



Dynamic Capabilities in Organizational Transformation for E-Government Development in Integrated Public Service Delivery: Evidence from the Public Service Mall of Maros Regency, Indonesia

Muhammad Nur¹, Badu Ahmad², Muh. Tang Abdullah²

¹University of Timor; Doctoral Candidate, Public Administration, Hasanuddin University, Indonesia

²Public Administration, Universitas Hasanuddin

Abstract

Organizational transformation is essential for the successful development of e-government because public organizations must continuously adapt to technological change and evolving citizen expectations. This study examines how dynamic capabilities support organizational transformation in e-government development at the Public Service Mall (Mall Pelayanan Publik) of Maros Regency, Indonesia. Drawing on Teece's Dynamic Capabilities Framework, the research explores how the organization develops sensing, seizing, and reconfiguring capabilities to improve integrated public service delivery. A qualitative case study approach was employed using in-depth interviews, participant observation, and document analysis involving key stakeholders responsible for managing the Public Service Mall. The data were analyzed thematically based on the Dynamic Capabilities Framework to identify organizational transformation processes. The findings reveal that sensing capabilities are reflected in the identification of public service needs and the implementation of the Electronic-Based Government System, although these efforts remain largely policy driven and are not yet supported by comprehensive assessments of citizens' digital literacy. Seizing capabilities are demonstrated through the implementation of electronic public services, WhatsApp-based information and queue management systems, and assisted Online Single Submission services. Reconfiguring capabilities are evident in cross-agency service integration, the transformation of employees into digital service facilitators, and the adoption of a hybrid service delivery model combining face-to-face, self-service digital, and assisted digital services. The interaction of these three capabilities generates organizational adaptability, enabling continuous adjustments to organizational structures, service processes, and institutional practices. This study proposes a conceptual model positioning organizational adaptability as the key mechanism linking dynamic capabilities to successful e-government transformation. The findings extend Dynamic Capabilities Theory within the public sector and provide practical insights for strengthening digital transformation strategies in local government institutions.

Keywords: Dynamic capabilities; organizational transformation; e-government; public service; Public Service Mall (MPP).

Introduction

The rapid advancement of digital technologies has fundamentally reshaped the way governments deliver public services, requiring public organizations to undergo continuous organizational transformation. Within this context, e-government has emerged as a strategic approach to enhancing the efficiency, transparency, accountability, and accessibility of public administration. Its implementation encompasses multiple dimensions of government interaction, including Government-to-Government (G2G), Government-to-Citizen (G2C), Government-to-Business (G2B), and Government-to-Employee (G2E), all of which aim to strengthen intergovernmental coordination, improve public service delivery, and enhance the productivity of public institutions.

Globally, the development of digital government has accelerated significantly over the past decade. According to the United Nations E-Government Survey (2022), Indonesia ranks 77th among 193 countries in the E-Government Development Index (EGDI), reflecting notable progress in digital government implementation. Despite this improvement, considerable disparities remain between central and local governments, particularly regarding the integration and interoperability of public services. This challenge is consistent with the Indonesia Digital Vision 2045, which emphasizes data-driven governance and integrated digital public services as essential pillars of national digital transformation.

Indonesia's commitment to e-government development began with Presidential Instruction No. 6 of 2001 concerning Telematics Development, followed by Presidential Instruction No. 3 of 2003 on the National Policy and Strategy for E-Government Development. Subsequently, the regulatory framework was strengthened through Law No. 25 of 2009 on Public Services and Presidential Regulation No. 95 of 2018 concerning the Electronic-Based Government System (SPBE), which established the principal framework for modern digital government implementation across Indonesia.

Consistent with these policy developments, many developing countries, including Indonesia, have adopted e-government initiatives to address bureaucratic complexity, improve urban governance, and enhance the quality of public service delivery (Hamzah, 2016). One of Indonesia's most significant innovations in public administration is the establishment of the Public Service Mall (Mall Pelayanan Publik—MPP) under Presidential Regulation No. 89 of 2021. The MPP integrates services from multiple government agencies into a single service center designed to provide citizens with faster, more accessible, and more efficient public services.

Following the enactment of the Electronic-Based Government System (SPBE) policy, Public Service Malls have increasingly been encouraged to evolve into Digital Public Service Malls (Digital MPPs) in response to the growing demands of digital society and rapid technological advancement. According to the Ministry of Administrative and Bureaucratic Reform (2024), Indonesia currently operates 206 Public Service Malls, including 60 Digital Public Service Malls. Meanwhile, the country's internet penetration rate has reached 78 percent, while mobile phone ownership stands at 67 percent (Statistics Indonesia, 2023). These developments further reinforce the urgency of accelerating digital transformation in public service delivery.

Maros Regency represents one of the local governments actively implementing e-government through the adoption of Regent Regulation No. 16 of 2024 concerning the Electronic-Based Government System (SPBE). This regulation aims to strengthen digital public services provided through the Public Service Mall, in line with national policies on electronic government administration. Geographically, Maros Regency covers an area of 1,619.12 km², consisting of 14 sub-districts and 103 villages, creating substantial administrative challenges in ensuring equitable access to public services across the region.

The Maros Regency Public Service Mall officially commenced operations in 2022 following the issuance of Regent Regulation No. 68 of 2022 and was inaugurated on 19 August 2022 as the 61st Public Service Mall in Indonesia and the fifth in South Sulawesi Province. Despite these achievements, several practical challenges remain. Many citizens continue to prefer obtaining services directly from individual government agencies rather than visiting the Public Service Mall. Consequently, the MPP has experienced relatively low visitor numbers despite offering a wide range of integrated public services.

