



KINGDOM OF ESWATINI



Eswatini's Digital Transformation: Progressing Systematically Towards a Digital Future



Credits



We would like to extend our sincere gratitude to the following for their invaluable contributions:

- Ministry of ICT e-Gov Directorate
- Participants of the Survey and Experts
- UNDP Eswatini
- UNDP Chief Digital Office



UNDP Resident representative, Henrik Franklin and Honorable Minister of Information, communications and technology, Savannah Maziya, during the launch of the Digital readiness assessment report of Eswatini in November 2024.



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Foreword



Honorable Minister of Information,
Communication and Technology
(ICT), Savannah Maziya

As Eswatini steps into a new era of digital transformation, it is essential that we evaluate our readiness to harness digital technology for social and economic development. This Digital Readiness Assessment Report (2024) serves as a foundational document, guiding our country's journey towards an inclusive and accessible digital ecosystem that supports the aspirations of all Emaswati.

This assessment, conducted through a partnership between the Ministry of Information, Communication and Technology (ICT) and the United Nations Development Programme (UNDP), provides a comprehensive review of Eswatini's digital infrastructure, connectivity, digital literacy, and regulatory environment. It identifies areas for growth and sets forth strategic recommendations for establishing a robust digital ecosystem that aligns with our national goals and paves the way for successful implementation of the Eswatini Digitalisation Strategy (2024–2028), themed "Government in Your Hand."

The findings outlined in this report highlight our nation's strengths while offering insight into the challenges we must address to ensure that digital transformation benefits every citizen. By prioritising digital public infrastructure, equitable access, and digital literacy, we aim to create an environment where the citizens, the public and private sector work together to bring innovation to every corner of Eswatini.

I extend my deepest gratitude to UNDP, ESEPARC, and all stakeholders who contributed to this assessment. Your insights and dedication are invaluable as we move forward, committed to building a digitally inclusive future for Eswatini.

Foreword



Resident Representative, United Nations Development Programme (UNDP) Eswatini, Henrik Franklin

Digital transformation is a powerful enabler of inclusive and sustainable development, and it holds immense potential to accelerate Eswatini's progress toward achieving its national and global development goals. The Digital Readiness Assessment Report for the Kingdom of Eswatini (2024) represents a pivotal step in this journey, offering critical insights and a comprehensive framework to guide the country's digital transformation.

This report, produced in partnership between the Ministry of Information, Communication and Technology (ICT) and the United Nations Development Programme (UNDP), reflects a shared vision for a future where digital innovation drives economic growth, social inclusion, and environmental sustainability. It aligns closely with Eswatini's National Development Plan, underscoring the importance of digitalization as a catalyst for progress across all sectors.

The findings in this report highlight both the opportunities and challenges inherent in achieving a digitally inclusive Eswatini. They emphasize the need for strategic investments in digital infrastructure, capacity building, and policies that ensure equitable access to technology for all, particularly for youth, women, and marginalized communities.

On behalf of the UNDP, I extend my gratitude to all stakeholders who contributed to this assessment. Your insights and commitment have been invaluable in shaping this roadmap for Eswatini's digital future. As we move forward, UNDP remains committed to supporting the implementation of the strategies outlined in this report and to working with our partners to achieve a more inclusive, resilient, and prosperous Eswatini.

Executive Summary

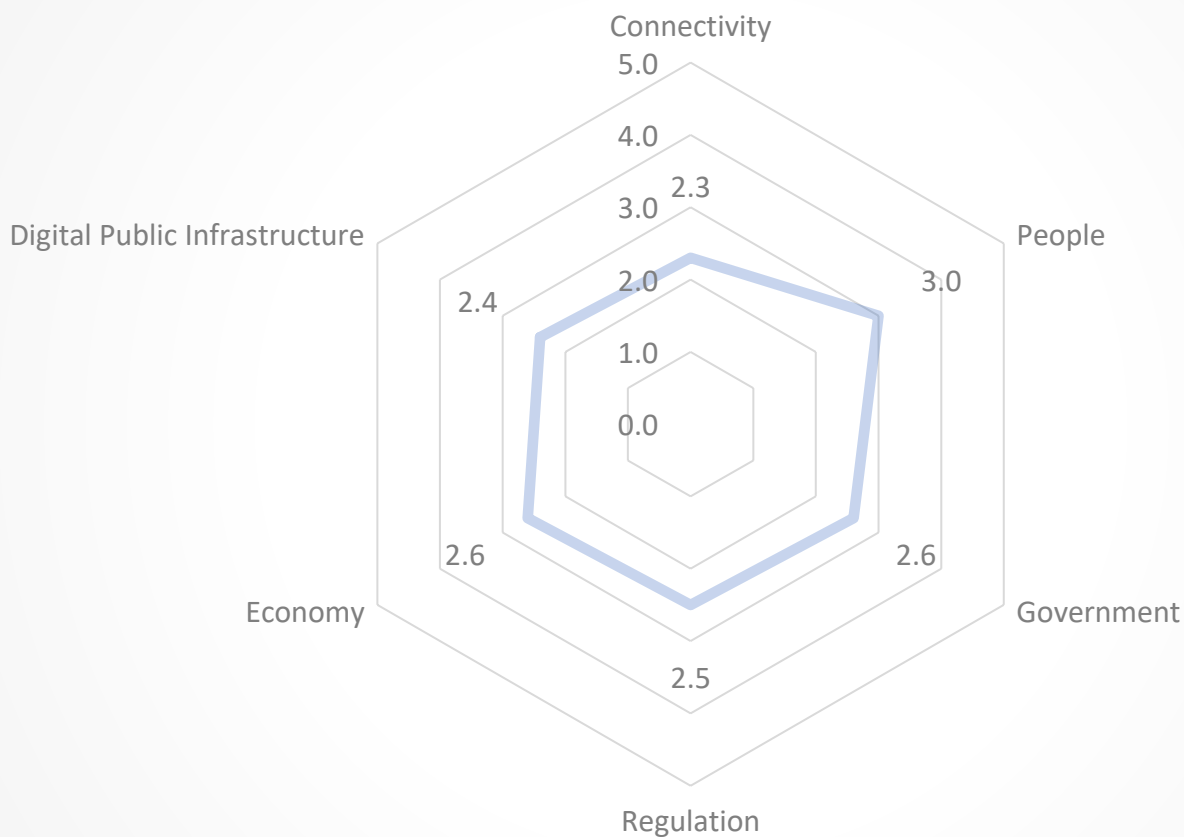


Eswatini's digital readiness is considered 'systematic' with an overall score of 2.6 – meaning the country is systematically advancing in key areas of digital transformation based on identified priority areas.



Overview

Eswatini has strengths in the People, Economy and Government pillar.



Executive Summary: Results by pillar and sub-pillar

To enhance their digital readiness, countries can support each part of the transformation framework. The Kingdom of Eswatini is currently in the Systematic stage across six pillars: DPI, Connectivity, Government, Regulation, Economy, and People.

DPI	Siloed to operate independently and/or missing key elements entirely	Partially synchronized to operate together	Fully synchronized to operate together while protecting user privacy and control.	Using open standards and ensuring vendor and technology neutrality.	Ensuring universal coverage for individuals from birth to death without discrimination
CONNECTIVITY	Limited infrastructure. Access to undersea internet cables.	Growing internet service provider & mobile networks.	Growing connectivity. Limited developer & business ecosystems.	Affordable connectivity. Strong supply chains. Growing tech hubs.	Universal broadband. IoT. Inclusive ecosystems.
GOVERNMENT	Limited capacity	First digital initiatives in siloes. Limited political support.	Shared vision and strategy. Vocally encouraged.	Embedded in decision-making. Codified in administrative acts.	Culture of innovation. Codified in legislation.
REGULATION	Limited legal capacity	Regulations support foundations.	Initial policies and laws established.	Regulations enable innovation. Transparently online.	Foundations enabled. Regulations integrated.
ECONOMY	Limited digital integration across sectors	Growing technology penetration in key sectors	Cross-sector collaboration. Seed financing.	Digital coordinated across sectors. Venture financing.	Digital industry. Enacting digital responsibility standards
PEOPLE	Limited literacy. Cultural aversion to technology.	Limited digital literacy. Deep digital divide.	Growing digital literacy. Technology embraced.	High levels of digital literacy and penetration.	Limited digital divide.

Stages of Digital Readiness

1. BASIC

2. OPPORTUNISTIC

3. SYSTEMATIC

4. DIFFERENTIATING

5. TRANSFORMATIONAL

Summary by Pillar



Government Pillar

Systematic stage

2.8

Leadership & Strategy

- **Limited Political Prioritization and Coordination:** Although a national digital strategy is in place, digitalisation holds only moderate political support. Survey data shows that 64% of stakeholders acknowledge the strategy's implementation, yet half perceive it as delayed, citing issues like weak design, insufficient political backing, and limited institutional coordination. Stakeholders are divided on Eswatini's approach to digital transformation. While 33% view the country as moderately bold, 16% express doubts. While MICT has established a dedicated task force to coordinate efforts, mixed perceptions about its operational status indicate possible communication and role clarity gaps. To accelerate digital transformation, Eswatini must strengthen political commitment, enhance inter-institutional coordination, and foster a clearer vision of its digital ambitions.

Implementation capabilities and systems

- Eswatini's digital transformation aims to overcome outdated technology and limited digital skills, particularly within local government. The 2021 General Education Framework introduces ICT from Grade 3 to enhance digital literacy, yet a 60% skills gap among government staff highlights critical capacity limitations that could impede digital progress. Additionally, Eswatini's digital initiatives suffer from inconsistent funding, with 28% of stakeholders noting the absence of a dedicated budget. This reliance on ad-hoc financing risks project discontinuation, undermining Eswatini's ambition to modernise government and become a regional digital leader. Secure, structured funding is essential to sustain and scale the nation's digital strategy and enhancing public participation mechanisms for a more transparent and accountable governance model.

Systematic stage

2.6

Summary by Pillar



Government Pillar

Systematic stage

2.7

Digital Public Services and Platforms

- Eswatini's digital transformation efforts in e-government show substantial progress in digitising Government-to-Consumer (G2C) and Government-to-Business (G2B) services. Key advancements are evident in tax (22.4%) and utility services (12.2%), with health and education services also adopting digital platforms. However, significant gaps remain in family, property, and immigration services, with only 4.1% availability noted by experts. Despite the positive uptake in tax and utility services, limited engagement with family, property, and immigration services suggests barriers like low public awareness, digital literacy gaps, or accessibility challenges in underserved areas. Stakeholder feedback reflects a positive reception to digital government efforts, with 36.4% noting significant improvements in service delivery and 25.1% reporting moderate improvements. Areas prioritised for further expansion include immigration, identity documents, and health services, aligning future digital strategies with high-demand areas to enhance accessibility and impact on citizens' lives.

Systematic stage

2.4

Open government

- The country faces substantial challenges in its open data infrastructure, ranking 191st out of 195 countries globally in the 2022 Open Data Inventory (ODIN) and last among Southern African countries. This low ranking reflects significant gaps in transparency and accessibility, primarily due to outdated data frameworks and the absence of a centralised open data portal—which limits the effectiveness of the Central Statistics Office (CSO). Survey respondents point to the limited inclusion of different groups of society. Only 7% of respondents affirmed full inclusion of marginalised groups, the majority of stakeholders view civic engagement as restricted. This aligns with broader trends in developing nations, where outdated frameworks and limited digital infrastructure often exclude vulnerable populations from governance processes. To align with global standards, Eswatini must prioritise modernising its data infrastructure and enhancing public participation mechanisms for a more transparent and accountable governance model.



People

Differentiating
stage
3.1

People Pillar

Usage and adoption

- Eswatini's digital transformation journey hinges on leveraging its strong basic literacy rate of 89.28% to build digital skills and literacy across the population. However, substantial gaps remain in digital competencies, particularly among older populations and rural communities, exacerbated by the lack of an ICT-focused education policy. High technology costs (identified by 30.9% of survey respondents) and digital knowledge gaps (28.7%) also hinder widespread adoption, while infrastructure limitations and concerns about technology's impact on personal matters create additional barriers.
- The survey highlights significant digital divides, with elderly (25%), rural (20.5%), and disabled populations (16.4%) facing the highest risk of exclusion. Other vulnerable groups include NEETs, children, migrants, and marginalised demographics such as women, veterans, and minorities. Addressing these disparities through targeted, inclusive policies is essential for achieving equitable digital inclusion and ensuring all citizens benefit from Eswatini's digital advancements.

Digital Literacy Skills

- Eswatini faces major challenges in building a digitally literate population, with fragmented initiatives and no cohesive policy framework to support both basic and advanced digital literacy. Survey data shows that digital skills integration within public school curricula remains minimal: 46% of experts report limited incorporation, and only 15% see substantial integration. This aligns with the World Bank's 2022 findings that Eswatini lacks a dedicated ICT in Education Policy, a gap that likely contributes to inconsistent digital skills development across the country. Establishing a comprehensive policy framework is crucial to create a standardised approach to digital education and to foster essential competencies in the nation's workforce and future generations.

Systematic stage
2.3



People Pillar

Systematic stage
2.9

Civic Engagement

- Eswatini's civic engagement via digital platforms remains underdeveloped, with limited usage and impact. Only 3.24% of stakeholders report effective, widespread platform use, while 37.35% indicate minimal engagement and 20% find platforms ineffective. Most activity is limited to basic public communication (30.9%), with less focus on impactful civic functions like project tracking (11.9%) and collective decision-making (10.5%). To strengthen civic engagement, Eswatini should prioritize expanding platform adoption and functionality, enabling deeper citizen involvement in governance processes. Enhanced platform features could transform these tools into valuable assets for community engagement and transparent governance, aligning with successful digital governance models globally.

Differentiating
stage
3.6

Cultural norms

- Trust in digital technologies and institutions is a significant hurdle in Eswatini's digital transformation. Privacy and cybersecurity concerns deter citizens from adopting new technologies, with government-deployed tech facing the most skepticism—60% of respondents report low trust in these platforms. By contrast, technology from the private sector and civil society is perceived more positively, with 40-50% indicating medium to high trust. The National Cybersecurity Strategy (2022-2027) underscores a collaborative, multi-stakeholder approach to secure Eswatini's cyberspace, which is essential for building public confidence. Strengthening cybersecurity and improving transparency in government tech initiatives are key to enhancing trust and encouraging broader adoption of digital services.

Digital Public Infrastructure

Data Exchange

- The absence of a national Interoperability Framework presents an obstacle to Eswatini's digital transformation. This results in increased operational costs due to process duplication, inefficient service delivery, and limited data sharing capabilities across systems. The Data Protection Act of 2022 provides a foundation for secure data exchange. Therefore, priority should be given to integration of systems to support the digital transformation strategy.

Identification

- The civil registration system of Eswatini records births, deaths, marriages, and divorces. However, there are mixed expert assessment of digital transformation of the civil registration, indicating inconsistent implementation of digitisation initiatives. Implementing a comprehensive digital transformation strategy will enhance system functionality, adoption, and data management capabilities.

Payments

- The government has initiated digital payment adoption but with limited scope. According to digital experts' digital payment systems exist but their functionality varies across government services.



Economy

Systematic stage

2.7

Systematic stage

2.7

Systematic stage

2.6

Systematic stage

2.6

Economy Pillar

Business

- E-commerce in Eswatini remains relatively low. Uptake of e-Commerce was reported to be at 5.2% in 2022. Respondents of the Stakeholder Survey attributed the low uptake of e-Commerce in Eswatini mainly to a lack of payment systems and gateways (19%), lack of tech providers (18%), lack of external finance (18%) (e.g., bank credits, investment), lack of internal finance (e.g., due to lack of profitability) (18%), unfavourable policy systems (17%), and lack of internet users (11%). These findings points to the need for investment and development in the digital ecosystem to enable e-commerce in Eswatini, including putting in policy frameworks that will be supportive of online commerce.

Financial Services

- Financial inclusion is high in Eswatini reported to be at 87% in 2023, yet the use of digital financial services is low. Several significant barriers hindering the use of digital financial services were highlighted by Stakeholders, including concerns about data privacy and security (26%), lack of knowledge about digital financial skills (25%), lack of trust on digital transactions (23%), and limited access to internet or mobile networks (19%). Building trust and strengthening data protection measures, financial literacy, and improving the underlying digital infrastructure is necessary to drive greater adoption and usage of digital financial services in Eswatini.

Innovation Ecosystem

- The establishment of the Royal Science Technology Park in 2018 positioned the institution as a technological hub for innovation capable of driving digital transformation across various sectors of Eswatini economy. However, the Park is yet to realise its full potential. According to stakeholders, government offers little to no financial incentives to encourage innovation and investment in digital technology and there is little to no funding for R&D in Eswatini.

Standards of responsibility

- Perceptions from the Stakeholder Survey show varying levels of corporate digital responsibility practices among private businesses in Eswatini. While 55% of respondents consider policies or reports on digital responsibility common, only 10% find them to be very common. A majority of the respondents (75%) indicated that there is no efficient management of e-waste in Eswatini, underscoring the lack of national policies promoting the recycling of electronic devices or waste in the country. As the country shifts to renewable energy, a plan for disposing of solar panels is important.



