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Exploring Dynamic Capabilities in UAE Digital Government: A Qualitative Study on How Coordination and Collaboration, and AI Capability, Shape Sustainable Digital Transformation

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Abstract

Purpose: Digital transformation in the United Arab Emirates (UAE) government embeds durably in some entities yet stalls in others. This paper develops a conceptual framework, grounded in dynamic capabilities theory, explaining this divergence and guiding sustainable digital transformation (SDT) in artificial intelligence (AI) intensive public-sector settings. **Design/methodology/approach:** Following a theory adaptation approach, this conceptual paper synthesises the dynamic capabilities, digital government and AI capability literatures. It integrates four established capability dimensions with coordination and collaboration as a fifth public-sector dimension, positions AI capability as a candidate enabling condition, and states four falsifiable propositions. No empirical data were collected. **Findings:**The framework links five capability dimensions to SDT, defined by five indicators: persistence, routinisation, governance integration, leadership independence and self-renewal. AI capability is theorised to condition how fully capabilities are enacted rather than to cause transformation directly. **Research limitations/implications:** The framework is conceptual and awaits empirical grounding; propositions and a research agenda are provided. **Practical implications:** The framework offers a diagnostic lens for sequencing capability and AI investments. **Originality/value:** The paper re-specifies coordination and collaboration for inter-organisational public-sector settings and reframes AI capability as an enabling condition of SDT.

Keywords: Dynamic Capabilities, Digital Government, Sustainable Digital Transformation, Artificial Intelligence Capability, United Arab Emirates

Introduction

Governments worldwide have committed extraordinary resources to digital transformation, yet the record of that investment is uneven. Programmes are launched, platforms are built

and services are digitised, but in many organisations the change does not take root: pilots accumulate without scaling, initiatives revert once their champions move on, and transformation remains an event rather than a condition (Mergel, Edelmann and Haug, 2019; Vial, 2019). The United Arab Emirates (UAE) offers a particularly instructive setting in which to examine this problem. The country has articulated one of the most ambitious digital government agendas in the world, including a national paperless strategy and a dedicated National Strategy for Artificial Intelligence 2031 (UAE Government, 2018), and it ranks eleventh globally on the United Nations e-government development index (United Nations, 2024). Yet beneath these headline achievements, progress at the level of individual ministries and departments is visibly uneven. Entities operating under comparable federal mandates, with comparable access to funding and technology, diverge markedly in whether digitally enabled change becomes embedded in their routines, governance and services, or remains fragile and prone to stalling.

This divergence is the puzzle that motivates the study. It is not adequately explained by resource endowments, because the entities compared are similarly resourced; nor by policy ambition, because the mandates are shared; nor by technology availability, because procurement channels are common. What differs, this paper argues, is organisational capability: the capacity of an entity to sense change in its environment, seize the opportunities that change presents, and transform its own resources and routines accordingly. That capacity is the core subject of dynamic capabilities theory (Teece, Pisano and Shuen, 1997; Teece, 2007), which was developed to explain why some firms sustain advantage in volatile environments while others do not. The question this paper pursues is how that theory must be configured, and extended, to explain sustainable digital transformation in an AI-intensive public sector.

The rise of AI sharpens the puzzle. AI adoption in government raises simultaneous demands for data governance, specialised skills, ethical oversight and cross-agency coordination (Wirtz, Weyerer and Geyer, 2019; Zuiderwijk, Chen and Salem, 2021). Whether the presence of organisational AI capability helps entities embed transformation, or merely adds another layer of initiative to be sustained, has not been examined in the UAE context. At the same time, the public-sector setting itself challenges the private-sector assumptions of dynamic capabilities theory. Government transformation depends on inter-agency platforms, mandated data sharing and alignment between federal and emirate levels, forms of coordination and collaboration that have no direct equivalent in the competitive market settings for which the theory's micro-foundations were specified (Pablo, Reay, Dewald and Casebeer, 2007).