To address this issue, the Government of Maros Regency has introduced digital public services as part of its broader e-government transformation strategy. In addition to conventional face-to-face services, the MPP now provides Digital MPP services, enabling citizens to access public services remotely through online platforms. At present, the Maros Regency Public Service Mall offers 111 public services delivered by 28 government agencies, accessible through both conventional and digital service channels.

Although the establishment of the MPP demonstrates the government's commitment to providing public services that are more accessible, efficient, and transparent, successful digital transformation depends not only on the availability of digital platforms but also on the organization's ability to recognize emerging opportunities, respond effectively to environmental changes, and continuously redesign its internal capabilities. In this regard, the concept of dynamic capabilities provides an appropriate theoretical perspective for understanding how public organizations adapt, innovate, and manage digital transformation effectively.

Empirical observations indicate that integrated service delivery within the Maros Regency Public Service Mall has not yet reached its full potential. Persistent challenges include limited system interoperability among participating agencies, inconsistent service standards, and insufficient human resource capacity to manage digital transformation. These issues suggest that the organization continues to face difficulties in coordinating cross-agency processes, assimilating technological innovations, and restructuring organizational resources to support sustainable digital transformation. Consequently, a fundamental question arises regarding the extent to which dynamic capabilities contribute to the successful implementation of e-government within the Maros Regency Public Service Mall.

From the perspective of Dynamic Capabilities Theory, organizational challenges remain evident. Resistance to organizational change, particularly in the adoption of integrated digital systems, continues to impede digital transformation. Furthermore, shortages of personnel with adequate digital competencies, inconsistent innovation efforts, fluctuating institutional commitment, and weaknesses in data governance collectively constrain the organization's capacity to manage digital transformation effectively. Accordingly, this study adopts Teece's (1997; 2007) Dynamic Capabilities Framework, comprising sensing, seizing, and reconfiguring, to examine how the organization adapts to technological change and responds to citizens' evolving demands for digital public services. Scholars in public administration, including Janssen and van der Voort (2016), Mergel et al. (2019), and Susanti et al. (2023), argue that successful digital government transformation depends fundamentally on an organization's ability to adapt proactively to technological opportunities and environmental change. Therefore, dynamic capabilities constitute a critical organizational foundation for the successful development of e-government.

From an academic perspective, studies examining dynamic capabilities within the public sector remain relatively limited, particularly in the context of integrated public service delivery through Public Service Malls. Existing research has predominantly focused on technological readiness and digital infrastructure, while comparatively little attention has been devoted to understanding how public organizations strategically develop, manage, and deploy dynamic capabilities to sustain digital transformation. This research gap provides the principal motivation for the present study, which seeks to explore how organizational dynamic capabilities facilitate e-government development within the Public Service Mall of Maros Regency.

Materials And Methods

This study employed a qualitative approach using an instrumental case study design to obtain an in-depth understanding of how dynamic capabilities are developed and enacted in the organizational transformation associated with e-government development at the Public Service Mall of Maros Regency, Indonesia. A qualitative case study was considered the most appropriate research design because it enables an intensive exploration of organizational processes within their real-life context, particularly the dynamics of sensing, seizing, and reconfiguring that characterize cross-agency public service integration.

The case examined in this study is instrumental in nature, as it is intended not merely to describe a particular organizational setting but to extend theoretical understanding of Dynamic Capabilities Theory within the context

of digital government transformation. Accordingly, Teece's Dynamic Capabilities Framework (2007)—comprising sensing, seizing, and reconfiguring—served as the principal analytical framework for examining how the organization identifies emerging service needs, exploits digitalization opportunities, and continuously reconfigures organizational structures, processes, and resources to facilitate digital transformation.

Data were collected using three complementary techniques. First, in-depth interviews were conducted with key informants, including managers of the Public Service Mall, officials from the Department of Investment and One-Stop Integrated Services (DPMPTSP), representatives of participating government agencies, and other stakeholders directly involved in public service delivery. These interviews explored organizational experiences, perceptions, and strategic responses related to e-government transformation.

Second, participant observation was undertaken to examine service delivery processes, inter-agency coordination, and the implementation of digital public services within the Public Service Mall. This method enabled the researchers to observe organizational practices and citizen interactions in their natural setting.

Third, document analysis was conducted to examine relevant regulations, standard operating procedures (SOPs), organizational reports, strategic planning documents, and official records concerning the development of the Electronic-Based Government System (SPBE) and the Public Service Mall. Documentary evidence was used to complement and validate the findings obtained from interviews and observations.

To enhance the trustworthiness of the findings, data triangulation was employed by comparing information derived from multiple sources and data collection methods. Furthermore, member checking was conducted by presenting preliminary findings to selected key informants to verify the accuracy of interpretations and ensure that the analysis accurately reflected participants' experiences and organizational realities.

Overall, this methodological approach was selected because it enables a comprehensive examination of organizational transformation within the context of integrated public service delivery, while providing a robust analytical foundation for understanding how dynamic capabilities facilitate e-government development in the Public Service Mall of Maros Regency.

Results and Discussion

The Maros Regency Public Service Mall (MPP) serves as an integrated public service center that consolidates various government services into a single location. It was established by the Government of Maros Regency under Regent Regulation No. 68 of 2022 concerning the Maros Regency Public Service Mall. Currently, the MPP is directly managed by the Maros Regency Investment and One-Stop Integrated Services Agency (DPMPTSP). As the leading agency responsible for implementing e-government development, DPMPTSP plays a pivotal role in driving organizational transformation. Accordingly, the organizational transformation underpinning e-government development can be examined through the dynamic capabilities framework, encompassing the stages of sensing, seizing opportunities, and reconfiguring (transforming) organizational resources and processes. This study therefore seeks to investigate the extent to which these transformational stages have been implemented in the development of e-government at the Maros Regency Public Service Mall.