Connectivity Pillar

Physical Infrastructure

- There is a need for the Government to establish comprehensive policies and implementation plans that will address the lack of digital infrastructure in schools and universities and build digital skills in the education system, ensuring that the next generation of Eswatini are equipped with the tools they need to become Eswatini's digital future. The Expert Survey results revealed that less than 15% of public-schools are connected to the internet. While the Stakeholder Survey suggests that availability of free Wi-Fi in public areas such as a park or libraries is poor in Eswatini. Digital Experts also indicated that there are inadequate network infrastructure and facilities, such as data centres and network, across the country.
- The Government established the National Data Centre housed at RSTP with the aim of providing secure, efficient and reliable ICT to enterprises as well as aiding in e-government development and promoting digital inclusion within the country. However, experts have pointed out that the overall capacity and scalability of the country's data storage infrastructure is poor. This indicates that the National Data Centre may not be adequately equipped to meet the growing data and computing needs of enterprises, e-government services, and the wider population. There is a need for a national data management strategy that will address gaps in storage, processing, and management capabilities to ensure that the digital infrastructure can support the country's digital transformation and economic development goals.

Access Enablers

- Despite ESCCOM's effort to ensure universally accessible, high-quality, and affordable services to promote inclusivity and connectivity in Eswatini, the cost of accessing the internet are still high, further enlarging the digital divide that already exists. The 2022 ICTAUS report revealed that about 67% of households across the country have internet coverage, with 70% in urban areas and 63% in rural areas.
- Despite growth in internet penetration in Eswatini, elderly people or senior citizens, rural population, and people living with disabilities are one of the groups at risk of being excluded from the benefits of Eswatini's journey towards digital transformation. Investment in last-mile connectivity solutions can help Eswatini to expand connectivity and provide affordable internet to vulnerable groups and communities.



Regulation

Systematic stage
2.6

Systematic stage
2.6

Systematic stage
2.1

Regulation Pillar

Data Protection

- Survey responses indicate that 28.6% of the respondents are aware of the data protection and privacy law and their enforcement, while more than 70% of the respondents express that the laws are not always enforced. This shows that Eswatini should put more effort into the implementation and enforcement of current regulations and laws.

Consumer Protection

- The DRA Expert Survey responses highlight that while 30% of the respondents do not know of the consumer protection authority or law more than 20% know of the authority and its level of development. The inconsistency in responses suggests a need for clearer communication and possibly strengthening of digital consumer protection measures, as highlighted in the SADC Model Law on Electronic Transactions and E-commerce (2020) recommendations for member states. UNCTAD Cyberlaw Tracker (2022), notes that while Eswatini has made progress in e-transaction legislation, specific consumer protection laws for e-commerce are still developing.

Cybersecurity

- Eswatini has made notable progress in cybersecurity with the enactment of the Computer Crime and Cybercrime Act of 2022 and the development of the National Cybersecurity Strategy 2022-2027. These initiatives provide a legal framework and a strategic roadmap for protecting the country's digital assets. However, survey findings reveal several challenges. 30.8% of respondents indicated that different government units have disintegrated digitalization strategies or plans, lacking a shared vision. A lack of coordination among government ministries leads to a fragmented approach, hindering effective responses to cyber threats. While a cybercrime law exists, inconsistent enforcement undermines its effectiveness. Furthermore, despite international engagement, the existing fragmentation hinders the translation of global collaboration into effective national strategies.



Systematic stage
2.7

Regulation Pillar

Emerging Technology

- Survey responses reveal that Eswatini's legal framework for emerging technologies is limited, with most indicating no existing laws (69.2%) in this area. Where laws are reported, they primarily cover specific technologies like drones, AI, biometrics, and IoT, pointing to a need for more comprehensive regulation to address the broader spectrum of digital innovations.

Systematic stage
2.4

Fair Market Competition

- The survey results indicate a mix of opinions regarding the existence and enforcement of laws regulating competition between telecom networks in Eswatini. While many respondents reported that such laws are fully enforced (50%), a smaller percentage (25%) stated that they are only sometimes or seldom enforced.

Differentiating
stage
2.5

Human Rights

- The survey findings reveal a concerning landscape regarding data protection laws aimed at safeguarding children's rights online and protecting vulnerable groups. Some of the respondents (38.5%) indicated uncertainty about the existence of such laws, with many stating they "don't know" if these protections are in place.

Prioritised recommendations



- Strengthen political commitment to digital transformation
- Establish a centralized digital transformation office
- Fast-track the implementation of the "Government in your hand" project
- Enhance communication of digital transformation strategies



- Develop and implement a national interoperability framework
- Facilitate the implementation of digital financial payment systems
- Coordinate ICT infrastructure investment
- Strengthen digital identity infrastructure



- Reduce technology costs and improve accessibility
- Expand digital literacy through inclusive training programs
- Enhance ICT accessibility for people with disabilities
- Build trust in digital platforms through transparent citizen engagement



- Enhance Research and Development (R&D) and innovation
- Promote the development of e-commerce platforms and products
- Enhance public digital financial literacy
- Expand education curriculum at all levels to include digital skills

Prioritised recommendations



- Establish a nationwide network for equitable internet access
- Increase digital literacy and promote broadband adoption
- Develop accessibility standards for inclusive digital services
- Establish an integrated data management strategy for security and interoperability



- Develop Emerging Technology Regulations Framework
- Implement Comprehensive Data Management Strategy
- Strengthen Data Protection Enforcement
- Enhance Digital Services Communication



Introduction



Digital Transformation Framework

Digital transformation is the shift towards digital tools and solutions across all aspects of government, the economy and society. To successfully steer this transformation at the national level, governments must address a broad range of policy areas in infrastructure, education, business, and regulatory frameworks for a truly 'whole-of-society' approach towards the advancement of digital transformation.

The UNDP Digital Transformation Framework, shown below, identifies the fundamental aspects around which to structure and prioritise national digital transformation efforts and agendas. The framework is composed of 5 pillars: connectivity, government, regulation, economy and people with digital public infrastructure as a foundation.

Central to the UNDP's strategy is the focus on people; to ensure that no one is left behind from the potential benefits of digital and enabling countries to leverage technology to achieve the Sustainable Development Goals.



DRA Methodology

The UNDP Digital Readiness Assessment is a survey-based tool to provide rapid, high-level insights into a country's digital strengths and opportunities. It is intended to serve as an "entry point" for increased engagement between governments, policy makers, academia, CSOs, private sector and UNDP Country Offices, a broad range of UNDP experts, and other international development partners.



The assessment has been designed to be used in conjunction with other tools and existing research. It is founded on several key principles: easy to complete, drawing on a mixed-method approach; providing real-time insights related to the 2030 Agenda, recognising that technology is a foundation and an enabler; providing iterative, tailored, and actionable results; and founded on inclusivity.



The Digital Readiness Assessment also aims to improve coordination and clarity **to drive a whole-of-government and whole-of-society approach to digital transformation.** This is crucial in achieving digital inclusion, ensuring that no one is left behind from the potential of digital, and enabling countries to leverage **digital to achieve the Sustainable Development Goals.**

The Digital Readiness Assessment is an online tool that combines information from non-representative digital surveys for experts and stakeholders, as well as data and desk research, to provide context and include other reports and assessments.

The Expert Survey features 104 single-choice, multiple-choice, and free-text responses. It is split into eight sections: DPI, Connectivity, Government, Regulation, Economy, People, and socio-demographic questions. The survey is targeted at a few experts in the country from diverse sectors who can provide an expert or objective opinion on the different sections.

The Stakeholder Survey features 63 single-choice and multiple-choice responses targeted at stakeholders in government (both national and local government), the private sector (including business associations), and civil society organizations.



DRA Methodology

The DRA also integrates **existing data indicators from a number of organizations**. This data comes from [UNDP Digital Compass](#), a digital-related data repository that features updated data and indicators by country in each of the sections of the DRA.

A set of scores is established for each pillar and sub-pillar through a series of weighted results derived from surveys and external data indicators. This approach allows the Digital Readiness Assessment (DRA) to provide an automated snapshot of a country's digital landscape.



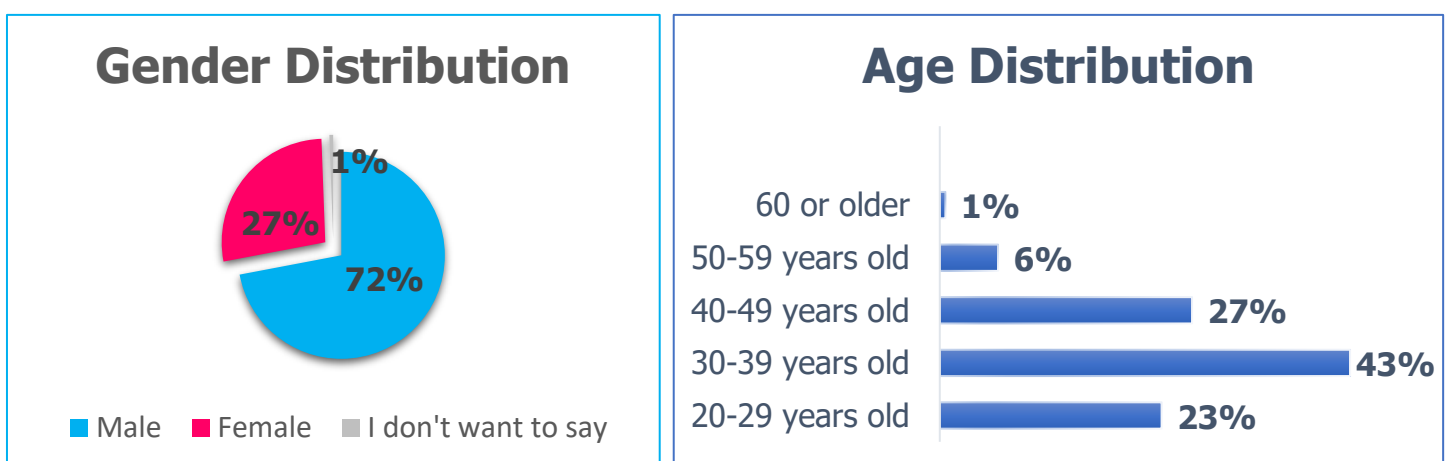
The DRA in Eswatini

In Eswatini, the Digital Readiness Assessment (DRA) was launched in August 2024 during a hybrid workshop hosted at the UN House, which brought together government and private sector participants. During this meeting, attendees completed both surveys using Microsoft Forms. To ensure comprehensive data collection, a team of 14 enumerators from ESEPARC facilitated Computer-Assisted Personal Interviewing (CAPI), conducting 340 interviews for the stakeholder perception survey and 14 interviews for the expert survey, all conducted in English.

The assessment methodology integrates three key components: first, desk research, which involves a thorough review of existing literature, reports, and data sources relevant to Eswatini's digital landscape; second, the Stakeholder Perception Survey, comprising 340 interviews that captures a diverse range of perspectives from various sectors of society; and third, the Expert Survey, consisting of 14 in-depth interviews with subject matter experts that provide specialized insights into Eswatini's digital readiness. This multi-faceted approach ensures a holistic view of the country's digital readiness by combining quantitative data with qualitative insights from both the general public and domain experts. Although the survey does not aim to be statistically representative, it offers valuable insights into the perceived strengths, challenges, and opportunities within Eswatini's digital transformation journey.

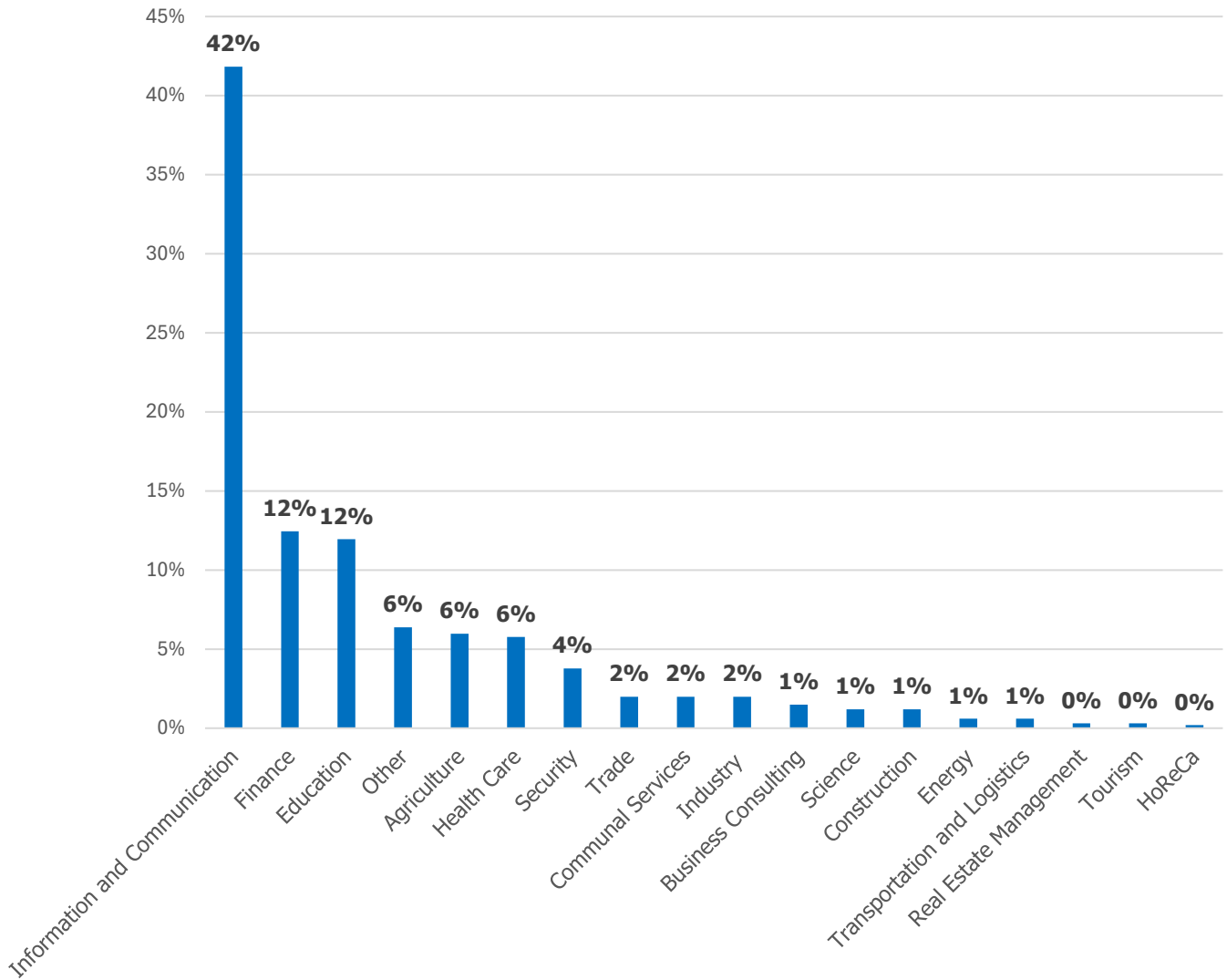
The DRA positions Eswatini as a country systematically applying digital tools and approaches to enhance its governance and public service delivery. This strategic alignment with the Digital Development Compass framework fosters deeper collaboration between stakeholders and facilitates informed discussions about improving digital readiness across various sectors.

Stakeholder Survey Demographics



The DRA in Eswatini

Survey Respondents by Sector





Ministry of ICT e-Government Director Bonga Ndlangamandla at the launch of the Digital Readiness Assessment (DRA) survey, August 2024.

