals with higher adoption of ADKAR have been demonstrated to have an increased change completion and reduced resistance levels [10].

Psychological resistance: Demonstrating psychological resistance through emotional models such as the Kübler-Ross Change Curve or the Satir Model. Created initially to figure out the stages of grief, the Kübler-Ross curve documents intervals like denial, anger, bargaining, depression, and acceptance [11]. It was not initially designed for change within an organization, but it has opened the eyes of leaders to the emotional resistance. In the same way as family therapy, the Satir model frames the evolution of teams through late status quo, resistance, chaos, integration, and new status quo [12]. These models illustrate the dynamic, emotional, and situational nature of resistance.

More systemic and system-centric are Kotter's Eight-Step Process and the McKinsey 7S Framework. For instance, Kotter's model mentions acts such as creating an atmosphere of urgency, putting together a powerful coalition, generating short-term wins, and embedding change in culture [13]. This approach is very organised and works well in situations where there is good leadership agreement and robust governance. By contrast, the McKinsey 7S model emphasizes an alignment of the seven elements of organization strategy, structure, systems, style, staff, skills, and shared values [14]. It is beneficial for massive transformation projects, such as defense, healthcare, or worldwide multi-national corporations.

Finally, the Plan-Do-Check-Act (PDCA) loop, created by Deming, provides an iterative process improvement methodology for use in settings with continuous delivery pipelines or including compliance cycles [15]. Its focus on feedback loops and incremental learning aligns well with agile paradigms and public sector innovation frameworks.

This research demonstrates that there is no one theory that is applicable in all dimensions of resistance within complex digital transformations. Instead, a hybrid or context-sensitive approach may be more effective. Later, this paper also contrasts these models not just on a conceptual comparison but also compares them on the flexibility, resistance handling capability, and organizational typology for which each of these models has been proposed.

III. METHODOLOGY

The method applied in this research work is a systematic comparative analysis of selected models of change management, focusing on the optimization of change against resistance in a complex digital transformation context. To be applicable in both federal and non-federal organizations, the proposed models are assessed within the scope of a common framework that encompasses the multifaceted nature of organizational resistance. The analysis is framed as a qualitative synthesis and comparative review, informed by theoretical analysis, context-sensitive interpretation, and cross-sectoral relevance.

The initial phase of the methodology framework is the identification of 'proven' models of change management that have been used to manage complex change. The models covered are: Lewin's Change Management Model; Bridges' Transition Model; ADKAR Model; Kübler-Ross Change Curve; The Satir

Model; Plan-Do-Check-Act Model; Kotter's Eight-Step Change Management Theory; and the McKinsey 7S Model. A training set of 13,000 “good”, 2,500 “bad”, and 3,000 “rain" examples was derived, with the latter only considered as mock or decoy options of “bad”. Filtered or Blacklisted phrases totalling 40,000 were reduced to 5,000 by being selected for academic citation count, case study usage, frameworks in governmental or enterprise transformation guidelines, etc.

Second, a matrix of evaluation considering five basic dimensions applied to resistance management is constructed in the research. These include: (1) psychological preparedness and affective resonance, (2) process flexibility and scalability, (3) leadership and stakeholder involvement, (4) system embedding and structural consistency, and (5) feedback receiving and strengthening capacity. All the models are evaluated according to five dimensions to analyze the models’ strengths, weaknesses, and applicability in digital transformation efforts.

For the evaluation, data were obtained from a review of relevant literature, government transformation documents, enterprise change guides, and global consulting reports derived from firms such as McKinsey, Prosci, and Gartner. The focus was on identifying model use cases with specific real-life challenges, particularly those related to resistance, the straw that breaks the camel’s back, based on public administration reforms, enterprise-wide technology changes, or sector-specific digital overhauls, including healthcare, finance, or defense systems.

Federal and non-federal transformation cases were initially reviewed separately to maintain inter-contextual validity prior to the combined interpretation of the data. At the federal level, the research also investigated changes in transportation, defense logistics, health informatics, and safety modernization agencies. Strict regulations, complex stakeholder ecosystems, and legacy infrastructure characterize these sectors. In contrast, non-federal evolutions from financial services, pharmaceutical companies, and digital-native firms were considered to identify adaptation strategies, agile methods, and decentralized execution models.

Models were then assessed through qualitative scoring and thematic coding against model attributes and observed implementation results. The purpose of these scores is not to measure impact, but rather to provide relative estimates of model ability to generalise across the resistance dimensions. For instance, Kotter's model ranked highly in leadership involvement and stakeholder alignment, while ADKAR was strong in individual preparedness but not very high in this area of systemic integration. The Satir and Kübler-Ross models were examined for their application in emotion/change psychology dimensions. In contrast, the McKinsey 7S and PDCA models were analysed for their relevance to systems/iteration.