Sensing: Organizational Capability to Identify Opportunities and Public Service Needs

The Public Service Mall of Maros Regency represents an integrated public service center established under Regent Regulation No. 68 of 2022 concerning the implementation of the Public Service Mall. The facility is administered by the Department of Investment and One-Stop Integrated Services (DPMPTSP) of Maros Regency, which serves as the lead agency responsible for coordinating organizational transformation and e-government development. Within the Dynamic Capabilities framework, the sensing dimension refers to the organization's capability to identify environmental changes, recognize emerging opportunities, understand citizens' needs, and anticipate future service demands.

The findings indicate that the sensing capability of DPMPTSP has been developed through organizational efforts to recognize changes in public service demands and respond to national digital government policies, particularly those related to the Electronic-Based Government System (SPBE) and the establishment of Public Service Malls. As explained by the Secretary of DPMPTSP, the implementation of the Public Service Mall was initiated as part of the national policy to integrate public services into a single service center while simultaneously responding to citizens' expectations for faster and more responsive public services.

The interview findings suggest that the organization has demonstrated an initial capacity to translate national policies into local institutional arrangements. This capability is reflected in the establishment of integrated service facilities that consolidate multiple government agencies within a single location, thereby improving service accessibility and administrative coordination. Consequently, the Public Service Mall represents the first stage of organizational transformation toward integrated public service delivery.

Field observations further indicate that the Public Service Mall provides service counters for various government agencies operating within a unified administrative environment. This organizational arrangement illustrates the government's commitment to improving service coordination and reducing bureaucratic fragmentation.

Regarding the development of e-government, the Secretary of DPMPTSP further explained that organizational learning is supported through continuous public feedback mechanisms. Citizens are invited to complete service satisfaction surveys after receiving services, enabling the organization to evaluate service quality and identify evolving public needs. In addition, the implementation of Regent Regulation No. 16 of 2024 concerning the Electronic-Based Government System (SPBE) has provided the legal foundation for gradually introducing digital public services within the Public Service Mall.

Rather than replacing conventional services entirely, the organization has adopted a gradual digital transformation strategy. Digital public services are implemented incrementally while conventional face-to-face services remain

available. Citizens may choose between digital self-service, assisted digital services, or conventional service delivery depending on their preferences and digital competencies. To facilitate this transition, the Public Service Mall has established an Online Single Submission (OSS) Assistance Center, where service officers provide direct assistance to citizens accessing electronic government services. Furthermore, digital queue management and service information are delivered through WhatsApp-based platforms, enabling citizens to obtain information before visiting the service center.

The empirical findings indicate that DPMPTSP has developed an initial sensing capability by recognizing both policy-driven and citizen-driven demands for digital public services. Organizational initiatives such as citizen satisfaction surveys, WhatsApp-based information services, and assisted OSS facilities demonstrate efforts to understand users' expectations while responding to the government's digital transformation agenda.

Nevertheless, the findings also reveal several limitations. The sensing process remains largely policy-driven and top-down, with organizational decisions being influenced primarily by national government regulations rather than comprehensive analyses of citizens' behavioral characteristics and digital readiness. Although public feedback is collected through satisfaction surveys, the organization has not yet developed a systematic mechanism for mapping digital literacy, technology acceptance, or user experience among different groups of citizens.

This limitation is reflected in citizens' continued preference for conventional face-to-face services despite the availability of digital alternatives. The sustained demand for assisted digital services indicates that many citizens still experience difficulties using electronic public services independently. Consequently, organizational sensing has not yet fully captured the diversity of citizens' capabilities and expectations regarding digital public service delivery.

These results, the findings suggest that the sensing capability within the Public Service Mall of Maros Regency has progressed beyond the initial stage of digital transformation by enabling the organization to recognize policy changes and emerging service demands. However, further improvements are required to develop a more user-centered sensing capability grounded in comprehensive analyses of citizens' digital literacy, service preferences, and technology adoption behavior. Strengthening this capability would enable the organization to design digital public services that more accurately reflect the actual needs and expectations of the community.

The findings reveal that the organization's sensing capability has primarily been driven by national policy initiatives, particularly the implementation of the Electronic-Based Government System (SPBE) and the establishment of Public Service Malls. Although the organization has introduced citizen satisfaction surveys and other feedback mechanisms to identify service needs, the sensing process remains largely top-down and has not been fully supported by systematic analyses of citizens' digital literacy, technology readiness, or patterns of digital service utilization. Consequently, organizational decisions continue to be influenced more by regulatory directives than by evidence-based assessments of user needs. These findings partially support the framework proposed by Layne and Lee (2001), who argue that successful e-government transformation requires governments to progress through successive stages of organizational and technological integration. While the Maros Regency Public Service Mall has advanced beyond the initial stages of digital government, the findings indicate that full organizational integration has yet to be achieved.

Seizing: Organizational Capability to Capture and Exploit Digital Transformation Opportunities

Within the Dynamic Capabilities framework, seizing refers to an organization's ability to capitalize on identified opportunities by mobilizing resources, implementing strategic initiatives, and transforming innovative ideas into operational practices. In the context of the Public Service Mall (MPP) of Maros Regency, this capability is reflected in the efforts of the Department of Investment and One-Stop Integrated Services (DPMPTSP) to translate digital transformation policies into practical public service innovations that accommodate the diverse needs of citizens.