The purpose of this conceptual paper is therefore threefold. First, it integrates four established dynamic capability dimensions relevant to digital transformation, leadership agility, organisational agility, organisational learning and digital capability, into a single public-sector framework, rather than treating them in isolation as much of the literature has done (Warner and Wäger, 2019; AlNuaimi, Kumar Singh, Ren, Budhwar and Vorobyev, 2022). Second, it advances coordination and collaboration as a fifth, public-sector-specific dimension of the capability set, the paper's principal theoretical contribution. Third, it positions AI capability not as an assumed driver of transformation but as a candidate enabling condition that may shape how fully the capability dimensions are enacted, an openness that guards

against technological determinism. The outcome construct is defined as sustainable digital transformation (SDT): change that persists, becomes routine, is integrated into governance, survives leadership succession and continues to renew itself.

Three research questions follow from this purpose. First, how do the established capability dimensions shape sustainable digital transformation in UAE government entities? Second, do coordination and collaboration function as a distinct, public-sector dimension of dynamic capabilities, and through what practices are they enacted? Third, how, and under what conditions, does AI capability shape the enactment of these capabilities, and what alternative factors matter? The questions are deliberately questions of how and why. They concern process, meaning and context, and the paper addresses them at this stage conceptually, by developing constructs and propositions; their empirical examination is reserved for the future research agenda outlined in Section 5. The doctoral research programme from which this paper derives has an applied mandate, and the framework is accordingly held to a dual standard: it must be theoretically defensible, and it must be usable by the practitioners whose organisations it describes.

The paper proceeds as follows. Section 2 reviews the relevant literature, develops the constructs and states four propositions, culminating in the conceptual framework. Section 3 describes the conceptual method through which the framework was developed. Section 4 presents the framework in detail as the paper's conceptual finding. Section 5 discusses theoretical and practical implications, limitations and the future research agenda, and Section 6 concludes.

Literature Review

Digital government transformation and the UAE context

Digital transformation in government is more than the digitisation of existing services. Following Vial (2019) and Gong and Ribiere (2021), it is understood here as a process in which digital technologies trigger strategic responses that alter an organisation's value creation paths, structures and culture. In the public sector this reconfiguration is complicated by mandates that originate outside the organisation, by accountability regimes that penalise failure more than they reward experimentation, and by service obligations that cannot be paused while the organisation reinvents itself (Mergel et al., 2019). The literature has documented an implementation gap: strategies and technologies diffuse faster than the organisational change needed to sustain them, so that transformation frequently plateaus after early wins.

The UAE is a critical case for studying this gap because its national-level enablers are unusually strong. The federal government has pursued a coherent digital agenda for over two decades, culminating in paperless government targets, unified digital identity, and an explicit national AI strategy with ministerial-level ownership (UAE Government, 2018). International benchmarks place the UAE among the world's leading digital governments (United Nations, 2024). Precisely because the macro conditions are favourable and broadly uniform, the persistent variation observed across individual entities cannot be attributed to the national environment. The explanatory burden falls instead on entity-level organisational factors, which is where dynamic capabilities theory directs attention.

The stakes of the entity-level question extend beyond the UAE. Across the Gulf Cooperation Council, national visions, Saudi Vision 2030, Qatar National Vision 2030 and their counterparts, stake economic diversification on digitally capable government, and the member states share governance features with the UAE: strong central direction, substantial fiscal capacity, young digitally literate populations and rapid technology adoption. A framework that explains entity-level divergence in the UAE, the region's furthest-advanced digital government, is therefore positioned to inform a much wider regional transformation agenda, a claim developed as analytic transferability in proposition P4 below. Conversely, the scarcity of experience-near organisational research from the region means that global digital government scholarship currently generalises from North American, European and East Asian cases whose administrative traditions differ markedly from the Gulf's; evidence from the UAE corrects that imbalance.