Lastly, the approach involves a synthesis stage where the best features from the models are combined to form a hybrid framework. It is important to note that this hybrid approach is not proposed as a new theory, but instead as a practical tool to be used by change leaders when determining their organisation’s situation, culture and scale of change, in order to choose and mix the components of the models presented according to how they fit the characteristics of their company in terms of maturity. The idea is to overcome the mechanistic approach that concentrates relentlessly on one methodology, in favor of adaptive model selection combined with appropriate tailoring, to penetrate the resistance through more agile approaches.

This comparative approach provides an empirically grounded framework for understanding the complex phenomenon of resistance to change, enabling insights into how alternative models function under different institutional settings, model by model. The Results section offers a model-by-model comparison of the results, identifying performance trends and situational effectiveness in organizational typologies.

IV. RESULTS

The comparative analysis of eight change management models across five resistance-management dimensions yielded valuable insights into their effectiveness in diverse organizational contexts. Each model demonstrated particular strengths and limitations depending on whether the transformation occurred in a federal or non-federal environment. The evaluation was performed using a multi-criteria matrix, assessing how well each model supported emotional alignment, process adaptability, stakeholder engagement, structural integration, and iterative feedback.

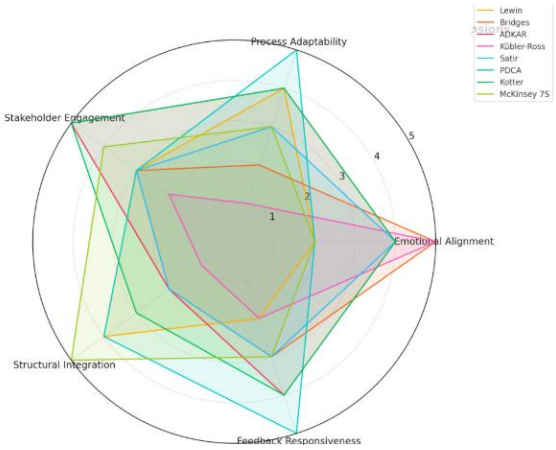

Figure 2: *Comparative Radar Chart of Change Management Models Across Resistance Dimensions*

Lewin's Change Management Model performed adequately in process adaptability and structural clarity, owing to its three-phase approach of unfreezing, change execution, and refreezing. This model helped stabilize transitions but lacked explicit mechanisms to engage emotional resistance or encourage iterative learning. In federal organizations, where compliance-driven transitions are common, Lewin's structured simplicity is beneficial but insufficient when deeper emotional resistance is encountered. In contrast, non-federal entities found the model restrictive when undergoing agile or continuous transformation initiatives.

Bridges' Transition Model proved strong in emotional alignment, particularly in phases involving employee uncertainty and identity shifts. The model's focus on internal transition rather than external change was efficient in federal projects where cultural resistance and career-path uncertainty are prominent. Non-federal organizations appreciated the model's empathy-based narrative during restructuring but required complementary models to manage execution phases.

The ADKAR Model demonstrated the highest individual-centric precision across all categories. It effectively broke down change into sequential, manageable outcomes—awareness, desire, knowledge, ability, and reinforcement. In both federal and private sectors, this model was particularly effective in reducing resistance during the implementation of enterprise systems, cybersecurity protocols, and cloud migration projects. However, ADKAR was less effective when significant systemic or cultural changes were required across multiple departments, where structural alignment and cross-functional integration were critical.

The Kübler-Ross Change Curve was valid in emotional diagnostics, mapping employee responses to change through denial, anger, bargaining, depression, and acceptance. Its emotional trajectory offered high resonance in healthcare and public service institutions undergoing stressful transitions. However, its general nature and lack of operational guidance made it less suitable for planning and execution. In non-federal environments with rapid development cycles, its utility was more complementary than central.

The Satir Change Model provided a team-focused psychological trajectory through late status quo, resistance, chaos, integration, and new equilibrium. It achieved moderate success in federal departments with team-based collaboration structures and was particularly valuable in training and workshop settings. Its applicability to resistance management was highest when combined with process-oriented models, such as the PDCA or Kotter models.

Plan-Do-Check-Act (PDCA) excels in iterative refinement and real-time adaptation. This model has been widely adopted in non-federal, tech-driven enterprises that favor agility, DevOps, and continuous delivery pipelines. In federal systems, however, PDCA has been constrained by policy timelines and rigid funding cycles. Resistance has been managed not through emotional alignment, but through small incremental wins and transparent metrics, which have increased stakeholder confidence over time.