The empirical findings demonstrate that DPMPTSP has proactively pursued digital transformation through the gradual implementation of electronic public services. Rather than adopting a fully digital service model, the organization has introduced digital innovations incrementally while maintaining conventional service channels. According to the Secretary of DPMPTSP, this strategy was intentionally designed to ensure that technological innovation remains accessible to citizens with varying levels of digital literacy and technological readiness.

Several digital initiatives have been introduced to improve public service delivery. These include the implementation of WhatsApp-based queue management and information services, the provision of electronic public services, and the establishment of an Online Single Submission (OSS) Assistance Center. Collectively, these initiatives demonstrate the organization's commitment to enhancing service accessibility while supporting the broader objectives of Indonesia's Electronic-Based Government System (SPBE).

One of the most significant findings of this study is the adoption of a hybrid public service delivery model. Under this model, citizens may choose among three alternative service channels according to their needs and digital capabilities:

1. Conventional face-to-face services, where administrative processes are completed directly through service officers;
2. Assisted digital services, in which citizens access electronic government platforms with guidance provided by officers through the OSS Assistance Center; and
3. Self-service digital platforms, enabling citizens with sufficient digital competence to complete administrative procedures independently.

The implementation of this hybrid model reflects an adaptive organizational strategy that recognizes the heterogeneous digital capabilities of service users. Instead of replacing conventional public services entirely,

DPMPTSP has integrated digital innovation into existing administrative processes while preserving service inclusiveness.

Field observations further reveal that conventional face-to-face services remain the most frequently utilized form of public service delivery. Although digital facilities are available, many citizens continue to rely on direct interaction with service officers when completing administrative procedures. The continued presence of service officers therefore remains essential, not only as administrative personnel but also as facilitators who assist citizens in navigating digital public service systems.

The study also observed the availability of self-service digital kiosks, which were established to encourage greater citizen autonomy in accessing government services. These facilities provide citizens with direct access to electronic government applications without requiring assistance from public officials. From an organizational perspective, this initiative represents a significant step toward improving service efficiency while reducing administrative workloads.

However, the utilization of these self-service facilities remains relatively limited. During field observations, only a small number of citizens used the self-service kiosks, whereas most preferred to obtain assistance directly from service officers. This finding suggests that the availability of digital infrastructure alone is insufficient to stimulate behavioral change among service users.

Several factors appear to explain the relatively low adoption of self-service digital platforms. These include limited digital literacy, insufficient familiarity with electronic administrative procedures, concerns about making procedural errors, and longstanding preferences for conventional face-to-face interactions. Consequently, many citizens perceive direct assistance from service officers as more reliable and less risky than independently navigating digital government platforms.

A similar pattern was observed in the utilization of the OSS Assistance Center. Although this facility was specifically established to facilitate citizens' access to Indonesia's Online Single Submission (OSS) system, observational evidence indicates that citizen utilization remains relatively low. Most visitors continue to prefer conventional service counters despite the availability of assisted digital services. This finding indicates that organizational efforts to promote digital public services have not yet translated into widespread behavioral change among service users.

The empirical findings suggest that DPMPTSP has demonstrated a substantial seizing capability by converting digital transformation opportunities into concrete organizational innovations. The implementation of electronic public services, WhatsApp-based information systems, assisted OSS services, and hybrid service delivery collectively illustrate the organization's strategic efforts to operationalize digital government policies while maintaining service accessibility.

Nevertheless, these findings also indicate that organizational capability has advanced more rapidly than citizen adoption. Although the organization has successfully developed various digital service innovations, the majority of citizens continue to favor conventional service channels. Consequently, the digital transformation of public services within the Maros Regency Public Service Mall remains in a transitional phase, where technological innovation has progressed more rapidly than societal acceptance and utilization of digital public services.

The study further demonstrates that the organization's seizing capability has evolved through the implementation of various digital innovations, including electronic public services, WhatsApp-based information systems, assisted Online Single Submission (OSS) services, and a hybrid service delivery model. These initiatives indicate that DPMPTSP has been able to translate digital transformation opportunities into practical organizational innovations. Nevertheless, the relatively low utilization of self-service digital platforms suggests that organizational innovation alone is insufficient to ensure successful digital transformation. The findings reinforce the argument advanced by Heeks (2002) that e-government initiatives in developing countries frequently encounter implementation gaps arising from disparities between technological development and users' readiness to adopt digital services. Similarly, the continued reliance on face-to-face services observed in this study supports the proposition of Rogers (2003) that innovation adoption is a gradual process shaped by individuals' readiness, perceived benefits, and acceptance of technological change.

Reconfiguring: Organizational Capability to Transform Structures, Processes, and Resources

Within the Dynamic Capabilities framework, reconfiguring (or transforming) refers to an organization's ability to continuously realign and reorganize its resources, organizational structures, operational processes, and institutional arrangements in response to environmental change and technological innovation. In the context of e-government development at the Maros Regency Public Service Mall (Mall Pelayanan Publik—MPP), this capability is reflected in the efforts of the Department of Investment and One-Stop Integrated Services (DPMPTSP) to redesign public service delivery through institutional integration, digital transformation, and organizational adaptation.

The empirical findings indicate that DPMPTSP has undertaken a series of organizational adjustments aimed at improving the effectiveness of integrated public service delivery. One of the most significant transformations has been the shift from fragmented service provision—where citizens were previously required to visit individual government offices—to a one-stop integrated service model in which multiple government agencies operate within a single service facility. This organizational restructuring has substantially simplified administrative procedures, enhanced inter-agency coordination, and improved citizens' access to public services.