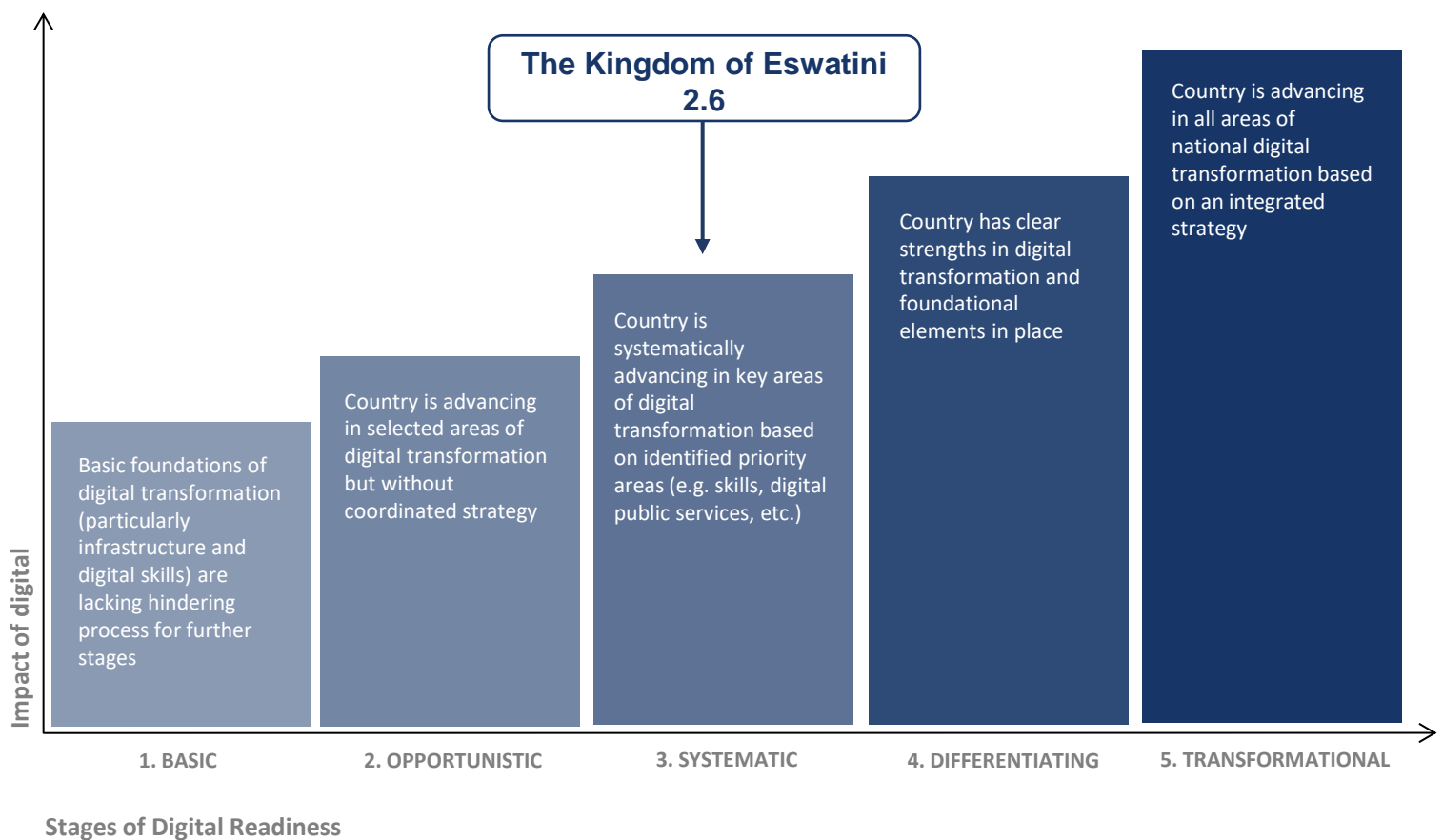


Results



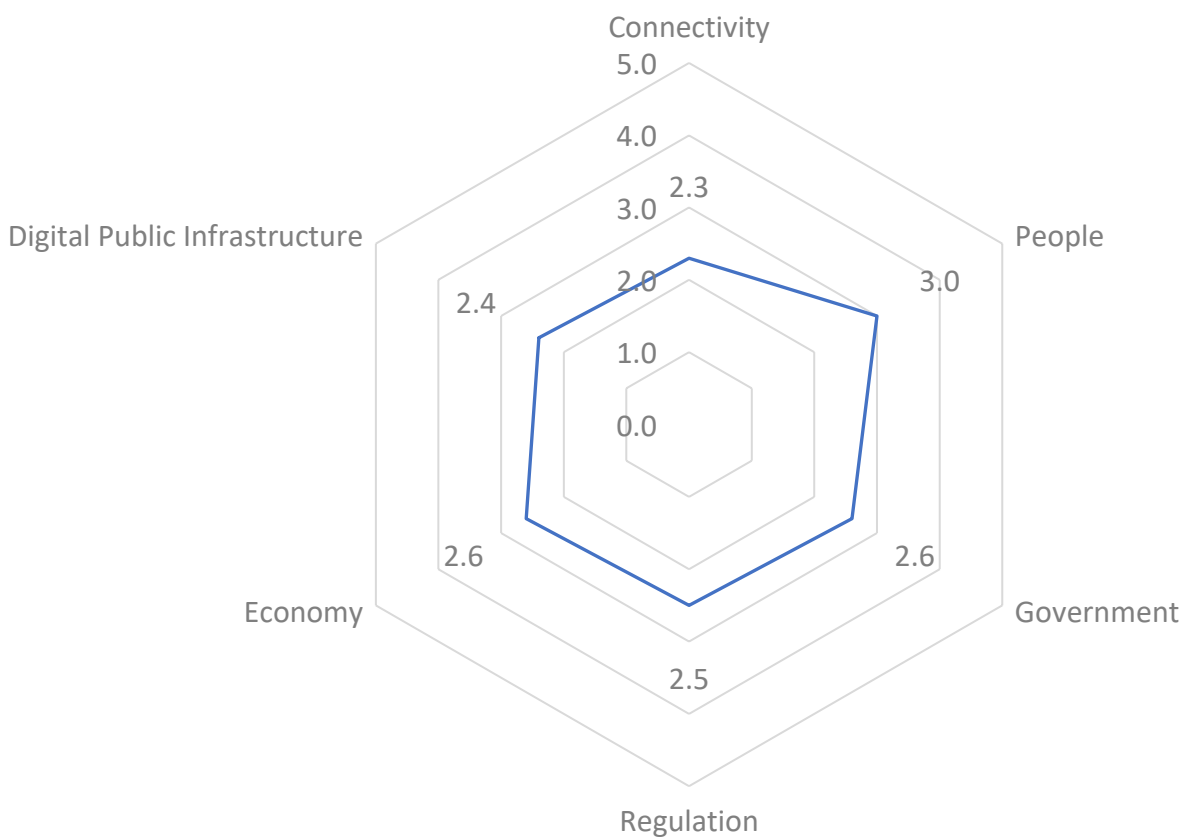
Country Results:

The relevant digital interventions for each country depend on the stage of “digital readiness”. The Digital Readiness Assessment positions the Republic of Belarus in its Systematic stage of digital readiness.



Country Results:

Eswatini's digital readiness is considered 'systematic' – meaning the country is systematically advancing in key areas of digital transformation based on identified priority areas. With an overall score of 2.6, Eswatini demonstrates progress across various dimensions of digital development, but also highlights areas requiring further attention and investment





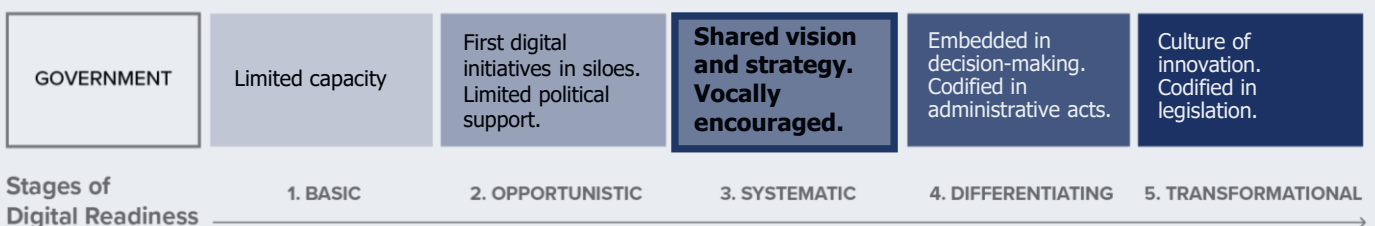
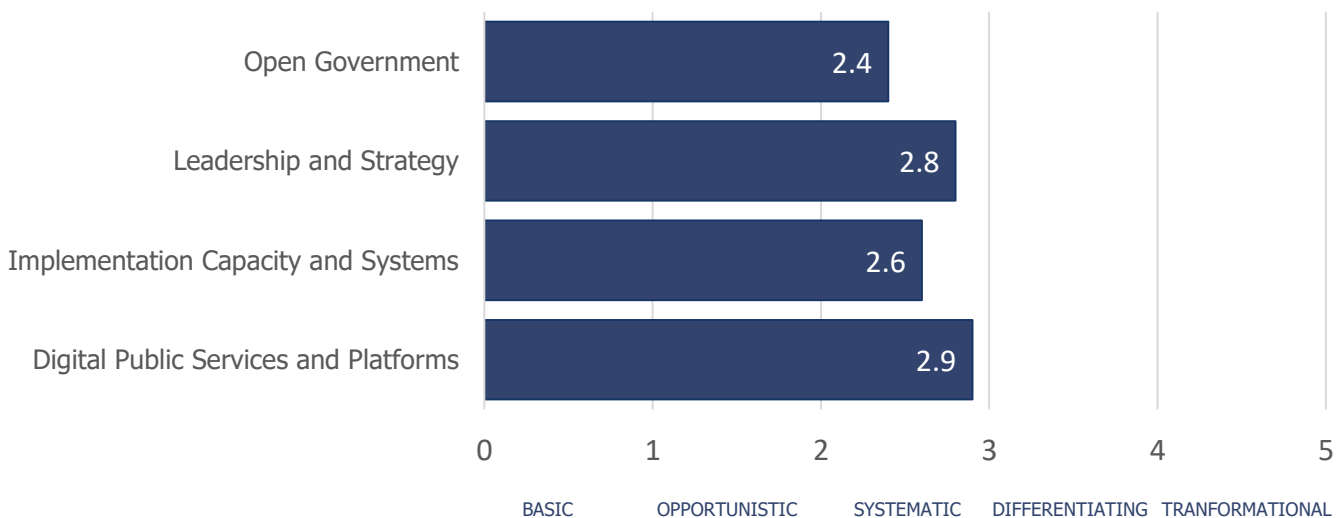
Government

Score 2.6 Systematic Stage



The Government pillar encompasses aspects related to a government's commitment, capacities, functions and processes related to digital transformation. The government should lead digital transformation by collaborating with the private sector and civil society. This requires delivering high-quality, inclusive, and sustainable digital services through a digitally skilled workforce, supported by service standards, sustainable funding, and open procurement. Strong political and civil service leadership, clear mandates, and robust monitoring are essential for successful transformation and evaluation of progress.

Eswatini is in a Systematic Stage of digital readiness for the Government Pillar. Government strategies towards the online transformation of public sector services are in progress with improvements in the integration of key services such as utility payments, education and taxation. However, substantial challenges are still at hand, especially with long-term funding for continued development and expansion as well as limited digital skills and opportunities for training.



Leadership strategy and coordination

2.8

The leadership strategy and coordination sub-pillar focuses on the strategic direction and governance mechanisms guiding a country's digital transformation efforts. It assesses whether there is a clear, government-wide digital strategy, plan, or vision, as well as the institutional capacity to implement it. Additionally, it evaluates the inclusivity of the digital transformation process and the priority given to digital initiatives by top government officials.

Leadership and Coordination score places Eswatini in a systematic stage. Although a digital strategy or vision exists, digitalization has only moderate priority and political support. A designated ministry coordinates its implementation with other government agencies.

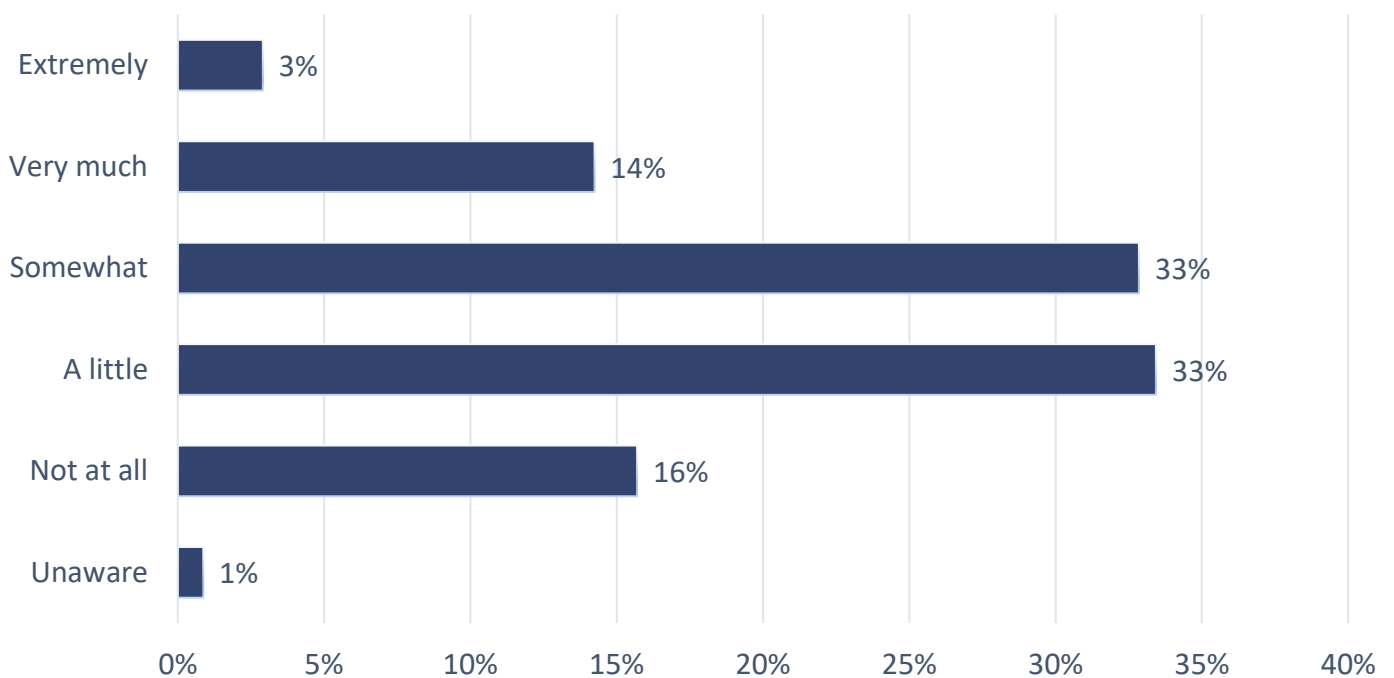
The Eswatini government has introduced several foundational strategies to promote digital development, including the e-Government Strategy (2013-2017) and the Eswatini Digitisation Strategy (2024-2028). These initiatives aim to streamline government processes, enhance digital literacy, and create a cohesive digital infrastructure to improve service delivery nationwide. Survey findings indicate that a national digital plan is currently in implementation, with 64% of respondents acknowledging its progress. However, of those, 50% feel the implementation is delayed or progressing very slowly. Challenges identified include poor design, limited political support, and insufficient institutional coordination, all of which have contributed to the slow pace of implementation.

The study also highlights a considerable lack of awareness regarding Key Performance Indicators (KPIs) associated with Eswatini's digital strategy. About 43% of respondents are unsure whether KPIs exist to measure the strategy's success, suggesting possible communication and transparency issues within government institutions. Additionally, 29% of respondents believe no KPIs are in place, raising concerns about the government's ability to effectively monitor progress. The absence of clearly defined KPIs makes it challenging to assess outcomes, successes, and areas needing improvement, potentially affecting accountability and hindering data-driven adjustments. Meanwhile, 14% of respondents acknowledge the presence of KPIs for some services, though they note that others are still in development. This partial implementation of KPIs reveals gaps in performance tracking, leading to a fragmented understanding of progress among stakeholders. Overall, these findings underscore the importance of establishing clear, comprehensive performance metrics and improving communication to facilitate better evaluation of Eswatini's digital transformation.

The Ministry of Information, Communications, and Technology (MICT) in Eswatini is a key driver of the nation’s digital transformation, responsible for overseeing the national digital strategy, promoting universal access, and ensuring compliance with international ICT standards. However, survey results reveal mixed perceptions about the MICT’s effectiveness in leading digital transformation. While 57% of respondents confirm the presence of a dedicated task force to coordinate these efforts, opinions differ regarding its operational status—some see it as partially functional, while others view it as fully operational. This variation suggests possible communication gaps around the task force's mandate and activities. Successful digital transformation depends on robust governance structures, clear role definitions, and effective coordination mechanisms, emphasizing the need for enhanced transparency within the MICT.

Despite these ongoing efforts, opinions on Eswatini's assertiveness in driving digital transformation remain divided. While 33% of respondents perceive the country as somewhat or modestly bold in this endeavour, 16% hold a contrasting view, indicating differing levels of confidence in Eswatini’s digital leadership trajectory.