Dynamic capabilities theory

Dynamic capabilities theory explains how organisations achieve and sustain fit with changing environments. Teece et al. (1997, p. 516) define a dynamic capability as the firm's ability to integrate, build and reconfigure internal and external competences to address rapidly changing environments. Teece (2007) disaggregates this ability into three clusters of activity: sensing opportunities and threats, seizing them through investment and business-model choices, and transforming the organisation's asset base and routines to remain aligned. Each cluster rests on micro-foundations, the concrete processes, structures and managerial behaviours through which the capability operates. Two distinctions matter for the present argument. First, dynamic capabilities differ from ordinary capabilities: ordinary capabilities allow an organisation to perform its current activities efficiently, whereas dynamic capabilities allow it to change what it does (Teece, 2007). Sustaining digital transformation is, on this definition, a dynamic rather than an ordinary problem. Second, dynamic capabilities are not a single monolithic capacity but a configuration of identifiable dimensions that can be observed and compared across organisations (Eisenhardt and Martin, 2000).

Translated into the vocabulary of digital government, the three clusters acquire concrete referents. Sensing appears as the routines by which an entity scans citizen expectations, emerging technologies and peer-government practice, and by which weak signals, a pilot elsewhere, a shift in service demand, a new federal directive, are noticed and interpreted rather than filtered out. Seizing appears as the capacity to convert what is sensed into committed action: securing budget and leadership sponsorship, choosing delivery models, mobilising teams and navigating procurement within public-sector constraints. Transforming appears as the deeper reconfiguration that follows: redesigning processes around digital delivery, re-skilling staff, retiring legacy structures and revising governance so that the new way of working becomes the way of working. The distinction matters diagnostically, because entities can fail at different points in the cycle; the literature and practitioner experience alike record organisations that sense acutely but cannot seize, and organisations that seize energetically but never transform, accumulating pilots that the organisation quietly sheds. The five capability dimensions developed below are the organisational properties on which performance across this cycle depends.

Within the digital transformation literature, four capability dimensions recur. Leadership agility denotes the capacity of senior leaders to set direction under uncertainty, to sponsor

experimentation and to reallocate attention and resources as circumstances change (AlNuaimi et al., 2022). Organisational agility denotes structural and procedural flexibility, the ability to reconfigure teams, processes and priorities rapidly (Warner and Wäger, 2019). Organisational learning denotes the routines by which experience, including failure, is converted into shared knowledge and revised practice. Digital capability denotes the technical and data-related competences, architectures and talent through which digital initiatives are actually delivered (Vial, 2019). Studies have linked each dimension individually to transformation outcomes, but they are rarely integrated into one framework, and more rarely still in public-sector settings, which constitutes the first gap this paper addresses.

The choice of theoretical lens

Alternative lenses were considered and set aside on grounds of fit. Institutional theory illuminates how organisations respond to isomorphic pressure and why they resist or imitate change (DiMaggio and Powell, 1983), but it is better equipped to explain conformity and stability than to explain why two entities under identical institutional pressures diverge in embedding change; the present puzzle is precisely that divergence. Technology acceptance models such as TAM and UTAUT explain individual users' adoption of specific technologies (Davis, 1989; Venkatesh, Morris, Davis and Davis, 2003), but the unit of analysis here is the organisation and the outcome is organisational transformation, not individual acceptance. The resource-based view explains how valuable, rare and inimitable resources generate advantage at a point in time (Barney, 1991), yet it is comparatively static and says little about the renewal of advantage as conditions change, which is central to an outcome defined by persistence and self-renewal. Dynamic capabilities theory, developed expressly to address that renewal problem, is therefore the most appropriate lens, provided its private-sector assumptions are examined critically, which the next subsection undertakes.