The transformation process has also extended to the gradual integration of digital technologies into service delivery. Rather than replacing conventional administrative procedures immediately, the organization has adopted an incremental approach by introducing digital information services, WhatsApp-based queue management, assisted Online Single Submission (OSS) services, and selected self-service digital applications. These initiatives

demonstrate that organizational transformation has been implemented progressively while taking into account the varying levels of digital readiness among service users.

Another important aspect of organizational reconfiguration concerns the evolving role of public officials. Interview findings reveal that service officers are no longer responsible solely for administrative processing; they also function as digital facilitators, assisting citizens who encounter difficulties in accessing electronic government services. Service personnel provide guidance throughout the process of data entry, digital application use, and electronic service access, thereby reducing barriers for citizens with limited digital literacy. This finding suggests that digital transformation has altered not only organizational systems but also the competencies and responsibilities of frontline public servants.

Field observations further indicate that the implementation of e-government has strengthened the integration of public services while improving citizens' access to information. Although the organization has not yet achieved full digitalization, electronic service channels have become increasingly available and accessible. Consequently, organizational transformation should be understood as a gradual institutional adaptation in which digital technologies complement, rather than completely replace, conventional service delivery mechanisms.

The findings also demonstrate that the adoption of a hybrid service delivery model constitutes a key organizational strategy for managing digital transformation. By combining face-to-face services, assisted digital services, and self-service digital platforms, the organization has attempted to accommodate the heterogeneous characteristics of service users while maintaining service inclusiveness. This approach reflects an adaptive organizational response to the coexistence of different levels of digital literacy and technology acceptance within the community. Nevertheless, the transformation process has not yet resulted in a fully integrated digital public service system. Observational evidence indicates that conventional face-to-face services remain the dominant mode of service delivery, while many citizens continue to depend on assistance from service officers when accessing electronic services. This pattern suggests that digital transformation remains in a transitional phase in which technological innovation has advanced more rapidly than citizens' capacity and willingness to adopt digital public services independently.

These findings are consistent with Teece (2007), who argues that organizations possessing strong dynamic capabilities are able not only to recognize opportunities and exploit them strategically but also to continuously reconfigure organizational resources and routines to sustain long-term competitiveness and organizational effectiveness. In the present study, organizational transformation is evident in the integration of public services, the redesign of work processes, the expansion of employees' roles, and the introduction of hybrid service delivery mechanisms. Collectively, these initiatives demonstrate that DPMPTSP has begun to institutionalize digital transformation within its public service system.

However, the findings also reveal that organizational transformation remains incomplete. Limited interoperability among participating agencies, the continued reliance on manual administrative procedures, and citizens' dependence on staff assistance indicate that digital transformation has not yet reached the stage of fully integrated digital government. Consequently, the organization's reconfiguring capability should be understood as an ongoing process of institutional adaptation rather than a completed transformation.

Overall, the findings demonstrate that the reconfiguring capability of the Maros Regency Public Service Mall has evolved through the redesign of organizational structures, service delivery mechanisms, employee roles, and digital service systems. Nevertheless, further efforts are required to strengthen system interoperability, enhance organizational digital competencies, and increase citizens' capacity to utilize digital public services independently. Achieving these objectives is essential for realizing a fully integrated and sustainable model of digital public service delivery.

Dynamic capabilities underpinning e-government transformation at the Maros Regency Public Service Mall have developed through the interrelated stages of sensing, seizing, and reconfiguring. However, each dimension remains at a transitional stage. The sensing capability is still largely policy-driven and has yet to be systematically informed by comprehensive assessments of citizens' digital literacy. The seizing capability is reflected in the introduction of digital services and assisted OSS facilities, although citizen utilization remains relatively low because most users continue to prefer conventional face-to-face services. Meanwhile, the reconfiguring capability is demonstrated through organizational restructuring, service integration, and the implementation of a hybrid service delivery model. Nevertheless, digital transformation has not yet achieved full system interoperability or complete digital integration. In summary, the existing model indicates that the development of dynamic capabilities within the Maros Regency Public Service Mall remains incremental, adaptive, and constrained by limited digital integration, highlighting the need for further organizational and technological development.

The analysis also highlights the critical role of reconfiguring capability in sustaining organizational transformation. DPMPTSP has undertaken substantial institutional adjustments through service integration, organizational restructuring, the redesign of employee roles, and the implementation of hybrid service delivery. Rather than functioning solely as administrative personnel, frontline employees increasingly serve as facilitators who assist citizens in accessing digital public services. These findings are consistent with Teece's (2007) assertion that organizations possessing dynamic capabilities continuously reconfigure internal resources, organizational routines, and institutional arrangements to maintain effectiveness in rapidly changing environments. However, the persistence of manual administrative procedures, limited interoperability among participating agencies, and citizens' continued dependence on staff assistance indicate that organizational transformation remains incomplete. This study demonstrates that the organizational transformation underpinning e-government development at the Maros Regency Public Service Mall (MPP) reflects the sequential development of dynamic capabilities, encompassing sensing, seizing, and reconfiguring, as proposed by Teece (2007). However, these capabilities have

not yet reached an optimal level of maturity. Instead, the transformation process remains gradual and adaptive, reflecting the complex realities faced by local governments in implementing digital public service reforms.

An important contribution of this study lies in demonstrating that the development of dynamic capabilities within the public sector differs from that observed in private organizations. Whereas previous applications of Dynamic Capabilities Theory have predominantly emphasized competitive advantage in business environments, the findings of this study indicate that, within public organizations, dynamic capabilities are directed toward improving service accessibility, promoting institutional integration, enhancing citizen participation, and strengthening adaptive governance. Consequently, the transformation of the Maros Regency Public Service Mall should be understood not merely as a technological modernization initiative but as a comprehensive process of institutional change encompassing organizational structures, administrative practices, human resource competencies, and government–citizen interactions.