Mixed Perception of Digital Transformation in Eswatini: Majority See Bold Efforts, but Some Remain Unaware



Implementation capabilities and systems

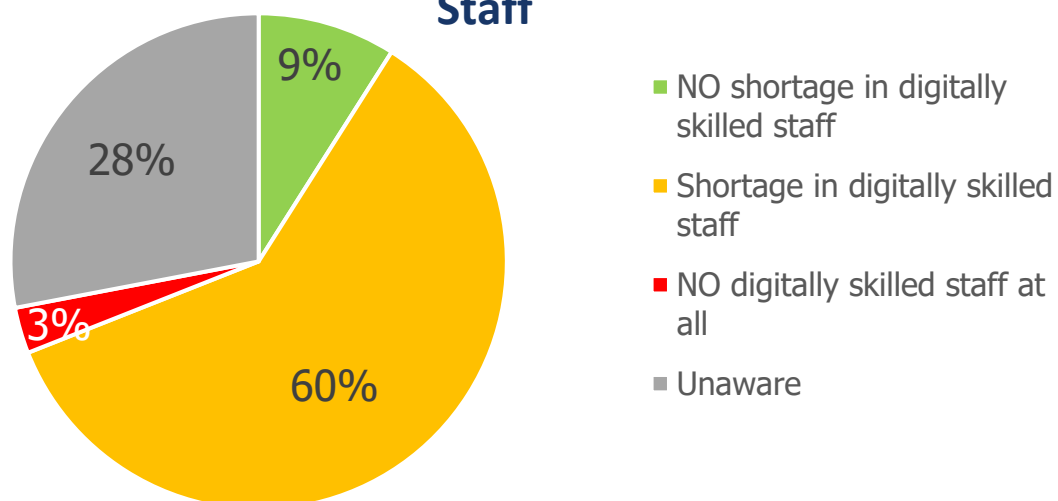
2.6

This sub-pillar consists of three key components: Tech Systems, Digital Skills, and Funding & Procurement. It focuses on the government's capacity to implement digital projects, including the availability of skilled staff, targeted training, and the adoption of new technologies. It also assesses the presence of centralized infrastructure, alongside the adequacy of funding, procurement standards, and technical support critical for successful digital transformation.

Eswatini's digital transformation agenda places a strong emphasis on developing digital skills within the public sector to overcome the significant challenges posed by outdated technologies and a shortage of trained IT personnel, particularly at the local government level. The General Education Framework, introduced in 2021, represents a key initiative aimed at reshaping the education system to improve digital literacy. This framework includes ICT as a subject starting from Grade 3, with plans for progressive expansion to higher grades by 2025.

The DRA Survey, however, highlights the extent of the digital skills gap within the government. A notable 60% of stakeholders indicated that the government lacks sufficient digitally skilled staff, reflecting a significant capacity gap that could hamper the country's transition to a fully digitalized government. This skills gap is particularly concerning as it implies that the government may struggle with the technical aspects of digital transformation, such as managing ICT infrastructure, developing digital services, and maintaining cybersecurity protocols. The absence of critical skills in areas like network engineering, programming, and system development could result in delayed project implementation, increased dependency on external consultants, and inefficient management of digital platforms.

Availability of Digitally Skilled Government Staff



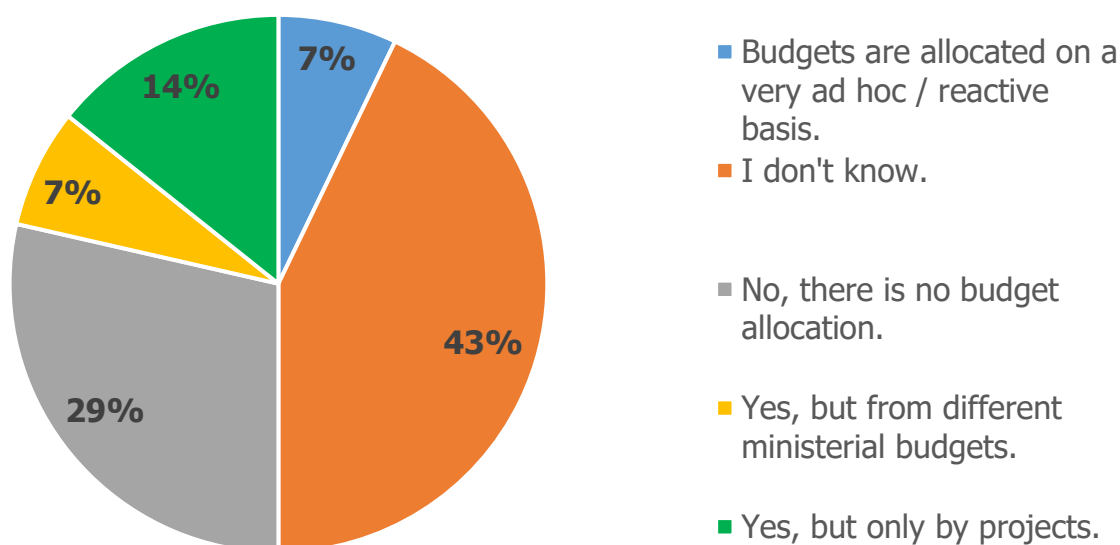
Implementation capabilities and systems

2.6

The analysis of funding for digital transformation in Eswatini reveals a significant challenge in ensuring the sustainability and effectiveness of digital initiatives. According to the expert survey, 28.26% of respondents highlighted the absence of a dedicated budget for digital initiatives in the public sector, which reflects a non-structured and inconsistent approach to funding. This lack of a structured financial framework implies that the government's digital transformation efforts may rely heavily on ad-hoc funding mechanisms, raising concerns about the continuity and long-term impact of these programs. Without secure, ongoing funding, digital transformation projects run the risk of being discontinued or delayed, undermining the broader goals of modernizing government operations and improving service delivery.

The reliance on intermittent or one-time funding for digital initiatives can create a cycle of dependency, where projects start but cannot be fully sustained or scaled. This lack of financial stability is a common barrier to digital transformation in many developing countries, where public sector digital projects often depend on external or short-term funding sources. The absence of a long-term financial commitment to digital transformation not only affects the ability to implement projects but also weakens the overall momentum of the digital strategy. This is especially concerning for Eswatini's broader ambition to establish itself as a regional digital hub.

Budget Allocation for Digital Strategy Implementation



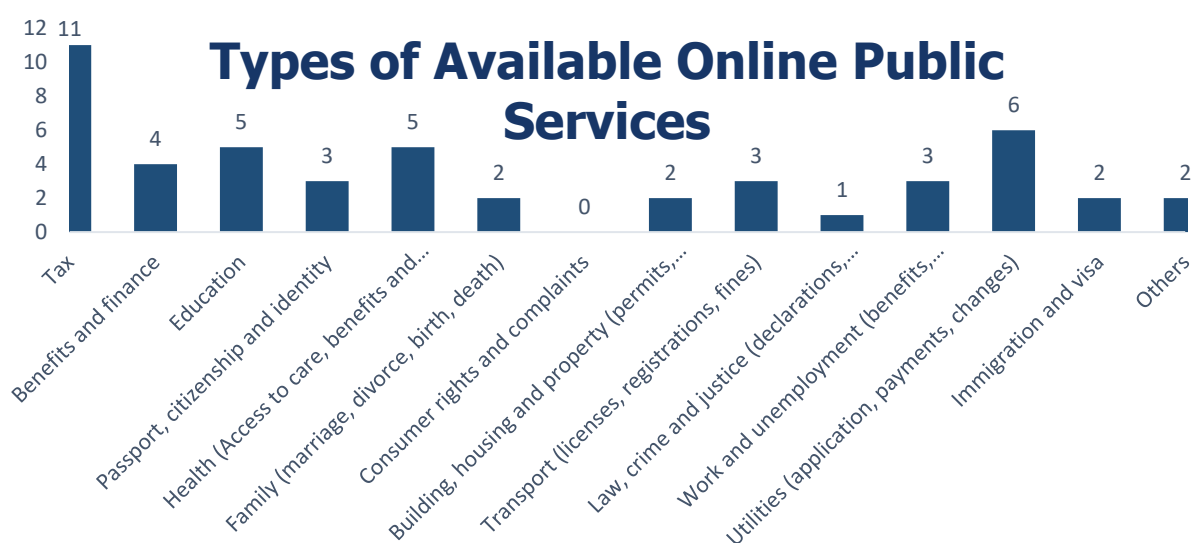
Digital public services and platforms

2.9

The Digital public services and platforms sub pillar covers two main components namely online services and service delivery platforms. It focuses on the use of technology and platforms used to deliver various (Government to consumer) G2C and (Government to business) G2B at local, regional and national levels. It also refers to eGovernment, GovTech or Smart Public Services.

Eswatini’s digital transformation initiatives reveal a diverse range of e-government services aimed at improving accessibility, efficiency, and responsiveness in both Government-to-Consumer (G2C) and Government-to-Business (G2B) interactions. The findings from the expert survey indicate substantial progress in certain areas, such as tax and utility services, with 22.4% of experts affirming the availability of tax services and 12.2% confirming digitized utility services. Health and education services also show promise in digital adoption, with 10.2% of experts indicating their availability. These findings suggest that, while foundational digital services are being adopted across multiple ministries, there remain significant gaps, particularly in family, property, and immigration services, where only 4.1% of experts noted their availability. Moreover, the usage data from stakeholders' points to a growing reliance on these platforms, as 166 stakeholders reported utilising online utility services and 138 accessed tax services in the past year.

Despite these advancements, the survey results also reveal areas requiring targeted improvement. Family, property, and immigration services lag in digital transformation, with limited adoption among the population. Only about 20 stakeholders engaged with these types of services online in the past 12 months, underscoring the need for increased digital access and public awareness. The discrepancy between the availability and usage of essential services signals potential barriers such as limited public awareness, lack of digital literacy, or perhaps technological constraints that affect accessibility, especially in underserved regions



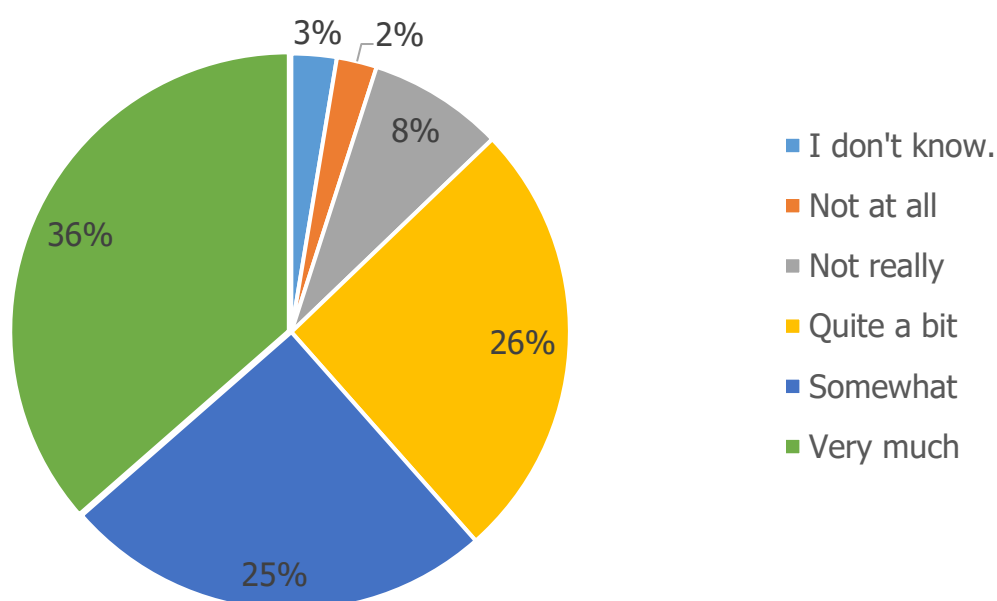
Digital public services and platforms

2.9

The survey data reflects a generally positive perception among stakeholders regarding the impact of digital technology on government services in Eswatini. Specifically, 36.4% of stakeholders report that digital technology has significantly improved government services, while 25.1% perceive a moderate impact. This suggests that the government's digital transformation initiatives have been well-received, affirming the value of these efforts in improving service delivery. Only a small percentage, 2.3% of stakeholders, feel that digital transformation has had no impact, and 7.9% were unsure, which may indicate a lack of awareness or direct experience with these services.

The survey also identified critical areas where stakeholders desire further expansion of digital services. The top three services for potential development include immigration and visa services, identity document services, and health services. This feedback highlights an opportunity for the government to prioritise these areas in future digital strategies, ensuring that they align with public demand and address current service gaps. The interest in digital identity and health services particularly reflects a growing need for accessible, efficient solutions in areas that directly impact citizens' daily lives and well-being

Impact of Digital Technology on Government Services



Open government

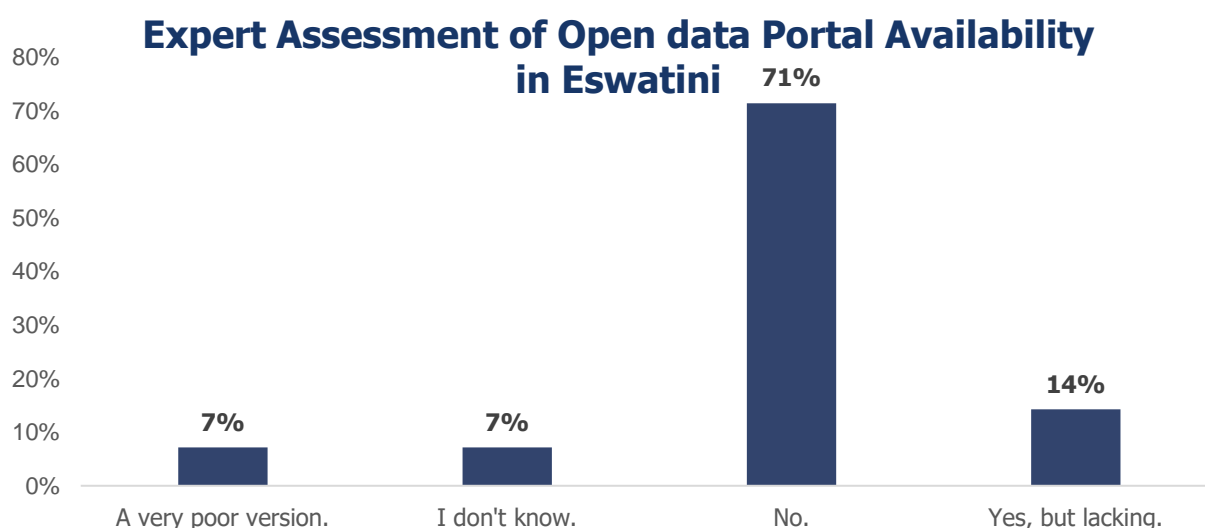
2.4

The Open government sub pillar consists of three key components: Transparency, Participation, and Open Government Data. It focuses on the extent to which governments are accessible, responsive, and accountable to the public through data usage, participatory tools, and transparency mechanisms aligned with international standards.

The score for this sub-pillar places Eswatini in a systematic stage, reflecting a controlled approach to governance. Information is shared regularly, but largely unilaterally, with limited stakeholder consultation. Grievance redress mechanisms remain limited for some services.

Eswatini's performance in the 2022 Open Data Inventory (ODIN) highlights significant gaps in its open data infrastructure and reflects broader challenges in implementing effective open government data initiatives. Ranked 191st globally out of 195 countries, Eswatini has an overall ODIN score of 15, with a data coverage score of 14 and an openness score of 17.¹ This ranking underscores a critical need for improvement, especially when considering the global standards for open data transparency and accessibility. In contrast, within Southern Africa, Eswatini ranks 5th out of 5 countries, further illustrating its lagging position even within a regional context.

This low ranking reveals the constraints faced by Eswatini's Central Statistics Office (CSO), which was established under the Statistics Act of 1967 and serves as the central entity responsible for managing and disseminating government data. The CSO plays a crucial role in coordinating the National Statistical System (NSS) and providing high-quality statistical data to support evidence-based policymaking. However, the outdated data frameworks and the absence of a centralized open data portal significantly hinder the CSO's effectiveness. These limitations are also reflected in survey results, where 71% of respondents report the lack of an open data portal, and 14% acknowledge the availability of limited data resources but emphasize the significant inadequacies in meeting current demands.