Coordination and collaboration re-specified for the public sector

Teece's micro-foundations were specified for firms competing in markets, where the strategic problem is positioning against rivals and the organisational boundary is comparatively clear. Public-sector transformation presents a different topology. Government entities deliver value through networks of agencies; their flagship digital initiatives, shared platforms, unified identity, cross-ministry data exchange, are inherently inter-organisational; and their room for manoeuvre is bounded by federal and emirate-level alignment requirements. Pablo, Reay, Dewald and Casebeer (2007), in one of the few sustained applications of dynamic capabilities in public organisations, demonstrate that public entities can deliberately identify, enable and manage dynamic capabilities, in their case a capability for learning through experimenting sustained by leadership and established trust. The specifically inter-organisational character of public-sector capability is developed further by Kattel (2022), whose account of connecting capabilities describes the building of networks and coalitions across organisational silos as constitutive of dynamic capability in the state, and by Kattel and Mazzucato (2018), who show that mission-oriented transformation depends on policy and analytical capacity exercised across agency boundaries. Building on these contributions, the present paper proposes coordination and collaboration as a fifth capability dimension specific to the public sector. A precision is warranted here. Coordination and integration already appears among the organisational processes identified by Teece, Pisano and Shuen (1997), but as an intra-organisational managerial function exercised within a single hierarchy. What is proposed here is its re-specification for inter-organisational settings, in which autonomous entities holding

separate mandates and budgets cannot direct one another, and alignment must therefore be achieved rather than commanded. Coordination refers to the structural component: aligning mandates, processes, standards and data across agencies so that joint work is possible. Collaboration refers to the relational component: the trust, joint problem-solving and willingness to work across boundaries that make the structures productive. They are combined into one dimension because in government they succeed or fail together; structure without willingness is likely to produce empty interoperability, and willingness without structure does not scale. Advancing this dimension, and subjecting it to empirical scrutiny rather than assuming it, is the paper's principal theoretical contribution.

The proposed dimension must also be distinguished from neighbouring constructs, since a fair critique of any extension is that it renames something already theorised. Coordination and collaboration as used here is not absorptive capacity, which concerns an organisation's ability to recognise and assimilate external knowledge; the present construct concerns joint action across organisational boundaries, not knowledge intake. It is not alliance or relational capability from the strategy literature, which theorises voluntary partnerships formed for competitive advantage and dissolvable at will; inter-agency relationships in government are frequently mandated, permanent and non-substitutable, which changes both their governance and their failure modes. Nor is it reducible to organisational agility, since an entity can be internally nimble yet incapable of working across boundaries, a combination practitioners readily recognise. The construct's claim to distinctiveness is therefore an empirical matter that the study is designed to adjudicate: if informant accounts show its explanatory work being fully absorbed by the four established dimensions, proposition P2 fails and the extension should be withdrawn, a possibility the abductive design treats as a legitimate result rather than a defect.

Artificial intelligence capability as an enabling condition

AI capability is defined, following Mikalef and Gupta (2021), as an organisation's ability to select, orchestrate and leverage AI-specific resources, spanning data, technology, skills and complementary organisational assets. The information technology business value literature, in a typology first proposed by Mooney, Gurbaxani and Kraemer (1996) and applied to AI by Enholm, Papagiannidis, Mikalef and Krogstie (2022), distinguishes three classes of effects: automational effects, in which processes are executed with less human effort; informational effects, in which analytics sharpen understanding and prediction; and transformational effects, in which AI enables new service and governance models. Mapped onto the dynamic capability cycle, these effects suggest mechanisms through which AI capability could condition transformation: informational effects may sharpen sensing, automational effects may free resources for seizing, and transformational effects may extend the reach of transforming.

Two cautions discipline this argument. First, the public-sector AI literature warns against technological determinism: AI adoption in government has produced both successes and conspicuous failures, and outcomes appear contingent on governance, skills and organisational readiness rather than on the technology itself (Wirtz et al., 2019; Zuiderwijk et al., 2021). Second, the direction of influence is genuinely uncertain: AI capability might amplify existing capabilities, might substitute for them in narrow domains, or might simply add complexity that dilutes them. For these reasons the framework positions AI capability as

a candidate enabling condition, a factor whose presence may shape how fully the capability dimensions are enacted, to be examined empirically with openness to disconfirming cases and to rival explanations such as leadership quality, funding stability and organisational culture. This framing, which examines rather than assumes AI's contribution, addresses the second gap identified in the literature.