The findings also emphasize that the success of e-government transformation depends not only on technological infrastructure but equally on organizational learning and citizen readiness. Digital platforms can generate meaningful public value only when they are accompanied by organizational capabilities that continuously identify emerging societal needs, respond strategically to technological opportunities, and redesign institutional arrangements to support sustainable service innovation. Accordingly, strengthening digital literacy, improving interoperability across government agencies, and enhancing employees' digital competencies represent strategic priorities for accelerating integrated digital government.

From a theoretical perspective, this study extends the application of Dynamic Capabilities Theory to the field of public administration, particularly within the context of integrated public service delivery. The findings demonstrate that sensing, seizing, and reconfiguring should be viewed as complementary and interdependent organizational capabilities rather than discrete organizational processes. Successful digital transformation requires the continuous interaction of these three capabilities, enabling public organizations to remain adaptive amid rapidly evolving technological, institutional, and societal environments.

Accordingly, this study develops a conceptual model of e-government transformation by positioning **organizational adaptability** as the central mechanism through which dynamic capabilities—comprising sensing, seizing, and reconfiguring—are translated into successful e-government development within integrated public service delivery. The findings reveal that organizational adaptability is manifested through adaptive organizational practices, including hybrid service delivery, flexible employee roles, assisted digital services, and an incremental approach to digital transformation that accommodates varying levels of citizens' digital readiness. By conceptualizing organizational adaptability as the pivotal link between dynamic capabilities and e-government transformation outcomes, this study extends the application of Dynamic Capabilities Theory beyond its traditional private-sector focus and offers a novel theoretical perspective for explaining organizational transformation in local public-sector organizations.

Organizational Adaptability as the Linking Mechanism of Dynamic Capabilities in E-Government Transformation

The preceding analysis demonstrates that organizational transformation at the Maros Regency Public Service Mall cannot be adequately explained by examining the dimensions of sensing, seizing, and reconfiguring in isolation. Rather, the findings indicate that these dynamic capabilities operate as mutually reinforcing organizational processes that collectively enable the organization to respond to technological change, institutional demands, and evolving citizen expectations. Their interaction gives rise to a broader organizational capability that this study conceptualizes as **organizational adaptability**.

Organizational adaptability refers to the organization's capacity to continuously adjust its structures, resources, operational processes, and service delivery mechanisms in response to changes in the internal and external environment. In the context of e-government development, adaptability extends beyond the adoption of digital technologies. It encompasses the organization's ability to integrate technological innovation with institutional change, organizational learning, and citizen-oriented service redesign. The empirical evidence suggests that DPMPSTP has gradually developed this adaptive capability through the cumulative interaction of sensing emerging service needs, seizing opportunities for digital innovation, and reconfiguring organizational resources to support integrated public service delivery.

The findings further demonstrate that organizational adaptability is manifested through several adaptive organizational practices. These include the implementation of a hybrid public service delivery model that combines conventional, assisted digital, and self-service digital channels; the transformation of employees' roles from administrative officers to digital service facilitators; the provision of assisted Online Single Submission (OSS) services; and the adoption of an incremental approach to digital transformation that accommodates varying levels of citizens' digital literacy. Collectively, these organizational practices illustrate that successful digital transformation depends not only on technological infrastructure but also on the organization's capacity to continuously align institutional arrangements with the changing needs of citizens.

From a theoretical perspective, these findings extend Dynamic Capabilities Theory by demonstrating that the interaction of sensing, seizing, and reconfiguring generates a higher-order organizational capability in the form of organizational adaptability. While Teece (2007) conceptualizes dynamic capabilities as the mechanisms through which organizations renew and reconfigure their resources in dynamic environments, the present study shows that, within the public sector, these capabilities converge to create an adaptive organizational capacity that supports sustainable e-government transformation. Organizational adaptability therefore functions as the central mechanism through which dynamic capabilities are translated into effective organizational transformation in

integrated public service delivery. These theoretical insights are synthesized into the conceptual model presented in Figure 1.

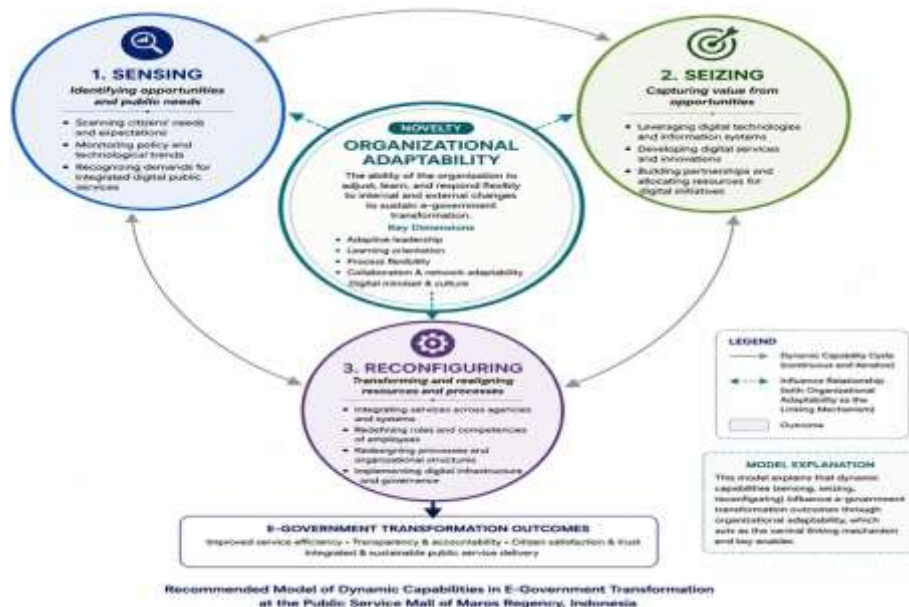


Figure 1: Recommended Model of Dynamic Capabilities in E-Government Transformation