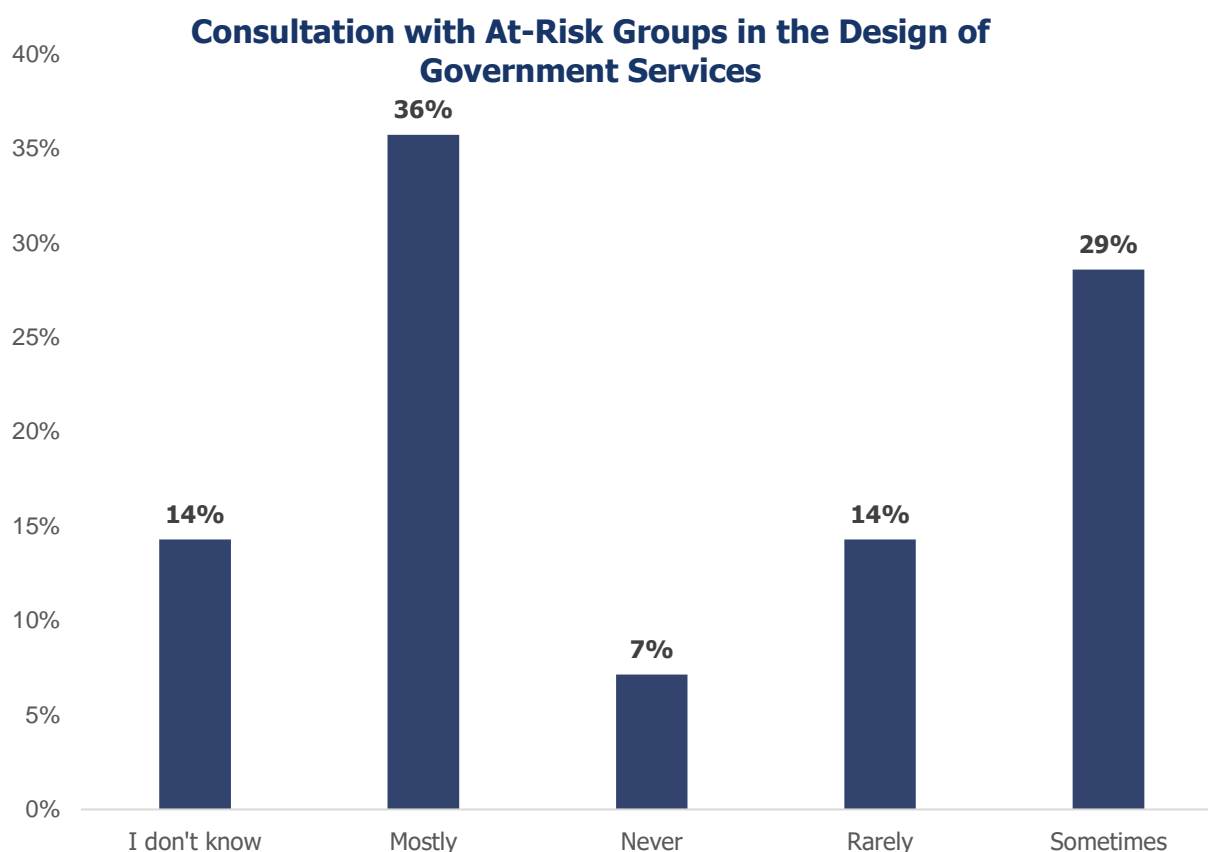


Open government

2.4

Eswatini's adoption of open government principles marks an essential step toward a more transparent, accountable, and participatory governance model. This aligns with global norms for open government, yet challenges such as outdated frameworks and limited digital infrastructure restrict the full realization of these principles. These constraints not only hinder effective civic engagement but also limit the scope of open data initiatives in Eswatini.

The expert survey findings reveal that 65% of respondents believe certain groups are likely to be excluded from consultations in designing government services, while only 7% affirm that inclusion occurs with certainty. These findings align with the observations of Hansson, Belkacem, and Ekenberg (2015), who studied civic exclusion in digital governance across developing nations. Their work emphasises that limited public engagement platforms and low digital literacy often result in the exclusion of marginalized communities from governance processes. The lack of inclusion in Eswatini's consultations reflects broader trends identified in developing regions, where limited infrastructure and restrictive legal frameworks often prevent meaningful citizen engagement



Government recommendations



1. Strengthen Political Commitment to Digital Transformation

Objective: Secure and enhance political support for digital transformation initiatives by actively engaging senior government leaders, ensuring that digital strategies are prioritized as key components of national development.

Recommendations:

- Engage senior leaders through regular briefings: Schedule consistent meetings and presentations with top government officials and policymakers to update them on the progress, challenges, and successes of digital transformation projects. These briefings should include data-driven insights and case studies that highlight the impact of digital initiatives on national development.
- Integrate digital transformation into national agendas: Ensure that digital initiatives are prominently featured in national development plans, policy documents, and public statements by political leaders. This integration reinforces the importance of digital strategies and aligns them with broader economic and social goals.
- Foster a culture of digital advocacy among political figures: Encourage political leaders to champion digital transformation by participating in digital forums, speaking at technology conferences, and publicly supporting key initiatives. Their active involvement can inspire confidence and mobilize resources across government departments.
- Provide training and awareness programs for political leaders: Develop specialized training sessions for senior leaders to deepen their understanding of digital technologies, trends, and their potential applications in governance. Enhanced knowledge among political figures can lead to more informed decision-making and stronger advocacy for digital projects.

2. Establish a Centralized Digital Transformation Office

Objective: Create a unified and coordinated governance structure that clearly defines roles, responsibilities, and accountability for digital transformation efforts across all government entities, ensuring cohesive and efficient implementation.

Recommendations:

- Develop a centralized digital transformation office: Establish a dedicated office at the highest level of government responsible for overseeing digital initiatives, coordinating between different ministries and departments, and ensuring alignment with national digital strategies.

Government recommendations

- Define clear roles and responsibilities: Outline specific duties for each government entity involved in digital transformation, ensuring that there is no overlap or ambiguity in responsibilities. This clarity helps streamline processes and enhances accountability.
- Appoint C-suite leadership for digital initiatives: Assign Chief Digital Officers (CDOs) or similar high-level positions within key government departments to lead digital projects. These leaders should have the authority and resources to drive digital strategies and collaborate effectively with other sectors.
- Implement a governance framework with standardized processes: Create standardized procedures for planning, executing, and evaluating digital projects. This framework should include guidelines for project management, resource allocation, risk assessment, and performance measurement to ensure consistency and quality across all initiatives.
- Facilitate inter-departmental collaboration: Promote regular communication and collaboration between different government departments and agencies involved in digital transformation. Joint task forces, inter-agency committees, and collaborative platforms can help synchronize efforts and share best practices.

3. Fast-track the implementation of the "Government in your hand" project

Objective: To facilitate the accelerated implementation of the "Government in Your Hand" project by addressing key operational, technical, and stakeholder engagement challenges, thereby enhancing e-governance and improving service delivery in Eswatini.

- Develop a Comprehensive Roadmap: Create a detailed implementation plan with clearly defined milestones, timelines, and responsibilities.
- Strengthen Digital Infrastructure: Invest in scalable ICT infrastructure, including improved internet connectivity in rural and underserved areas. And ensure system reliability through the deployment of robust servers, cybersecurity measures, and backup solutions.
- Build Institutional Capacity: Train government staff and technical teams to effectively manage and operate e-governance platforms and establish dedicated teams to provide ongoing support and address technical issues promptly.
- Create an on-going digital training programme to support government employees
- Secure Adequate Funding: Explore partnerships with development agencies and private sector stakeholders to secure funding for technology upgrades and operational costs, and leverage existing government budgets and reallocate resources for priority activities.
- Promote Policy Alignment: Harmonize the project with existing policies on e-governance, data protection, and ICT development to ensure regulatory frameworks support the integration and scalability of the project.

Government recommendations

4. Enhance Communication of Digital Transformation Strategies

Objective: Improve the dissemination and understanding of existing digital strategies, such as the e-Government Strategy and the Eswatini Digitisation Strategy, to foster greater awareness, collaboration, and support among stakeholders and the general public.

Recommendations:

- Develop comprehensive communication plans: Create detailed plans that outline how information about digital strategies will be shared with various audiences, including government employees, citizens, businesses, and international partners. Utilize multiple channels such as websites, social media, newsletters, and press releases to reach a broad audience.
- Provide regular updates on strategy progress: Share periodic reports and updates that highlight milestones achieved, ongoing projects, and future plans related to digital transformation. These updates can be disseminated through official government portals, public forums, and media outlets to keep stakeholders informed and engaged.
- Organize public forums and workshops: Host events where government officials present digital strategies, discuss their implications, and gather feedback from participants. These forums can facilitate dialogue between the government and the public, enhancing transparency and fostering a sense of ownership among citizens.
- Create an enabling environment for citizen engagement: Encourage citizens to participate in digital governance by upholding their rights to information and expression. Implement policies that protect these rights and promote an inclusive, safe space for dialogue and feedback, ensuring citizens feel empowered to share their opinions without fear of reprisal.

5. Encourage Citizen Participation Through Interactive and User-friendly Platforms and raising awareness about government services

Objective: Enable citizens to actively engage with government initiatives by creating platforms that allow for feedback, idea-sharing, and direct communication with government.

Recommendations:

- Develop interactive and user-friendly online engagement platforms: Create official online forums, feedback portals, and survey platforms where citizens can provide input on ongoing and proposed government services. These platforms should be easy to navigate, with sections dedicated to specific sectors (e.g., health, education, infrastructure) to streamline the feedback process.
- Incorporate citizen feedback into decision-making: Set up transparent processes to ensure feedback is reviewed and used in shaping policies. Publicize examples where citizen input has directly influenced decisions, fostering a sense of accountability and reinforcing the value of civic participation.

Government recommendations



- Raise awareness to encourage the adoption and utilisation of government digital services using multiple awareness platforms:
- Create tutorials and guides for digital service use: Publish short video tutorials and step-by-step guides on government websites, social media, and popular messaging platforms. These guides should explain how to complete specific tasks, such as making utility payments online, filing taxes, or accessing educational records, with language options to cater to different linguistic groups.

6. Leverage GovTech Innovations for Improved Service Delivery

Objective: Enhance the efficiency and quality of public service delivery by forming strategic partnerships with technology companies to develop and implement innovative GovTech solutions tailored to citizen needs.

Recommendations:

- Explore partnerships with tech companies: Collaborate with local and international tech firms to design and pilot digital solutions such as AI-driven chatbots for service inquiries, automated systems for permit processing, and predictive analytics to improve response times in high-demand services like healthcare and emergency support.
- Pilot emerging technologies in service delivery: Test blockchain for secure and transparent record-keeping, cloud-based platforms for interdepartmental coordination, and IoT devices for real-time monitoring in areas like utility management. These technologies can streamline operations and improve service accessibility.
- Adopt an iterative design and feedback process: Regularly seek citizen feedback on new technologies and improvements, using surveys, online forums, or focus groups to understand user experience. Adapt GovTech solutions based on this feedback to ensure services remain responsive to evolving citizen needs.

7. Enhance Transparency Measures Through Open Data and Accessible Information

Objective: Foster greater transparency in government operations by providing citizens with access to relevant data and information, building trust and accountability within the digital government framework.

Recommendations:

- Implement open data initiatives: Develop a government open data portal that provides citizens with access to datasets on areas such as public expenditure, project budgets, environmental monitoring, and health statistics. Structure the data to be user-friendly, easily downloadable, and accessible without technical expertise.



Government recommendations



- Ensure regular data updates and accessibility: Set policies for consistent data updates across sectors and require that information is presented in an accessible format, with clear labeling and explanations. This ensures that the data remains relevant and usable, even for those with limited data literacy.
- Establish data protection and usage policies: Ensure that transparency initiatives adhere to data privacy standards, particularly when sharing information that may include or impact personal data. These policies should outline how data is collected, stored, and shared, building public confidence in the security of open data initiatives.
- Adopt open government principles: Implement the Open Government Partnership (OGP) principles or similar frameworks, which emphasize transparency, accountability, and public engagement. Establish policies that clearly communicate the government's commitment to these standards and provide training for public officials on their importance.



Digital Public Infrastructure

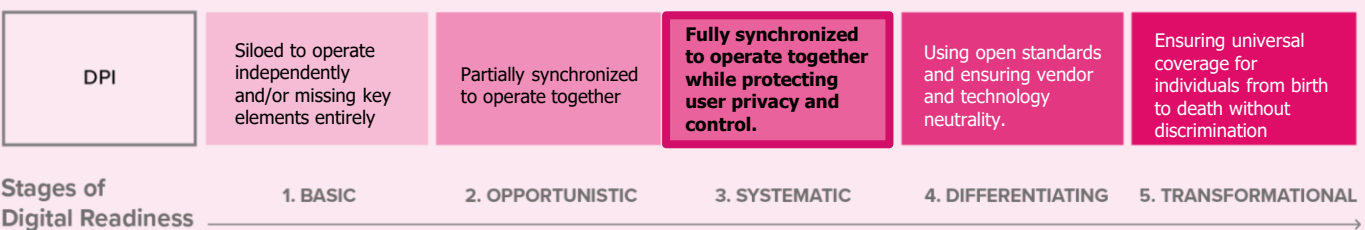
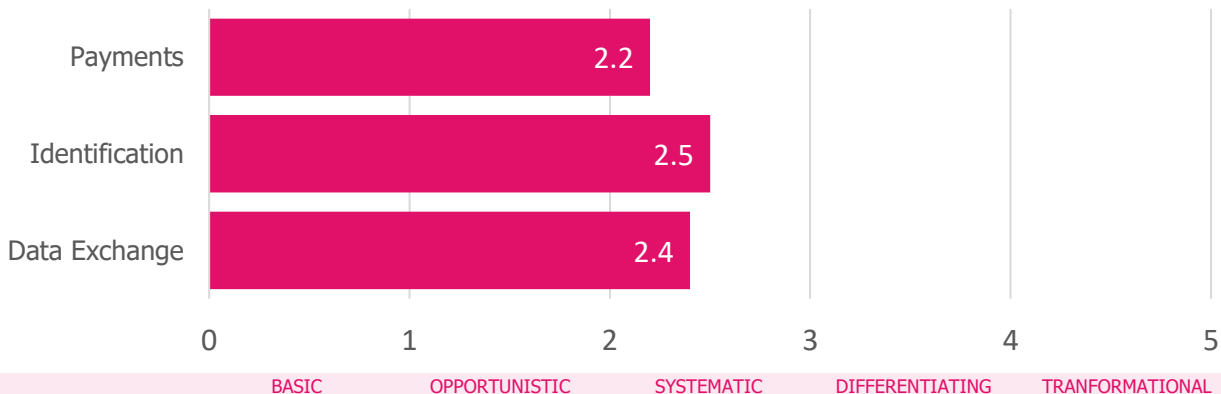


Score 2.4 Systematic Stage



Digital Public Infrastructure is driving digital transformation with a truly whole-of-government and whole-of society approach. These foundational systems improve the functioning, inclusivity, and sustainability of digital transformation. Foundational systems are driven by data, and this makes data exchange a crucial component of a country's digital progress. This includes systems of open government data, including to drive the development of products and services in the private sector, and canonical data registries. Digital legal identity, covering the entire population is crucial to ensure inclusivity, access and participation in the digital – and broader – economy. This legal identity is often the unique identifier used in databases and other digital government components. Finally, a digital payments ecosystem is a catalyst in enabling the benefits of e-commerce and financial inclusion. This ecosystem includes digital financial service providers, but also the national and global enablers (such as platforms, agents, processors, and a commitment to interoperability).

Eswatini is in a Systematic Stage of digital readiness for the Digital Public Infrastructure Pillar. This means that while foundational elements are present, there is room for growth and improvement. Eswatini should ensure the inclusive availability and affordability of a robust national ID system. This should include both physical and digital ID formats. Furthermore, the country must ensure interoperability of its systems, including the development of a data management strategy. Lastly, ensuring widespread access to and adoption of digital financial services, including mobile and electronic banking is crucial for the country to experience the world that digital payment systems have to offer.



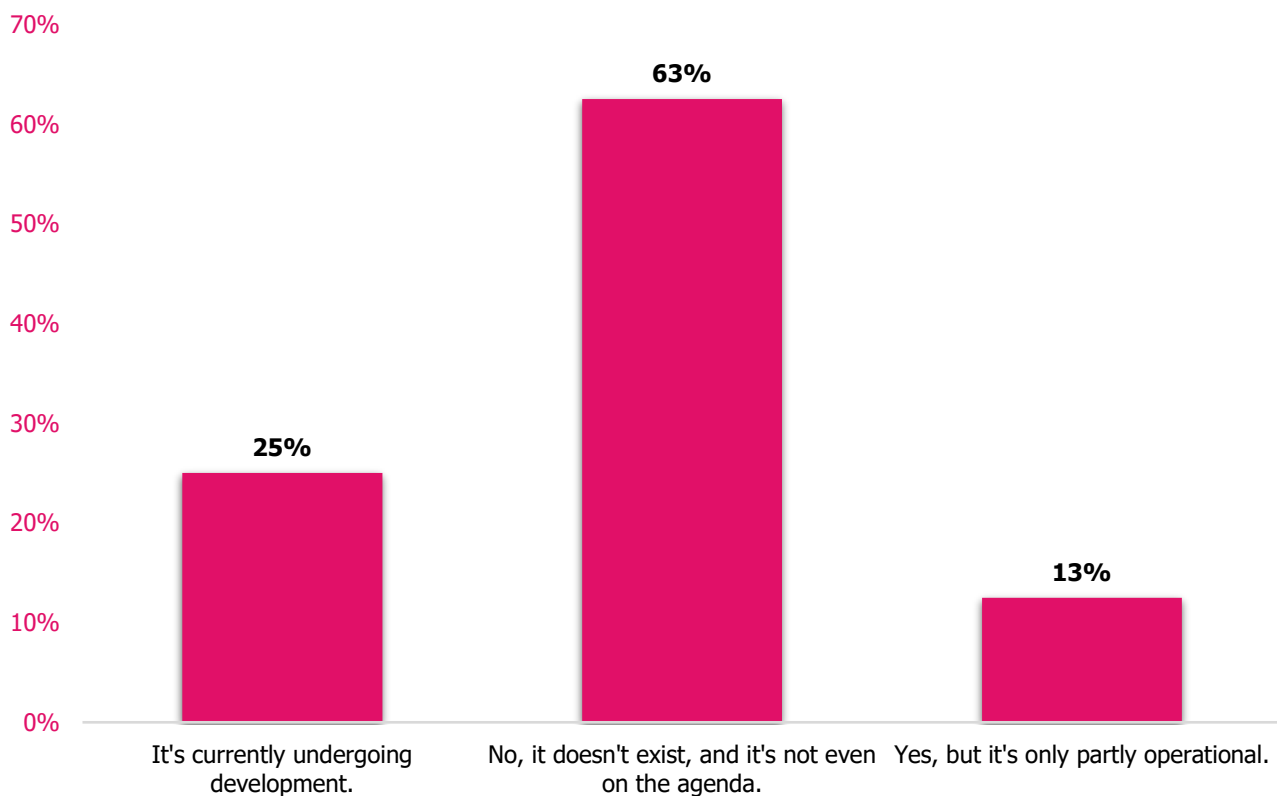
Data exchange

2.4

The data exchange sub-pillar covers the systems that allow information to be managed and shared easily but securely among a diverse network of users. The score for this sub-pillar places Eswatini in a Systematic Stage meaning that a data management model is being considered and information systems, as well as infrastructure for central data repositories are recognized.