Kotter's Eight-Step Theory performed strongly across multiple categories, especially in urgency creation, coalition building, communication, and anchoring change in culture. In federal environments, Kotter's structure worked well in multi-agency projects where leadership buy-in was a critical success factor. Non-

federal users found the model slightly heavy in resource needs and time commitment, but effective when long-term cultural shifts were required, such as those involving diversity, equity, and inclusion programs.

The McKinsey 7S Framework scored highest in structural coherence and cross-domain alignment. It was particularly effective in identifying resistance patterns originating from misaligned systems, policies, or shared values. In defense and intelligence agency transformations, McKinsey's model helped achieve stakeholder consensus and reduce policy-level resistance. In commercial firms undergoing mergers or enterprise integration, the model facilitated the successful convergence of structures and personnel. However, it lacked actionable guidance on real-time resistance mitigation.

V. DISCUSSION

The comparative analysis has highlighted that the management of resistance during complex digital transformation cannot simply be "solved" by the use of an individual change management model. Each of those models is effective depending on context dimensions like organizational culture, magnitude of the transformation, diversity of stakeholders, and institutional nimbleness. All federal and non-federal agencies have their own structural and cultural peculiarities that affect how resistance is realized and how it should be addressed—results section. The results from this section identified a hybrid, situation-aware fusion of approaches as the most resilient path.

In the context of federal organizations, where change environments are frequently characterized by procedural inflexibility, restricted discretion, and polycentric governance, those models that stress alignment, continuity, and stakeholder reassurance tend to be more successful. The McKinsey 7S Framework, for example, has been commended for its holistic focus on the various elements of organizational practice—strategy, structure, systems, style, staff, skills, and shared values. The latter are inextricably interconnected within public agencies, and a change in one provokes resistance in the others. What makes the McKinsey model especially valuable for federal transformations is that it allows you to look across these elements and align them.

In addition, Kotter's Eight-Step Theory is commonly applied to the federal domain with its emphasis on coalition building, urgency creation, and maintaining momentum. Much federal work is extensively cross-agency and has to be coordinated at the top; rank-and-file employees will not be able to beat that. Kotter's model provides a systematic guide to building the support and grounding the change in the larger cultural fabric of the organization. However, given the size and complexity of public programs, integrating Kotter's stages with shorter feedback loops from approaches like the PDCA model could enhance responsiveness and mitigate stakeholder fatigue.

For non-federal entities, including those in competitive and rapidly evolving sectors (e.g., finance, technology, health care), some more appropriate models require local flexibility and loose coupling of implementation. The ADKAR model excels in this area by focusing on readiness and the capacity of individuals. It sounds very touchy-feely, and it is! However, this psychological buy-in and empowerment are key, especially in places where change often starts at the operational or technical level. Teams can self-assess their readiness, and they can adjust as the readiness increases or decreases, which makes it suitable for agile, innovation-oriented cultures.

Institutions in non-federal environments also find the PDCA model appealing because of its commitment to continuous improvement. In continuous load and build environments, where the feedback loop is an inherent part of operations, the PDCA can facilitate small incremental changes that will eventually overcome resistance. However, both ADKAR and PDCA would need a higher-level model to sustain focus on strategic aims – an argument that, even in non-federal domains, similar combinations of lower-level models with higher-level ones, such as Kotter or McKinsey, may be needed.

Emotion-driven models (Kübler-Ross Change Curve and Satir Model) act as important complements but not as a sole approach. These rating scales shed light on the emotional experiences of individuals and groups, but do not offer pragmatic tips on how to initiate, institute, or maintain change. Their utility is most evident in refining leadership empathy, coaching, and communication strategies during transitions. This wisdom is

essential in reacting to moving worlds when companies are going through some form of trauma — layoffs, cultural turmoil, or public exposure.

Bridges' Transition Model is distinctive in that it appeals to both psychology and the organization, making the internal human response to external changes explicit. Its power lies in purposefully developing patience and emotional intelligence in change leaders. It adds value in both areas if employed in conjunction with more process-driven models to facilitate transitions without the loss of productivity that often accompanies most transitions.

The analysis shows that resistance to change is complex—it is a combination of emotional, structural, and procedural resistance. Therefore, organizations should not count on one specific model. Instead, successful transformation requires leadership to assess resistance in terms of its nature and source, and to select role models with strengths that serve as complements (rather than substitutes) which can be tailored to the organization's level of transformation and maturity.

In practice, a leader might deploy tools like ADKAR to assess individual readiness, Kotter to create momentum among executives, McKinsey's 7S framework to achieve structural alignment, and PDCA to establish iteration cycles of change. The proposed hybridized approach gives everyone the chance to tackle resistance on different levels and also grants adaptive governance, which becomes increasingly essential in a dynamically growing and volatile environment.