Based on these findings, this study proposes a conceptual model positioning organizational adaptability as the pivotal link between dynamic capabilities and successful e-government transformation. As illustrated in **Figure 1**, sensing, seizing, and reconfiguring operate as complementary organizational capabilities that collectively shape organizational adaptability. In turn, organizational adaptability enables public organizations to achieve integrated, citizen-centered, and sustainable digital public service delivery. This conceptual model represents the principal theoretical contribution of the study by providing a more comprehensive explanation of how dynamic capabilities facilitate organizational transformation in local public-sector organizations.

Collectively, this study concludes that the organizational transformation of the Maros Regency Public Service Mall represents an ongoing process of institutional adaptation rather than a completed digital transformation. Although significant progress has been achieved through service integration and digital innovation, further organizational development is required to strengthen interoperability, institutional commitment, citizen engagement, and adaptive capacity. These improvements are essential for achieving a mature and sustainable model of e-government capable of delivering integrated, citizen-centered, and digitally enabled public services.

Conclusion

This study examined the role of dynamic capabilities in organizational transformation for e-government development at the Public Service Mall (Mall Pelayanan Publik—MPP) of Maros Regency by employing Teece's (2007) Dynamic Capabilities Framework, comprising sensing, seizing, and reconfiguring. The findings demonstrate that the development of e-government within the Maros Regency Public Service Mall is not merely a technological initiative but a comprehensive organizational transformation process involving institutional adaptation, service innovation, organizational learning, and continuous capacity development.

The study reveals that the organization's sensing capability has been developed through the identification of policy changes and emerging public service needs. However, this capability remains predominantly policy-driven and has yet to be fully supported by systematic assessments of citizens' digital literacy, technology readiness, and service preferences. Consequently, organizational decision-making continues to rely more heavily on regulatory directives than on evidence-based analyses of citizens' actual needs.

Regarding seizing capability, the organization has demonstrated its ability to capitalize on digital transformation opportunities by introducing electronic public services, WhatsApp-based information systems, assisted Online Single Submission (OSS) services, and a hybrid public service delivery model. These innovations reflect the organization's commitment to expanding digital public services while accommodating citizens with diverse levels of digital competence. Nevertheless, the utilization of self-service digital platforms remains relatively limited, indicating that the availability of digital technologies alone does not automatically translate into widespread citizen adoption.

The findings further indicate that the organization has developed reconfiguring capability through the integration of public services, the redesign of organizational processes, the transformation of employees' roles, and the implementation of hybrid service delivery mechanisms. These organizational changes have strengthened institutional coordination and improved service accessibility. However, the transformation process remains incomplete, as evidenced by limited system interoperability, continued reliance on manual administrative procedures, and citizens' dependence on staff assistance when accessing digital services.

Collectively, these findings suggest that the development of dynamic capabilities within the Maros Regency Public Service Mall is incremental, adaptive, and evolutionary rather than linear. Although substantial progress has been achieved in institutional integration and digital service innovation, organizational transformation has not

yet reached the level of a fully integrated digital government ecosystem. Strengthening organizational learning, improving interoperability among participating agencies, enhancing employees' digital competencies, and increasing citizens' digital literacy will therefore be essential for accelerating sustainable e-government transformation.

From a theoretical perspective, this study contributes to the growing literature on Dynamic Capabilities Theory by demonstrating its applicability within the field of public administration, particularly in the context of integrated public service delivery. Unlike its traditional application in the private sector, dynamic capabilities in public organizations primarily serve to enhance organizational adaptability, institutional integration, citizen-centered service delivery, and public value creation rather than competitive advantage. Accordingly, this study broadens the application of Dynamic Capabilities Theory by illustrating how sensing, seizing, and reconfiguring collectively shape organizational transformation in digital government.

Consequently, this study develops a conceptual model of e-government transformation by positioning **organizational adaptability** as the central mechanism through which dynamic capabilities—comprising sensing, seizing, and reconfiguring—are translated into successful e-government development within integrated public service delivery. The findings reveal that organizational adaptability is manifested through adaptive organizational practices, including hybrid service delivery, flexible employee roles, assisted digital services, and an incremental approach to digital transformation that accommodates varying levels of citizens' digital readiness. By conceptualizing organizational adaptability as the pivotal link between dynamic capabilities and e-government transformation outcomes, this study extends the application of Dynamic Capabilities Theory beyond its traditional private-sector focus and offers a novel theoretical perspective for explaining organizational transformation in local public-sector organizations.

From a practical perspective, the findings suggest that local governments should place greater emphasis on strengthening digital governance, fostering organizational learning, promoting cross-agency interoperability, and improving citizens' digital inclusion. Future e-government initiatives should therefore move beyond the deployment of digital technologies and focus on developing adaptive organizational capabilities that enable public institutions to respond effectively to the rapidly evolving expectations of citizens and technological change.

Despite these contributions, this study is limited to a single case study of the Maros Regency Public Service Mall. Future research could adopt comparative case studies involving multiple Public Service Malls or local governments to examine how institutional contexts influence the development of dynamic capabilities in digital government. Quantitative or mixed-method approaches may also provide additional insights into the relationships between dynamic capabilities, digital service adoption, organizational performance, and citizen satisfaction.