Interoperability remains a key challenge in Eswatini. The majority (63%) of Expert Survey respondents reported that an Interoperability Framework doesn't exist and is not even on the Government agenda. This lack of interoperability has resulted in duplicated processes and higher costs, ultimately affecting service delivery to citizens. The implementation of the Data Protection Act No.5 of 2022 provides a regulatory framework for data collection and processing which is crucial for ensuring secure and privacy-preserving data exchange. The development of APIs and cloud-based data exchange platforms is crucial for enhancing data-sharing capabilities and supporting Eswatini's digital transformation strategy.

Interoperability Framework Developed



Identification

2.5

This sub-pillar focuses on the systems that provide trustworthy, accurate and privacy preserving identification of individuals, businesses or other entities. The score for this sub-pillar situates Eswatini in a Systematic Stage meaning that records are digitalized into a machine-readable digital formats, and initial data collection processes and workflows have been established.

Eswatini has established a national population register linked to civil registration, providing adults with national ID cards with unique Personal Identification Numbers (PINs). This system forms the foundation for data exchange across various sectors. However, the current framework lacks a comprehensive digital ID strategy that seamlessly integrates with both public and private sector systems. This gap presents challenges in granting people greater control over their data and credentials, a crucial aspect of modern digital identity frameworks. The system's limitations in enhancing inclusivity, particularly for marginalised groups, highlights the need for a more integrated approach to data exchange and management.

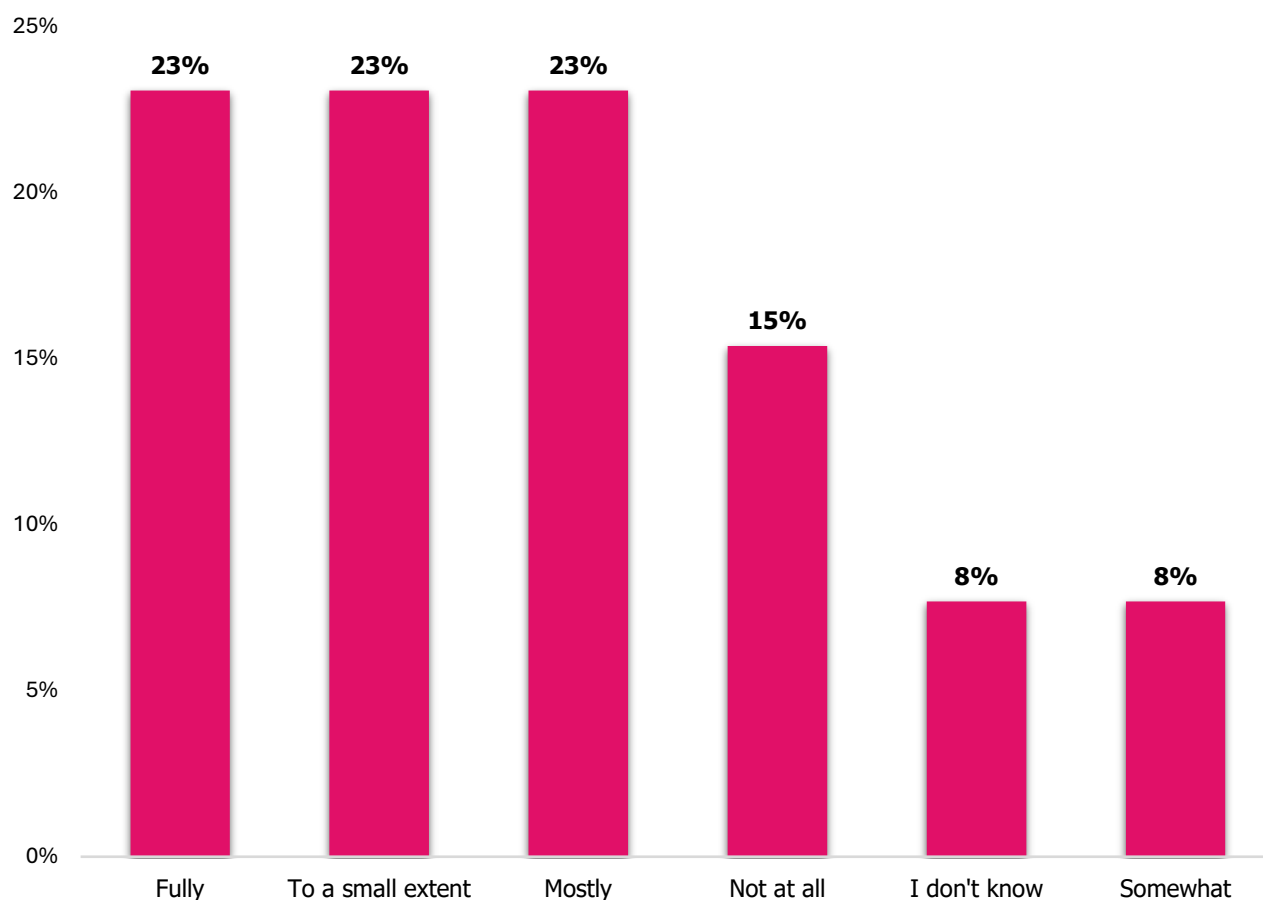
The adoption of the District Health Information System (DHIS2) for Education exemplifies Eswatini's transition from paper-based to digital systems in data exchange. This platform, originally designed for health information management, has been adapted as a robust Education Management Information System (EMIS). The system captures detailed data on students and teachers using PINs, facilitating real-time data collection and analysis. This approach aims to enhance budgeting, planning, and monitoring of educational programs, while also addressing gaps in areas such as Early Childhood Care Development and Special Needs Education. The decentralisation of data collection empowers schools and districts to manage and utilise data more effectively, promoting timely transmission of quality data and enabling effective decision-making at all levels

Identification

2.5

The Expert Survey results revealed that the registration system is effective in capturing vital events such as births, deaths, marriages, and divorces, but there is a gap in the registration of adoptions, highlighting that the system does not fully encompass all vital life events for individuals. Moreover, the Expert Survey indicates some varying degrees of digitalisation of the civil registration system, with 23% saying that the system is fully digitalised. On the other hand, 15% indicated that the civil registration system in Eswatini is not digitalised at all. This uncertainty among the respondents hinders the effective capture and management of vital events and this indicates that there is a need for improved digitalisation efforts to enhance overall functionality and accessibility.

Extent of Digitalisation of Civil Registration System



Payments

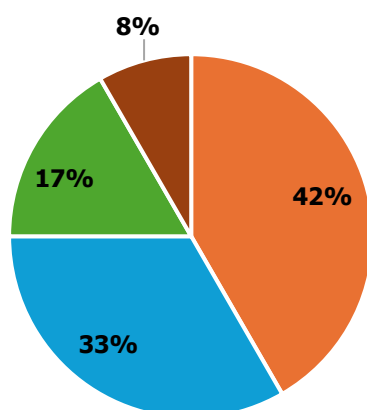
2.2

The payments sub-pillar covers the availability of open and interoperable digital payment infrastructure for clearing, settlement and processing (e.g., automatic clearing houses, real-time gross settlement systems). The score for this sub-pillar situates Eswatini in the Systematic Stage meaning that there is an introduction of digital access to bank accounts, and the digitization of traditional banking with debit and credit cards, and online banking to process cashless payments.

The growth of digital payments in Eswatini, particularly mobile money services, has been increasing reflecting a shift towards more convenient and efficient financial transactions. The Central Bank of Eswatini (CBE) has established a financial technology (Fintech) unit to support innovative digital financial services and is working towards full interoperability between bank and non-bank payment service providers. The Eswatini Payment Switch (EPS) represents an advancement in the country's digital payments landscape. This initiative aims to modernise the domestic electronic payments ecosystem by interfacing with digital payment systems, Point of Sale (POS) systems, and Automated Teller Machines (ATMs). Challenges persist in the widespread adoption of digital payments, particularly among smaller merchants and in rural areas. Factors such as low levels of financial literacy and trust, the dominance of cash as a preferred payment instrument, and the absence of merchant acceptance points for digital financial services pose significant barriers.

The Expert Survey revealed that the government has made some progress in adopting digital payment systems; most respondents (42%) acknowledge the existence of such systems for select services, while 33% mentioned that the digital payment system used by the Government is somewhat functioning, indicating that the overall functionality and comprehensive application of the the system remains limited.

Extent to which Government use a Digital Payment System



- There is a digital payment system used for some services.
- There is a digital payment system that is somewhat functioning.
- No, there is no digital payments system.
- There is a fully functioning government digital payment system used for all services.



DPI recommendations



1. Develop and Implement National Interoperability Framework

Objective: Create a standardised approach for seamless integration of government digital services while reducing operational redundancy and costs enabling efficient service delivery to citizens

Recommendations:

- Design and implement a comprehensive Interoperability Framework that includes technical standards, data exchange protocols, and security requirements for all government systems, ensuring compatibility across different platforms.
- Establish detailed guidelines for secure data sharing between agencies, including data classification, access controls, audit trails, and compliance with international data protection standards.
- Create a centralised governance structure to oversee framework implementation, monitor compliance, coordinate training programs, and maintain system documentation.

2. Facilitate the implementation of Digital financial payment systems

Objective: To enhance the efficiency, transparency, and accessibility of public financial transactions by implementing secure and user-friendly digital public payment systems.

- Develop a Robust Digital Payment Framework: Establish clear policies and standards for digital payment systems, including security protocols, interoperability, and data protection.
- Support the implementation of IFMIS and create a centralized platform that integrates various government services for seamless payment processing.

3. Coordinate ICT Infrastructure Investment

Objective: Create a unified approach to infrastructure development through coordinated investment and partnerships, ensuring equitable access across urban and rural areas.

Recommendations:

- Develop a comprehensive national blueprint for ICT infrastructure development in Eswatini, with clear implementation timelines and responsibilities.
- Establish formal coordination mechanisms between government funded entities including RSTP, ESCCOM, EPTC, and central/local government to harmonise infrastructure investments.
- Implement public-private partnership policy framework for telecommunications infrastructure development, including low-cost internet programs for underserved communities.



DPI recommendations



- **Upgrade Infrastructure and Technology:** Invest in ICT infrastructure to ensure the reliability and scalability of payment platforms and compatibility with existing financial systems and integrate with mobile payment services commonly used by citizens.
- **Promote User Accessibility:** Design user-friendly payment interfaces that accommodate diverse literacy levels and are accessible in multiple languages, including Siswati.
- **Partner with telecommunications companies** to support payment access in rural and underserved areas, including through USSD and SMS-based solutions.
- **Ensure Security and Fraud Prevention:** Employ advanced encryption and multi-factor authentication to safeguard payment systems from cyber threats

4. Strengthen Digital Identity Infrastructure

Objective: Build an inclusive and comprehensive digital ID system that seamlessly integrates with both public and private sector systems while ensuring individual privacy and data control.

Recommendations:

- Expand the existing national population register to include robust digital identity features with advanced security measures, biometric verification, and privacy controls.
- Develop standardised integration protocols for both government and private sector systems to ensure seamless interoperability while maintaining data protection standards.
- Create targeted programs to ensure inclusion of marginalised groups, including rural populations and elderly citizens, with user-friendly interfaces for data control.



DPI

recommendations



5. Enhance Public Communication and Awareness

Objective: Improve visibility and understanding of digital initiatives among citizens, with a special focus on entrepreneurs and ensuring widespread adoption of available services.

Recommendations:

- Design and implement a comprehensive communication strategy that targets different demographic groups through traditional media, social media, and community outreach programs.
- Develop specific communication programs for young entrepreneurs about available digital services and support initiatives, including regular workshops and training sessions.
- Create a centralised online portal with information about all available digital government services, supported by multilingual materials and regular feedback mechanisms.

6. Implement Systematic Monitoring and Evaluation

Objective: Ensure effectiveness and continuous improvement of digital initiatives through regular assessment and stakeholder engagement across all sectors of society.

Recommendations:

- Establish a comprehensive assessment framework for evaluating all digital infrastructure initiatives, including regular impact evaluations of regulatory sandboxes and Fintech challenges.
- Create formal consultation mechanisms with private sector stakeholders and civil society beneficiaries to ensure continuous improvement.
- Develop quantitative and qualitative metrics for measuring success, with regular reporting cycles and transparency mechanisms.



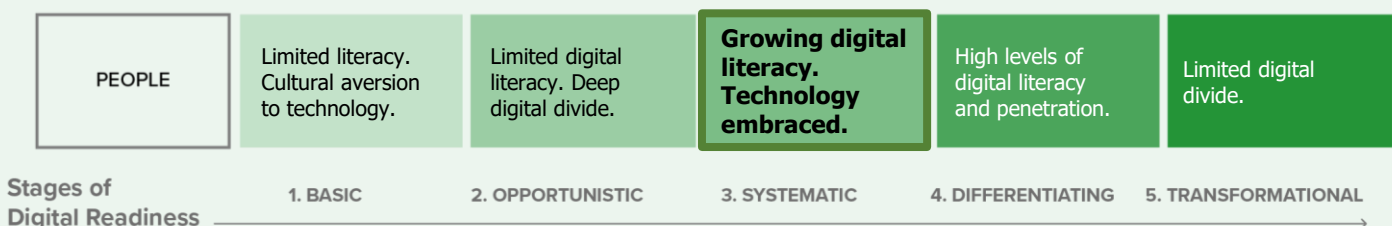
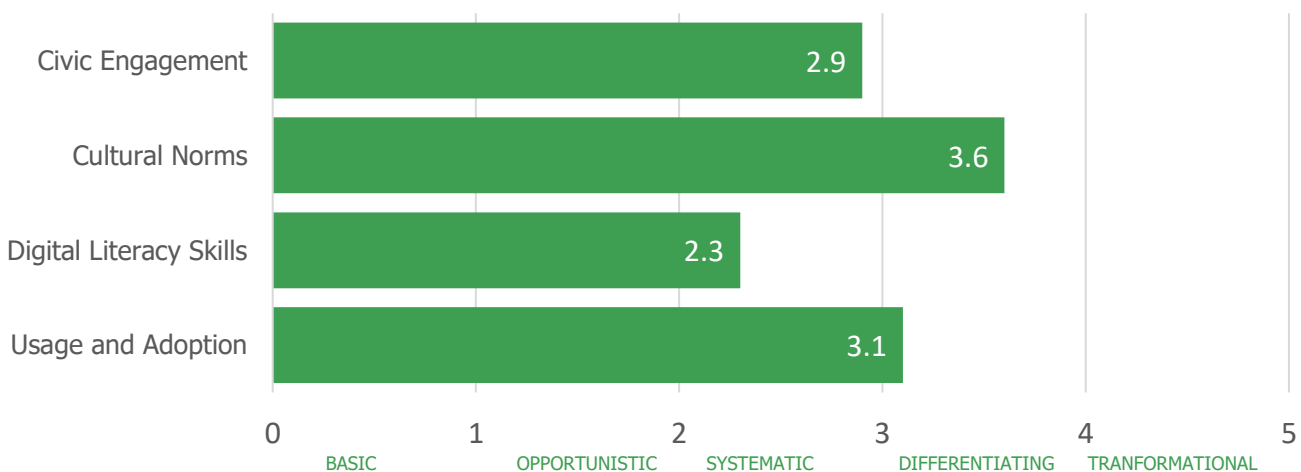
People

Score 3.0 Systematic Stage



Digital transformation should be driven by the needs, realities, and aspirations of individuals. It should be people-centred, including founded on participation, engagement, and co-design wherever possible. It is a tool to improve lives and livelihoods. In order for everyone to benefit from the potential that digital transformation offers, it should be inclusive – with no one left behind. This includes building strong digital literacy across all of society, particularly in more marginalised groups. However, digital literacy can be wide-ranging - and it's important to look beyond access to technology. Usage and ownership is crucial in building sustainable and relevant digital skills. However, digital is not a panacea. Government, the private sector, and civil society should build a safe and useful digital culture. This includes building trust in digital technologies, supporting entrepreneurs, and identifying and tackling harms caused or amplified by the digital economy. This includes digital addictions, online harassment, and disinformation.