The UAE supplies unusually rich variation on this construct. It was the first country to appoint a Minister of State for Artificial Intelligence, its national AI strategy assigns sectoral priorities and institutional ownership (UAE Government, 2018), and its entities range from early, sustained adopters running AI in live services to organisations whose engagement remains exploratory. This within-country variation in AI maturity, against a broadly common policy and funding backdrop, is precisely the comparative material the enabling-condition proposition requires: if AI capability conditions the enactment of the other dimensions, entities of similar capability profile but different AI maturity should exhibit observably different transformation trajectories, and practitioner accounts, once gathered in the future study outlined in Section 5, should narrate the mechanisms in recognisable automational, informational and transformational terms.

Sustainable digital transformation as the outcome

The dependent construct requires equal care. Much of the literature treats digital transformation as achieved when systems are deployed or services digitised; sustainability in the sense used here concerns whether the change endures. Drawing on Warner and Wäger (2019) and Vial (2019), sustainable digital transformation (SDT) is defined as digitally enabled change that has become a property of the organisation rather than of a project. Five observable indicators operationalise the construct: persistence, the change continues beyond the original team and budget; routinisation, it operates as standard practice rather than exceptional effort; governance integration, it is embedded in policy, structures and accountability; leadership independence, it survives the departure of its founding champion; and self-renewal, the organisation continues to adapt the change without external impetus. These indicators supply the evidential targets for the future research agenda outlined in Section 5 and distinguish entities in which transformation has embedded from those in which it remains fragile, thereby addressing the third gap: the scarcity of experience-near, entity-level evidence from the Gulf region on why embedding succeeds or fails.

Research propositions

The argument yields four propositions, framed as expectations to be examined abductively rather than hypotheses to be tested statistically. The choice of form is deliberate and paradigm-consistent: hypotheses presuppose operationalised variables, validated instruments and a deductive test, none of which yet exist for the focal constructs in this context, whereas propositions state the framework's expected relationships precisely enough to be confronted with qualitative evidence and revised, supported or rejected on its terms. P1: the five capability dimensions, leadership agility, organisational agility, organisational learning, digital capability, and coordination and collaboration, operate unevenly across UAE government entities, and this unevenness is associated with observed differences in SDT. P2: coordination and collaboration functions as a distinct public-sector dimension of dynamic capabilities, doing explanatory work that the four established dimensions do not absorb. P3: AI capability operates as an enabling condition that shapes how fully the capability

dimensions are enacted, rather than as an independent cause of SDT. P4: the resulting framework transfers analytically to comparable Gulf Cooperation Council (GCC) settings that share the UAE's governance features and digital ambitions. Figure 1 presents the conceptual framework integrating these propositions.