ACKNOWLEDGEMENT

The authors would like to express their sincere gratitude to the Maros Regency Investment and One-Stop Integrated Services Agency (DPMPTSP) and the Maros Regency Public Service Mall (MPP) for their invaluable support, cooperation, and assistance throughout the data collection process. The authors are also deeply grateful to all research participants for generously sharing their time, experiences, and insights, which significantly enriched this study.

The first author would like to extend heartfelt appreciation to Hasanuddin University for providing an outstanding academic environment and continuous support throughout the doctoral study. Special acknowledgment is also extended to the supervisors, lecturers, and academic staff whose guidance and encouragement have been instrumental in the completion of this research. This study was financially supported through the Beasiswa Pendidikan Indonesia (BPI), funded by the Ministry of Higher Education, Science, and Technology of the Republic of Indonesia. The authors gratefully acknowledge this financial support, which has substantially contributed to the successful completion of the doctoral study and the present research. Finally, the authors sincerely appreciate the constructive comments and valuable suggestions provided by colleagues and anonymous reviewers, which have significantly improved the quality of this manuscript.

References

1. Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management*, 17(1), 99–120. <https://doi.org/10.1177/014920639101700108>
2. Badan Pusat Statistik. (2023). *Statistik telekomunikasi Indonesia 2023*. Badan Pusat Statistik.
3. Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 13(3), 319–340. <https://doi.org/10.2307/249008>
4. Fountain, J. E. (2001). *Building the virtual state: Information technology and institutional change*. Brookings Institution Press.
5. Hamzah, A. (2016). E-government dan reformasi birokrasi di negara berkembang. Prenadamedia Group.
6. Heeks, R. (2002). Information systems and developing countries: Failure, success, and local improvisations. *The Information Society*, 18(2), 101–112. <https://doi.org/10.1080/01972240290075039>
7. Janssen, M., & van der Voort, H. (2016). Adaptive governance: Towards a stable, accountable and responsive government. *Government Information Quarterly*, 33(1), 1–5. <https://doi.org/10.1016/j.giq.2016.01.003>
8. Kementerian Komunikasi dan Informatika Republik Indonesia. (2022). *Status literasi digital Indonesia 2022*. Kementerian Komunikasi dan Informatika Republik Indonesia.
9. Kementerian Pendayagunaan Aparatur Negara dan Reformasi Birokrasi. (2024). *Data Mall Pelayanan Publik dan MPP Digital di Indonesia*. Kementerian PANRB Republik Indonesia.

10. Layne, K., & Lee, J. (2001). Developing fully functional e-government: A four stage model. *Government Information Quarterly*, 18(2), 122–136. [https://doi.org/10.1016/S0740-624X\(01\)00066-1](https://doi.org/10.1016/S0740-624X(01)00066-1)
11. Mergel, I., Edelmann, N., & Haug, N. (2019). Defining digital transformation: Results from expert interviews. *Government Information Quarterly*, 36(4), 101385. <https://doi.org/10.1016/j.giq.2019.06.002>
12. Pemerintah Indonesia. (2001). Instruksi Presiden Republik Indonesia Nomor 6 Tahun 2001 tentang Pengembangan dan Pendayagunaan Telematika di Indonesia.
13. Pemerintah Indonesia. (2003). Instruksi Presiden Republik Indonesia Nomor 3 Tahun 2003 tentang Kebijakan dan Strategi Nasional Pengembangan E-government.
14. Pemerintah Indonesia. (2009). Undang-Undang Republik Indonesia Nomor 25 Tahun 2009 tentang Pelayanan Publik.
15. Pemerintah Indonesia. (2018). Peraturan Presiden Republik Indonesia Nomor 95 Tahun 2018 tentang Sistem Pemerintahan Berbasis Elektronik.
16. Pemerintah Indonesia. (2021). Peraturan Presiden Republik Indonesia Nomor 89 Tahun 2021 tentang Penyelenggaraan Mall Pelayanan Publik.
17. Pemerintah Kabupaten Maros. (2022). Peraturan Bupati Maros Nomor 68 Tahun 2022 tentang Mall Pelayanan Publik Kabupaten Maros.
18. Pemerintah Kabupaten Maros. (2024). Peraturan Bupati Maros Nomor 16 Tahun 2024 tentang Sistem Pemerintahan Berbasis Elektronik Kabupaten Maros.
19. Pollitt, C., & Bouckaert, G. (2011). *Public management reform: A comparative analysis—New public management, governance, and the neo-weberian state* (3rd ed.). Oxford University Press.
20. Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.). Free Press.
21. Susanti, E., Rahman, A., & Yusuf, M. (2023). Dynamic capabilities in digital government transformation: Evidence from public sector organizations in Indonesia. *Jurnal Administrasi Publik*, 19(2), 145–160.
22. Teece, D. J. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509–533. [https://doi.org/10.1002/\(SICI\)1097-0266\(199708\)18:7<509::AID-SMJ882>3.0.CO;2-Z](https://doi.org/10.1002/(SICI)1097-0266(199708)18:7<509::AID-SMJ882>3.0.CO;2-Z)
23. Teece, D. J. (2007). Explicating dynamic capabilities: The nature and microfoundations of (sustainable) enterprise performance. *Strategic Management Journal*, 28(13), 1319–1350. <https://doi.org/10.1002/smj.640>
24. Teece, D. J. (2018). Business models and dynamic capabilities. *Long Range Planning*, 51(1), 40–49. <https://doi.org/10.1016/j.lrp.2017.06.007>
25. United Nations. (2022). *United Nations e-government survey 2022: The future of digital government*. United Nations.
26. van Dijk, J. (2005). *The deepening divide: Inequality in the information society*. SAGE Publications.