Eswatini is in a Systematic Stage of digital readiness for the People Pillar.



Usage and adoption

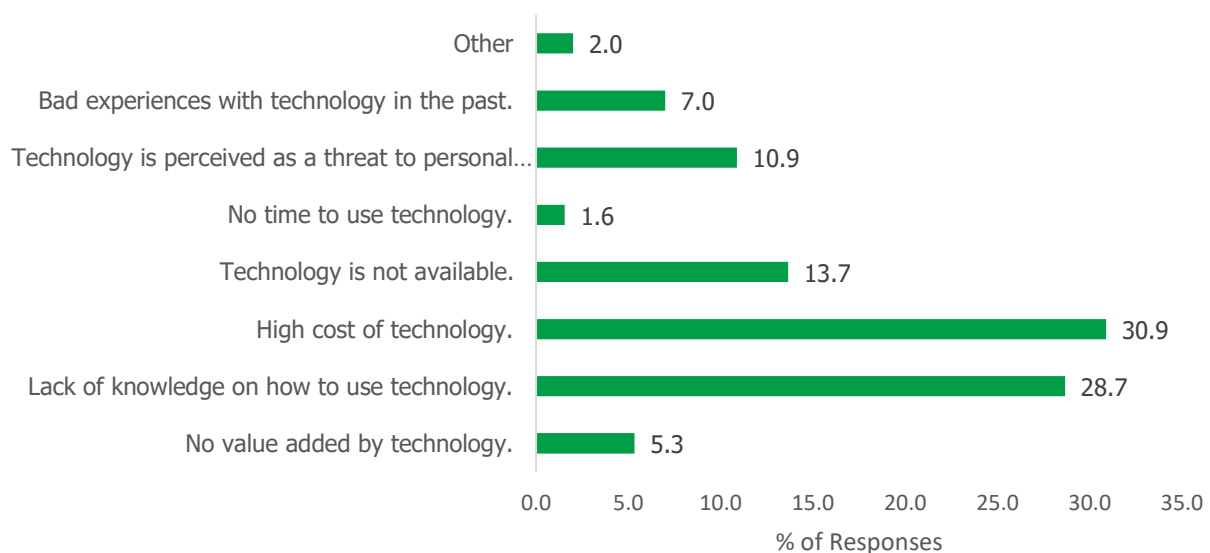
3.1

The Usage and adoption sub pillar covers the purposes and the modes of use of technology, as well as reflections on the portion of society using technology and the levels of usage within different segments of the society. Digital divide is reduced but existing in high proportions.

Eswatini's digital transformation journey is deeply rooted in its most valuable resource: its people. With a strong basic literacy rate of 89.28%, the country has a solid foundation to build upon in developing digital skills and literacy among its population. However, there remains a significant gap in basic digital competencies, especially among older populations and rural communities. The lack of a comprehensive ICT in Education Policy that prioritizes digital skills as core educational outcomes further exacerbates this divide, limiting the development of essential digital competencies across the country.

Challenges to achieving inclusive digital access remain substantial. The Stakeholder Survey indicates that the high cost of technology continues to be a major barrier to digital adoption, preventing the population from fully benefiting from digitalization. This is clearly evidenced in the survey results, where 30.9% of respondents identified high technology costs as the primary barrier. The challenge is further compounded by knowledge gaps, with 28.7% of respondents citing a lack of knowledge on how to use technology. Infrastructure availability (13.7%) and perception issues, where 10.9% view technology as a threat to personal matters, create additional hurdles.

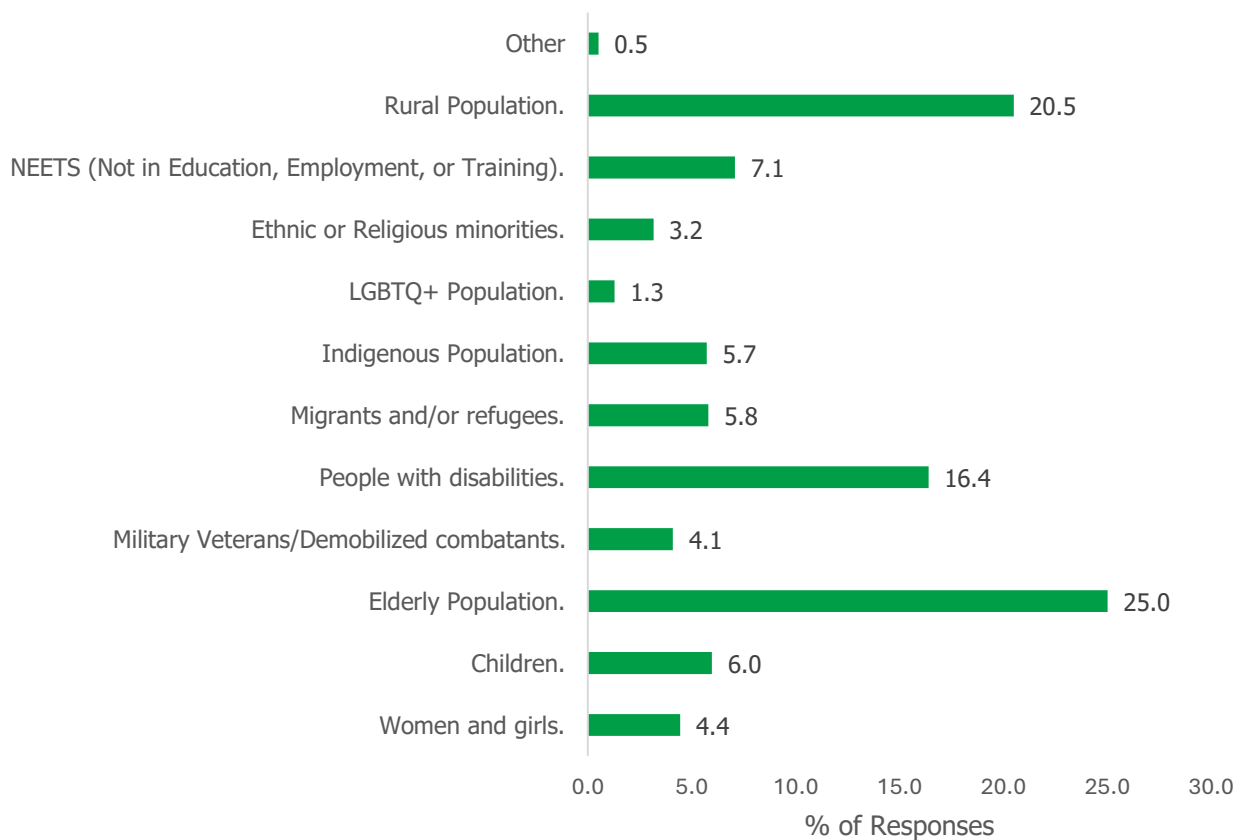
Technology Adoption Barriers



The Survey also revealed that digital divides persist among certain groups of society, leaving some populations at greater risk of exclusion from digital opportunities. Last-mile delivery of affordable and accessible connectivity is particularly challenging, especially for vulnerable demographic groups. Survey results highlight the heightened risk faced by elderly populations (25%) and rural communities (20.5%), who emerge as the most digitally marginalized groups. People with disabilities represent another significant vulnerable group at 16.4% of responses. The survey also identifies other at-risk populations, including NEETs (Not in Education, Employment, or Training) at 7.1%, children (6%), migrants and refugees (5.8%), and indigenous populations (5.7%). Women and girls (4.4%), military veterans/demobilized combatants (4.1%), ethnic or religious minorities (3.2%), and LGBTQ+ populations (1.3%) also experience a level of exclusion. This demonstrates a need for targeted interventions to ensure no-one is left behind in the country's digital transformation journey.

Accessible and inclusive ICT for people living with disabilities is one of the priority areas of the Eswatini National Disability Plan of Action 2024-2028 to ensure that emerging technologies are available and accessible in schools and for home-based care and independent living. A lack of disaggregated data, including on the extent of use of ICT by people living with disabilities, severely affects efforts to improve their access to appropriate services, information and resources.

Groups at Risk of Digital Exclusion



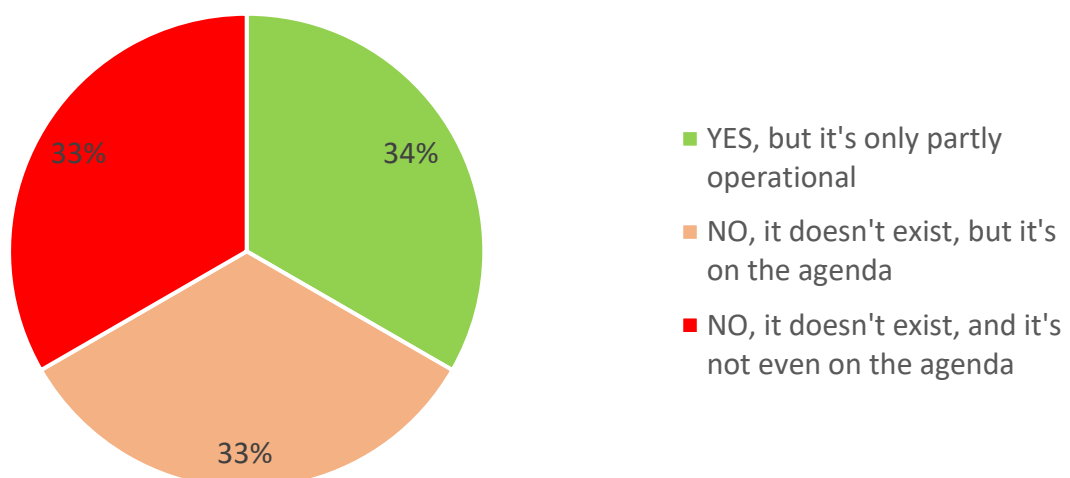
Digital Literacy Skills

2.3

This sub-pillar analyzes the ability to use digital technology by all parts of society (irrespective of gender, location, age groups, socioeconomic background, disability etc.), and particularly disadvantaged groups. The competences include basic skills for using computers and smartphones for everyday basic tasks to more advanced skills such as coding, programming, data visualization, problem solving and innovation & creativity etc. The sub-pillar also covers the digital impact on financial literacy which can enable individuals to manage their financial resources effectively.

Eswatini's digital skills landscape presents challenges, with fragmented efforts and a lack of comprehensive policy frameworks hindering progress in both basic and advanced digital literacy. The survey reveals a lack of digital skills integration in public school curricula. Most experts indicate that digital literacy skills are only somewhat (46%) or minimally (39%) incorporated into school curriculums. Only 15% believe these skills are substantially integrated, while none report full integration. This finding aligns with the World Bank's 2022 report, which notes that Eswatini lacks a comprehensive ICT in Education Policy focusing specifically on building digital skills. The absence of such a policy likely contributes to the limited and inconsistent integration of digital skills in the education system.

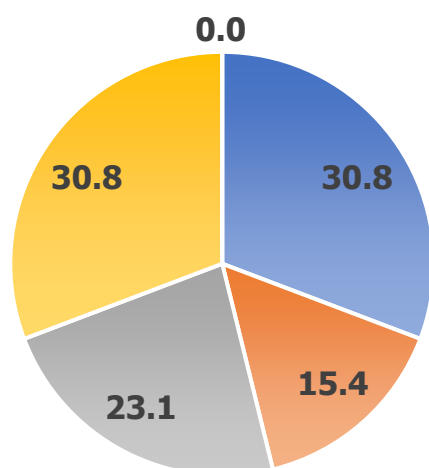
National Digital Skills Planning: Expert Survey Results



The survey highlights a critical policy gap, with 31% of respondents reporting that no digital skills plan exists and that such an initiative is not even on the agenda. This indicates a fundamental lack of prioritisation at the national level. Although 23% of respondents acknowledge that a plan is currently under development, this remains a work in progress, and no respondent reported a fully operational framework. Another 31% of respondents state that a plan exists but is only "partly operational." This suggests a lack of comprehensive implementation, where efforts may be initiated but remain incomplete or ineffective, echoing the broader literature that points to the fragmented nature of digital literacy initiatives in Eswatini. The ILO (2021) noted similar challenges, highlighting an absence of cohesive frameworks and sufficient funding to support large-scale skill development.

The failure to move beyond partial or underdeveloped plans is likely contributing to the supply-demand mismatch between the outputs of the TVET and higher education systems and the needs of the labor market. Without a fully implemented strategy, Eswatini's ability to build a digitally literate workforce remains limited, and progress is difficult to measure or accelerate. Moreover, 15% of respondents state that the issue is on the agenda but with no concrete action points for effective implementation. This reinforces concerns in the literature regarding weak institutional capacity to translate policy into practice, which could further hinder the country's competitiveness in the digital economy. This lack of strategic planning echoes the literature's observation of fragmented and underfunded efforts to improve digital literacy, making progress difficult to attain nor measure. The absence of a comprehensive skills development plan likely contributes to the supply-demand mismatch between the TVET and higher education systems and the labour market, as noted by the ILO in 2021.

Comprehensive Plan for Addressing Digital Skills Gaps



- No, it doesn't exist, and it's not even on the agenda.
- No, it doesn't exist, but it's on the agenda.
- It's currently undergoing development.
- Yes, but it's only partly operational.
- Yes, and it's fully operational.

Cultural norms

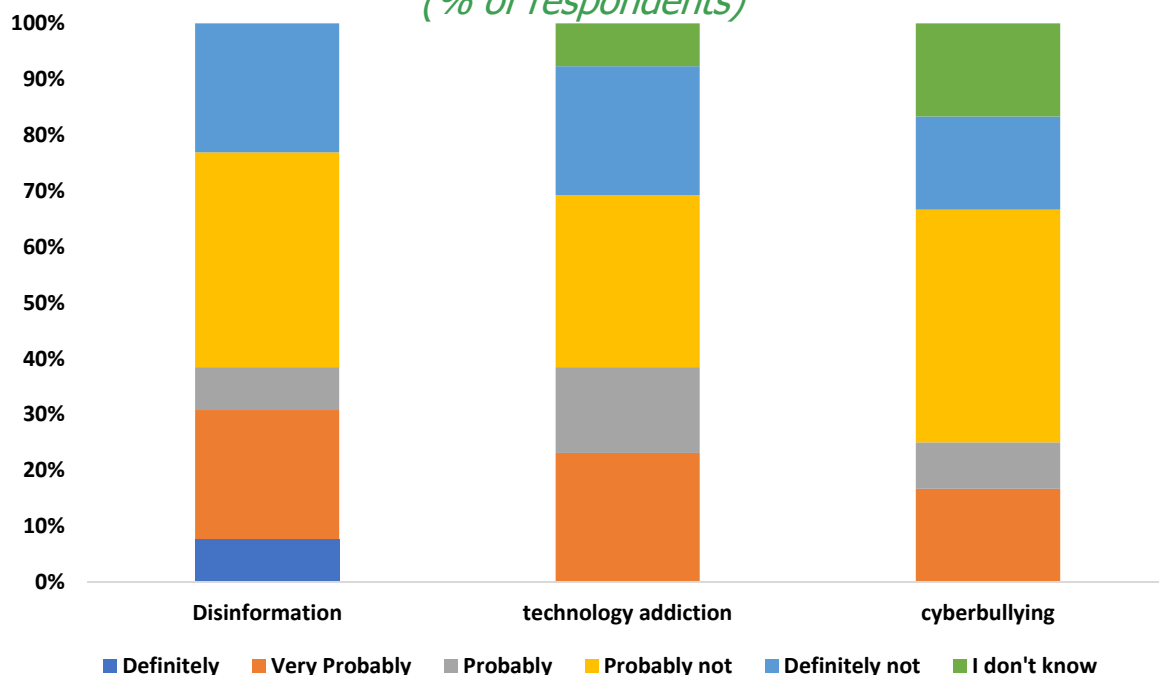
3.6

The cultural norms sub-pillar analyzes the cultural attitudes towards technology adoption in a society and the impact of digital technologies on the wellbeing of people. It encompasses digital addiction, cyberbullying, racism, violent content, misinformation etc.

Cultural norms in Eswatini significantly influence the adoption and use of digital technologies. The Digital Eswatini Strategy (2022) recognises the importance of addressing cultural factors to drive digital transformation across the country. The analysis reveals several key aspects of cultural norms that influence the digital landscape in the country. There is a notable cultural divide between urban and rural areas in terms of digital adoption and literacy. The DRA score for Eswatini in the cultural norms sub-pillar is 3.6, categorising it as Differentiating. This suggests that while there is good digital literacy and broad interest in technology in some segments of society, substantial disparities exist.