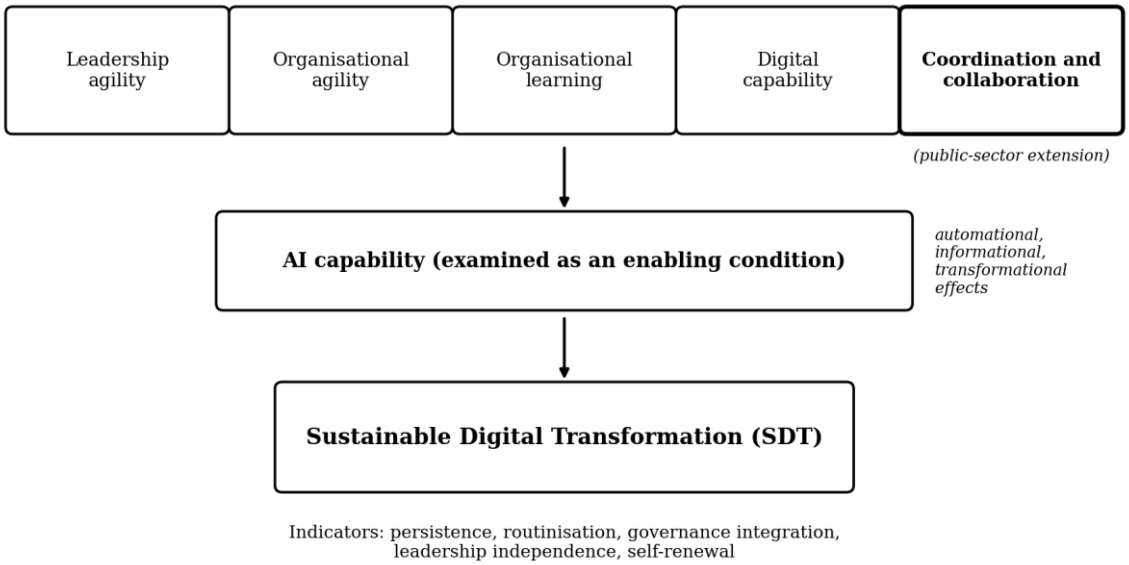

Figure 1 Conceptual framework of dynamic capabilities for sustainable digital transformation

Method

This is a conceptual paper, and its method is accordingly a method of theory development rather than of data collection; no empirical data were collected or analysed for this paper. Following Jaakkola (2020), the paper adopts a theory adaptation design: it takes dynamic capabilities theory as its domain theory and revises the scope and configuration of that theory for a new context, AI-intensive public-sector transformation, using the digital government and AI business value literatures as the method theories that discipline the adaptation. The approach proceeded in three steps: problem framing, construct derivation and framework integration.

The synthesis drew on peer-reviewed literature across three fields: strategic management for the dynamic capabilities constructs, public administration and digital government for the transformation context, and information systems for AI capability and its business value. It privileged conceptual and empirical work published since Teece (2007) for the capability constructs and recent work for AI in government, alongside primary policy documents for the UAE context. The intent was not a systematic review, which suits the consolidation of mature constructs, but a problem-driven integrative reading appropriate to theory adaptation, in which sources were selected for their contribution to construct definition and to the logic of the framework rather than for exhaustive coverage.

Problem framing anchored the synthesis in the practical puzzle stated in the introduction rather than in a gap-spotting reading of the literature, consistent with the applied mandate

of doctoral business research. Construct derivation then reviewed the literatures for candidate capability dimensions and retained those meeting three criteria: recurrence across independent studies of digital transformation; relevance to public-sector conditions; and observability, meaning the possibility of recognising the dimension in practitioners' narrated practice, so that the framework remains empirically examinable. The four established dimensions in Table 1 satisfied all three criteria. Coordination and collaboration was derived from the public-sector dynamic capabilities literature, principally Pablo et al. (2007), Kattel (2022) and Kattel and Mazzucato (2018) and is advanced as an extension precisely because it satisfies the second and third criteria while being absent from private-sector formulations of the theory. AI capability entered the framework not as a dimension but as a condition, a decision taken to preserve the guard against technological determinism developed in Section 2.5.

Framework integration assembled the retained constructs into the layered model of Figure 1 and expressed its expected relationships as four propositions. As a conceptual product, the framework is to be evaluated at this stage on conceptual criteria: clarity of construct definition, parsimony, internal coherence and falsifiability, each proposition being stated so that qualitative evidence could contradict it. The empirical examination of the propositions is deliberately reserved for future research; the agenda for that research, including its philosophical and methodological commitments, is outlined in Section 5.

The Proposed Conceptual Framework

As a conceptual paper, the study's findings take the form of the integrated framework and the theoretical clarifications it embodies. The framework, presented in Figure 1, comprises three layers. The first layer contains the five capability dimensions. Four are established in the digital transformation literature; the fifth, coordination and collaboration, is the proposed public-sector dimension. Table 1 states the working definition of each dimension and its principal sources, which together give the constructs the definitional clarity that future empirical examination will require.

Table 1
Capability dimensions and working definitions

Dimension	Working definition	Key sources
Leadership agility	Capacity of senior leaders to set direction under uncertainty, sponsor experimentation and reallocate resources as conditions change.	AlNuaimi et al. (2022); Teece (2007)
Organisational agility	Structural and procedural flexibility enabling rapid reconfiguration of teams, processes and priorities.	Warner and Wäger (2019)
Organisational learning	Routines converting experience, including failure, into shared knowledge and revised practice.	Teece (2007); Vial (2019)
Digital capability	Technical and data competences, architectures and talent through which digital initiatives are delivered.	Vial (2019); Warner and Wäger (2019)