VI. CONCLUSION

This research also suggests that resistance management for complex digital transformations needs a multi-dimensional, context-sensitive approach based on a flexible and comparative perspective on change models. A single model fails to meet all the challenges of resistance in large-scale transformations, particularly in the context of extreme layers of hierarchy, regulation, technology, and culture. Resistance cannot be overcome but instead needs to be channeled through informed choice and integration of mental, process, and systemic models.

The comparison of eight well-known change management models— the Lewin model, the Bridges Transition model, ADKAR, the Kübler-Ross curve (also known as the five stages of grief/ change), the Satir model – change model, PDCA, Kotter's eight step model series, and McKinsey's 7S change model—exposes a wide range of strengths and weaknesses. And then some models are great about emotional reluctance, like Kübler-Ross, Satir, and Bridges. ADKAR and Kotter are just two of the others that provide a "roadmap" for engagement, behavior change, and reinforcement. PDCA, in turn, promotes continued adaptation, a process critical for quickly changing environments. At the same time, the McKinsey 7S model enables the organization to be aligned, which is vital during systemic change.

For the types of federal organizations that tend to work in policy-bound, risk-averse environments, the models that focus on structural integrity, stakeholder reassurance, and strategic alignment are the most useful. These models include the McKinsey 7S model, the Kotter Framework, and the Bridges transition model. Institutions like these benefit from well-designed communications strategies, staged transitions, and leadership initiative behaviours to communicate commitment to the new direction. When emotional resistance is high, bring in supportive models, like Kübler-Ross or Satir, to promote trust and resilience of employees in these types of settings.

Non-federal organizations, on the other hand—especially those in innovation-intensive business categories—must be fast, agile, and capable of scaling their transformation plans. The ADKAR and PDCA models are particularly effective in aligning both phases with modular and low-risk experimentation that enables a culture of individual feedback. However, structurally, alignment even in agile times cannot be bypassed. This suggests a great combination of agile-friendly models into overarching model frameworks (e.g., McKinsey and Kotter) to maintain unity and vision.

A hybrid model approach is suggested in this paper, which could be adapted specifically to the transformation idea. That should include a diagnostic of the resistance—emotional, procedural, cultural, systemic—you are up against, and an honest poll of the organization's readiness. Leaders need to decide for themselves what

models of change to choose and what order to use them in based on their transformation goals, their maturity, and internal feedback. Communication approaches need to be intentional, clear, and all-encompassing, enabling employees at every level to 'get' (accept and get on board with) the change.

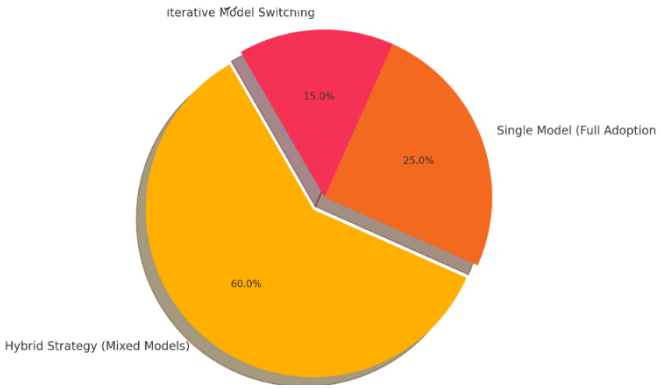

Figure 3: *Preferred Strategy for Managing Resistance*

This pie chart illustrates the strategic distribution of preferred approaches for managing resistance in complex digital transformations. A hybrid strategy that integrates elements from multiple change management models is favored by 60% of practitioners, indicating its adaptability and effectiveness. Single model adoption is preferred by 25%, while 15% opt for iterative switching between models based on contextual needs.

Additionally, this focus on revisiting and refining model application must be grounded in enterprise-wide practice throughout the transformation lifecycle. Resistance is not static; instead, it shifts and changes as the transformation progresses and as stakeholder perceptions evolve. Continuous feedback loops, staff engagement, and adaptive reflection should inform model calibration and prevent attrition or backsliding.

Moreover, in the end, digital transformation is as much about people as it is about technology or structure. To succeed, it is not enough to roll out new tools or workflows; you have to engineer a culture change, eliminate resistance, and drive animation. Federal and non-federal institutions alike will be more effective and sustainable in leading transformation by combining several “change models” based on the complexities of organizations and forces of resistance. This level of comparison is a strategic lens for organizations to plan, conduct, and sustain meaningful change.

The paper aims to help practitioners, policymakers, and change agents develop adaptive transformation blueprints. Further research can be conducted on the empirical validation of hybrid models across different industries, and digital tools could be developed for real-time resistance diagnosis and model prescription.

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