Coordination and collaboration	Structural alignment of mandates, processes and data across agencies, combined with the relational trust and joint working that make alignment productive; proposed public-sector extension.	Pablo et al. (2007); this paper

The second layer positions AI capability as an enabling condition interposed between the capability dimensions and the outcome. The layer is deliberately drawn as a band rather than an arrow of its own: AI capability is theorised to modulate the enactment of the dimensions, sharpening sensing through informational effects, accelerating seizing through automational effects and extending transforming through transformational effects (Enholm et al., 2022), rather than to produce SDT independently. This drawing choice encodes the study's guard against technological determinism and its openness to the finding that AI capability matters little, or matters only where other capabilities are already strong.

The third layer is the outcome construct, SDT, specified by its five indicators. Defining the outcome by indicators of embedding rather than by deployment counts has a methodological consequence: it permits a comparative logic in future empirical work, in which entities exhibiting strong and weak embedding can be contrasted on their capability profiles, providing the variation the propositions require. It also has a practical consequence: the indicators double as a self-assessment checklist by which an entity can judge whether its own transformation has genuinely taken root.

The dimensions are, moreover, expected to operate configurationally rather than additively. Leadership agility without organisational learning would be expected to produce bold starts that the organisation cannot digest; digital capability without coordination and collaboration yields systems that stop at the entity's boundary; learning without leadership sponsorship accumulates insight that is never resourced. The framework therefore directs attention to an entity's capability profile, the pattern across the five dimensions, rather than to any single strength, and it anticipates that the profiles associated with embedded transformation may be plural: more than one configuration may prove sufficient, a possibility that qualitative comparison across entities is well suited to reveal.

The framework's scope conditions should be stated explicitly. It is specified at the level of the individual government entity, not the whole-of-government or programme level, and it presumes a setting in which central digital mandates, funding and technology access are broadly uniform across entities, since it is precisely that uniformity that isolates capability as the explanatory variable. It therefore applies most directly to centrally directed administrative systems such as the UAE and its GCC neighbours, and it should be applied with caution in decentralised or resource-constrained settings, where variation in mandates and funding would confound the capability explanation the framework advances. Within its scope, the framework is agnostic as to entity type, applying to ministries, authorities and departments alike, because its dimensions are defined by organisational properties rather than by sectoral function.

Read together, the layers state the paper's explanatory claim: differences in SDT across UAE government entities are proposed to arise from differences in the configuration and enactment of the five capability dimensions, with AI capability expected to shape the fullness

of that enactment. The claim is falsifiable at each layer, and the future study outlined in Section 5 is intended to permit each proposition to fail.

Discussion

Theoretically, the framework contributes to dynamic capabilities scholarship in three ways. First, integration: it assembles dimensions that prior work has examined piecemeal into a single, comparable configuration, answering calls for more holistic treatments of digital transformation capability (Warner and Wäger, 2019). Second, extension: it advances coordination and collaboration as a dimension specific to public organisations, giving analytical form to the observation of Pablo et al. (2007) that public-sector capability work is boundary-spanning in kind, not merely in degree. If the empirical phase supports P2, the theory's micro-foundations acquire a public-sector complement; if it does not, the field learns that coordination is absorbed within existing dimensions, itself a clarifying result. Third, conditionality: by casting AI capability as an enabling condition, the framework offers a disciplined alternative to both AI-as-driver enthusiasm and AI-as-hype dismissal, and connects the dynamic capabilities and AI business value literatures (Mikalef and Gupta, 2021; Enholm et al., 2022) at the organisational level where they most need connecting.

Practically, and in keeping with the applied orientation of doctoral business research, the framework is designed to be usable before and after empirical validation. As a diagnostic, it directs an entity's attention to five assessable dimensions and five outcome indicators, allowing leadership teams to locate their weakest capability and to judge honestly whether past transformations have embedded. As a sequencing aid, the enabling-condition logic cautions against AI investment as a substitute for capability building: entities weak in learning or coordination should expect AI initiatives to amplify little. For central digital authorities and policymakers, the coordination dimension identifies a lever, inter-agency structures and relationships, that sits above any single entity and may explain why entity-level effort alone so often plateaus. The framework is also deliberately drawn to accommodate the approaching shift toward agentic AI, systems that plan and act with limited human oversight; as agency migrates from tools to systems, the governance content of digital capability and coordination is expected to grow, and the framework's dimensions are specified at a level of abstraction that survives that shift.

An illustration, offered as illustration rather than evidence, shows the diagnostic in use. A leadership team reviewing a stalled service transformation would ask, dimension by dimension: did senior leaders reallocate attention and resources when circumstances changed, or only announce; could teams and processes actually be reconfigured, or did structures resist; was the experience of early phases converted into revised practice, or repeated; did technical delivery capability match ambition; and did the initiative's cross-agency dependencies have working coordination behind them, or assumed goodwill. The same review would then score the initiative against the five SDT indicators to establish honestly whether the transformation had embedded before it stalled or had never embedded at all. The output is not a number but a located conversation: the framework tells the team where to look and what evidence would count.

The framework also speaks directly to the sustainability agenda that frames this conference. Sustainability in digital government is commonly discussed in environmental terms, yet there

is an organisational sustainability that logically precedes it: a green procurement policy, a paperless mandate or an AI-enabled efficiency programme delivers durable benefit only if the transformation that carries it endures. The SDT construct supplies the missing organisational half of that conversation. Its indicators define what it means for change to be sustained, its capability dimensions specify what sustains it, and the framework thereby connects the microdynamics of organisational capability to the macro commitments, including the UAE's net-zero and sustainable development undertakings, that digital government is increasingly asked to serve. In this sense the paper treats sustainability not as a domain of application but as a property of transformation itself, which is the property most often missing when public digital initiatives disappoint.

The paper's limitations follow from its conceptual character. The framework has not yet met data; its propositions may be revised or rejected, and the abductive inquiry proposed below anticipates exactly that. The intended empirical setting is a single country, and claims beyond the UAE are limited to analytic transferability to GCC settings sharing its governance features, supported by thick description rather than statistical inference (P4). An eventual evidence base of senior-informant interviews would carry known risks of retrospective and socially desirable accounts, to be mitigated by document triangulation and disconfirming-case analysis.

The immediate item on the research agenda is the empirical examination of the four propositions, for which the corresponding author's doctoral study is currently at the proposal stage; data collection has not commenced. That study is planned as interpretivist, qualitative and abductive (Dubois and Gadde, 2002), using semi-structured interviews with senior practitioners responsible for digital transformation across UAE federal and emirate-level entities, sampled purposively with snowball referral, with adequacy judged by information power (Malterud, Siersma and Guassora, 2016), and analysed through reflexive thematic analysis (Braun and Clarke, 2006, 2019) under the trustworthiness criteria of Lincoln and Guba (1985). The propositions are framed so that such evidence can support, refine or reject them, including the withdrawal of the coordination extension should its explanatory work prove absorbed by the established dimensions. Beyond that study, future research should develop measurement instruments from the refined constructs to enable quantitative extension across the GCC, and should revisit the framework as agentic AI deployments mature, when the enabling-condition proposition can be examined against a materially different technological baseline.

Conclusion

This paper set out to explain why digital transformation becomes embedded in some UAE government entities and stalls in others despite comparable mandates and investment. It answered conceptually, by developing a framework in which five dynamic capability dimensions, four established and one, coordination and collaboration, re-specified for the public sector, are proposed to account for differences in sustainable digital transformation, with AI capability positioned as an enabling condition that shapes how fully those capabilities are enacted. The outcome construct was specified through five indicators of embedding, the framework was developed through a theory adaptation approach and expressed as four falsifiable propositions, and a future qualitative research agenda was outlined through which those propositions can be examined among senior practitioners in UAE government entities.

The paper's value is twofold: for scholarship, a falsifiable re-specification of coordination as a public-sector capability dimension fitted to an AI-intensive era; for practice, a diagnostic and sequencing tool for governments determined that their digital transformations should outlast their announcements.

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