The focus on digital well-being is crucial for creating a cultural environment where technology can be integrated safely into daily life. The Computer Crime and Cybercrime Act of 2022 and the Data Protection Act of 2022 aim to address concerns about privacy and cybersecurity, which the Digital Eswatini Strategy identifies as key barriers to digital adoption. However, the expert survey indicates that about 70% of respondents believe the population is poorly or very poorly equipped to handle digital risks such as disinformation, technology addiction, and cyberbullying

How well are people equipped to deal with digital risks (% of respondents)



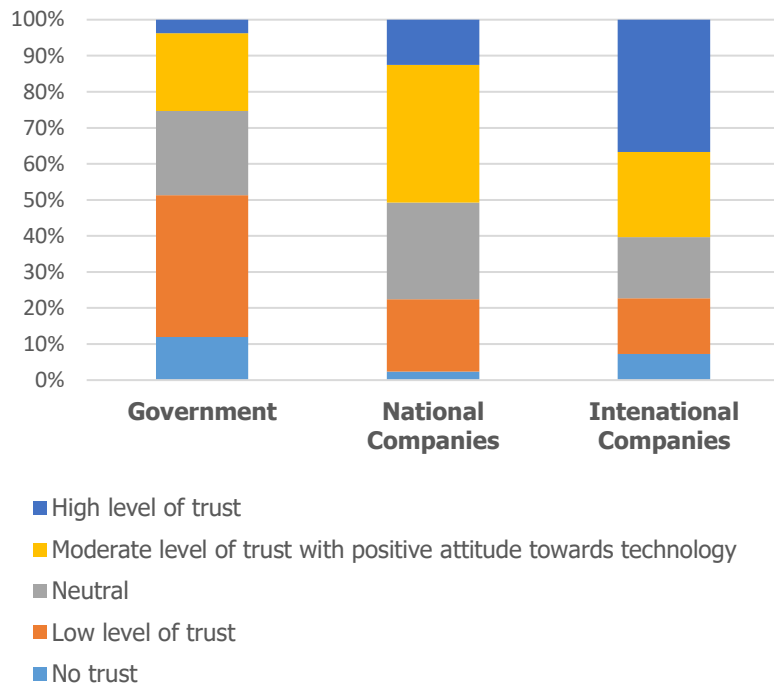
Cultural norms

3.6

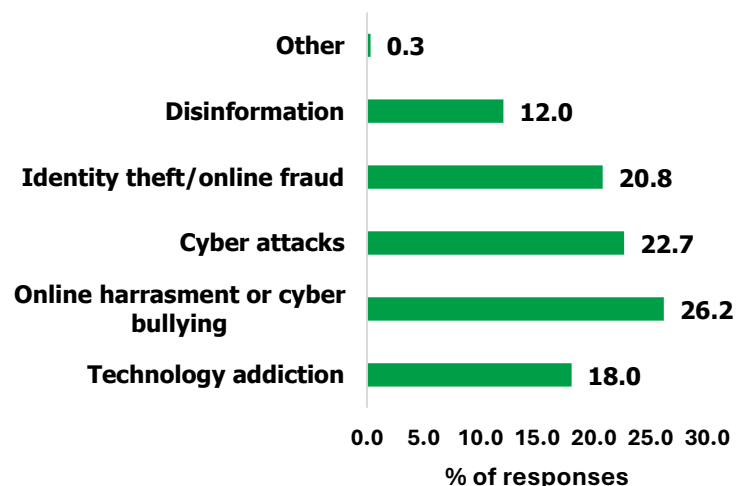
Building trust in digital technologies and institutions is a major challenge in Eswatini. Concerns about privacy and cybersecurity undermine citizens' willingness to adopt new technologies. The National Cybersecurity Strategy of Eswatini 2022-2027 emphasises the need for a multi-stakeholder approach to ensure the security and integrity of Eswatini's cyberspace. According to the stakeholder survey, there are varying levels of trust in technology deployed by different actors. Government-deployed technology faces the highest scepticism, with approximately 50% of respondents indicating low trust. In contrast, technology deployed by the private sector and civil society organisations garners more trust, with about 20% of respondents respectively indicating medium to high trust levels

Attitudes towards technology adoption in Eswatini are shaped by factors such as cost, complexity, and a lack of digital literacy. These factors contribute to hesitancy among businesses and individuals to embrace new technologies. This hesitancy is particularly pronounced in rural areas, where traditional practices dominate. The DRA Survey of stakeholders identified online harassment or cyberbullying as the most pressing digital threat, with 26.2% of respondents marking it as a primary concern. This is closely followed by cyber-attacks (22.7%) and identity theft/online fraud (20.8%), highlighting a strong awareness of online security risks. Additionally, 18% of respondents pointed to technology addiction, while 12% noted disinformation as a significant issue. The lack of a comprehensive digital education framework further hinders technology adoption.

Level of trust that people have in technology deployed by the following actors



Digital Risks



Civic Engagement

2.9

The Civic Engagement sub-pillar analyzes the impact of technology on individuals' political participation, the diversity of voices participating in open government process, the opportunity for minorities to ensure access to information and participation and proposed solutions to community priorities.

The score for this sub-pillar situates Eswatini in a systematic stage reflecting a moderate level of digital engagement of the population with the government.

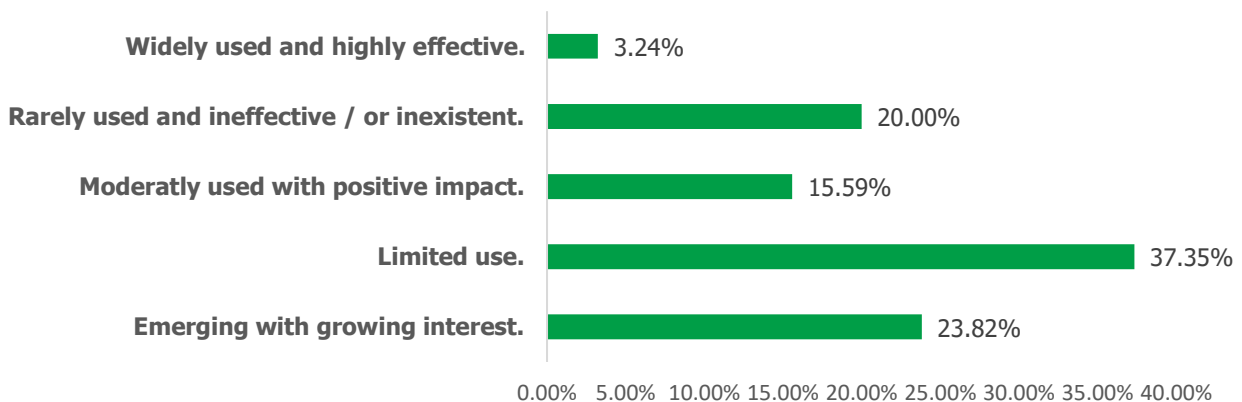
Civic engagement through digital platforms remain limited in Eswatini, with few opportunities for citizens to interact with the government or influence decision-making processes online. While some countries have integrated platforms for gathering citizen feedback, Eswatini lacks such systems. This gap limits the effectiveness of government services and restricts the potential for citizens to participate in governance through digital means. However, there are pilot initiatives, such as a quality management system in the health sector, that gathers citizen feedback on services, suggesting a potential model for expanding civic engagement in other areas. The limited availability of platforms for civic engagement is closely tied to the broader role of digital media in Eswatini. While social media use is on the rise, its impact on political discourse and civic engagement remains minimal. This reflects an area that has to be improved to enhance the role of digital technologies in facilitating more active and meaningful civic participation.

The role of digital technology in advancing civic engagement was highlighted during recent elections in Eswatini. E-platforms were utilised to facilitate political participation and public discourse, showcasing their potential to enhance democratic processes. This is supported by efforts to increase the rollout and development of Digital Access Centers to increase the availability and accessibility of digital services to communities. These centres will focus on creating local content and facilitating user-generated content, which can empower citizens and enhance community engagement. Generating local content through such centres will increase community involvement in developing communal solutions and foster a culture of citizen responsibility and participation in national development.

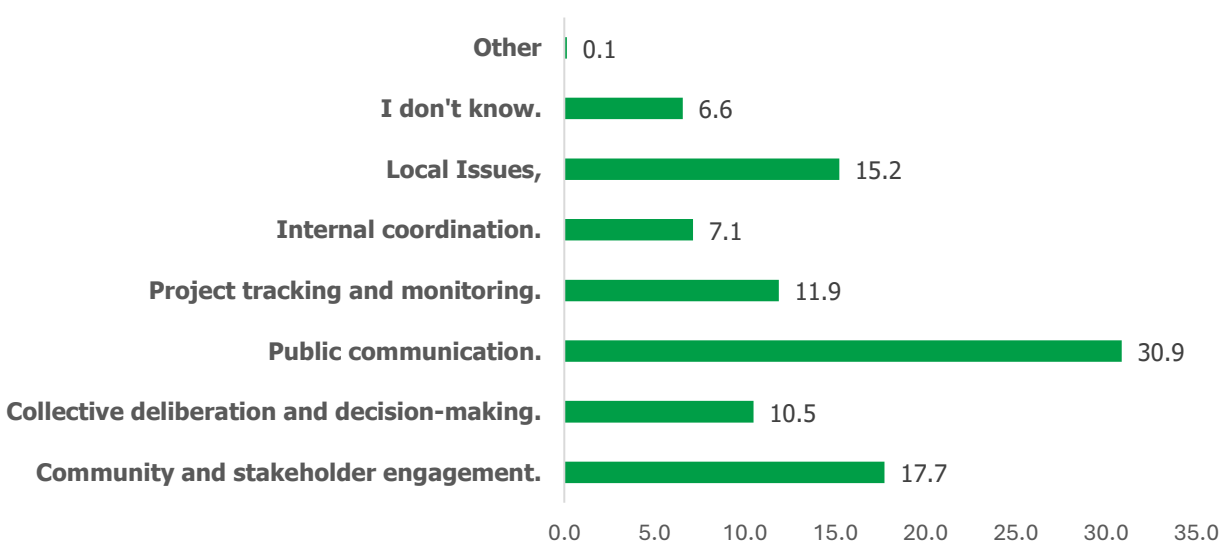
The Stakeholder Survey reveals significant challenges regarding civic participation platforms. A substantial 37.35% of respondents reported limited use of these platforms, while 20% indicated that they are rarely used and often ineffective or non-existent. However, there are signs of optimism, as 23.82% of respondents expressed interest and 15.59% reported moderate use that has a positive impact. Conversely, only a small percentage, 3.24%, reported widespread and effective use of these platforms. This indicates that despite minimal engagement, there are opportunities to leverage technology to increase civic engagement and foster greater participation.

The survey also illuminates how these platforms are currently being utilized, with public communication emerging as the dominant use case (30.9%), followed by community and stakeholder engagement (17.7%) and local issues (15.2%). Lesser but notable uses include project tracking and monitoring (11.9%), collective deliberation and decision-making (10.5%), and internal coordination (7.1%). These usage patterns suggest that while basic communication functions are being adopted, more sophisticated forms of civic engagement, such as collective decision-making and project monitoring, have great potential. These findings reinforce the need for comprehensive strategies to not only increase platform adoption but also to diversify and deepen the ways in which citizens engage with governance processes through digital means.

Do people use civic participation platforms or apps in your country?



For what purpose do people use civic participation platforms or apps?





People Recommendations



1. Reduce Technology Costs and Improve Accessibility

Objective: Foster inclusive access to government and public services by enhancing digital platforms to meet the diverse needs of all groups, including marginalized and at-risk populations.

Recommendations:

- **Implement targeted subsidies:** Provide subsidies specifically designed for low-income and rural communities to offset the costs of purchasing devices and accessing the internet. These could be structured as direct financial aid, discount vouchers for devices, or reduced-rate internet plans in collaboration with service providers.
- **Establish public-private partnerships:** Engage with private sector tech companies and ISPs to develop affordable technology bundles that include devices, data plans, and maintenance support. These partnerships could also facilitate the distribution of refurbished devices, ensuring more people can afford access to essential digital tools and services.
- **Modify digital platforms for universal accessibility:** Redesign government websites and online portals to meet global accessibility standards (such as WCAG), including features like alternative text for images, screen reader compatibility, easy-to-navigate layouts, and multiple language options. Conduct user testing with groups such as persons with disabilities, the elderly, and rural residents to ensure the platforms are intuitive for all.
- **Promote inclusion across all demographics:** Ensure public services are inclusive by tailoring design features for various groups—such as increased font size for the elderly, multilingual support for migrants, and visual indicators for low-literacy users. This also includes outreach initiatives that inform communities about available digital services and encourage their active use, reducing barriers to essential resources for women, youth, LGBTQ+ individuals, and other minority groups.



People Recommendations



2. Expand Digital Literacy Through Inclusive Training Programs

Objective: Bridge the digital knowledge gap by providing comprehensive, community-oriented digital literacy programs, particularly for groups identified as vulnerable to digital exclusion (28.7% of respondents cited lack of knowledge as a primary barrier).

Recommendations:

- Community-based digital literacy programs: Develop grassroots digital literacy initiatives, such as mobile-first training courses, to make digital skills training accessible to community members where they are. Partner with local community centers, libraries, and schools to run ongoing workshops that teach essential skills like internet navigation, basic online security, and digital communication.
- Targeted training for elderly and rural populations: Design customized training sessions for the elderly and those in rural areas who may face additional challenges in adapting to digital environments. This can include simplified user interfaces for smartphones, training on accessing government services online, and personalized support sessions to build confidence in using technology. Additionally, ensure these programs offer content in local languages and cover locally relevant use cases.
- Implement comprehensive digital safety guidelines: Develop user-friendly safety guidelines that cover core aspects of digital security, privacy protection, and secure online behaviors. Ensure these guidelines are widely accessible across government platforms and through community programs.
- Introduce cyberbullying prevention programs: Establish anti-cyberbullying initiatives within schools and community centers that include education on identifying and reporting online harassment, fostering a culture of respect, and implementing supportive resources for victims.
- Combat disinformation and technology addiction: Launch awareness campaigns and provide training for critical media literacy to empower users to identify and counter disinformation. Additionally, create support resources to address technology addiction, focusing on managing screen time, recognizing signs of dependence, and promoting digital wellness practices.
- Tailor strategies for vulnerable groups: Design targeted resources for children, the elderly, and individuals with disabilities, who may be particularly at risk in digital environments. These could include parental controls, digital etiquette training, and accessible resources on cyber safety.



People Recommendations



3. Enhance ICT Accessibility for People with Disabilities

Objective: Increase digital accessibility for people with disabilities by conducting a comprehensive, disability-focused assessment that informs policy and service improvements tailored to their specific needs.

Recommendations:

Conduct a national ICT accessibility assessment: Partner with disability rights organizations and key stakeholders to perform a detailed assessment of ICT use, accessibility challenges, and barriers faced by people with various disabilities. This study should gather quantitative data and qualitative insights on issues such as device usability, availability of assistive technologies, and accessibility of digital platforms.

4. Build Trust in Digital Platforms Through Transparent Citizen Engagement

Objective: Enhance trust in digital government by ensuring that citizen feedback is visibly incorporated into decision-making processes, thereby encouraging active participation and trust in e-governance systems.

Recommendations:

- **Implement transparent e-participation mechanisms:** Regularly publish public reports summarizing citizen feedback from digital platforms, highlighting specific policies or decisions that were shaped by this input. Such reports could include case studies or testimonials demonstrating the tangible impact of citizen participation.
- **Showcase responsive government action:** Feature real examples where citizen feedback has directly influenced policies, whether in areas like healthcare, education, or public safety. This can be done through online portals, social media updates, and community outreach, underscoring that public input genuinely shapes outcomes.
- **Establish feedback loops for accountability:** Set up clear channels for citizens to see how their input is being considered, with periodic updates on the progress of initiatives influenced by public opinion. Regular, open communication about these outcomes will improve transparency and foster greater trust.
- **Encourage inclusive digital engagement:** Promote e-participation among underrepresented groups by providing accessible, easy-to-use platforms and offering guidance on how to engage in online discussions. This ensures diverse voices are represented, creating a more inclusive and equitable governance system.



People Recommendations



5. Diversify Platform Usage for Enhanced Civic Engagement

Objective: Broaden the scope of digital platform use in governance to support not just public communication but also collective decision-making and project monitoring, addressing the current focus on communication (30.9%) and the limited use for deliberation (10.5%).

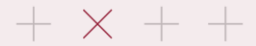
Recommendations:

- Incentivize platform engagement for collective decision-making: Introduce rewards or recognition systems for citizens and community groups that actively engage in decision-making discussions on digital platforms. For example, create a “Community Impact” badge or ranking system that acknowledges high-participation users who contribute to meaningful deliberation on policy proposals.
- Develop participatory project monitoring features: Enable tools within digital platforms that allow communities to track the progress of local government projects, such as budgets, timelines, and completion status. This feature can include options for community feedback, giving citizens a voice in monitoring public initiatives and fostering a sense of ownership over local projects.



Economy

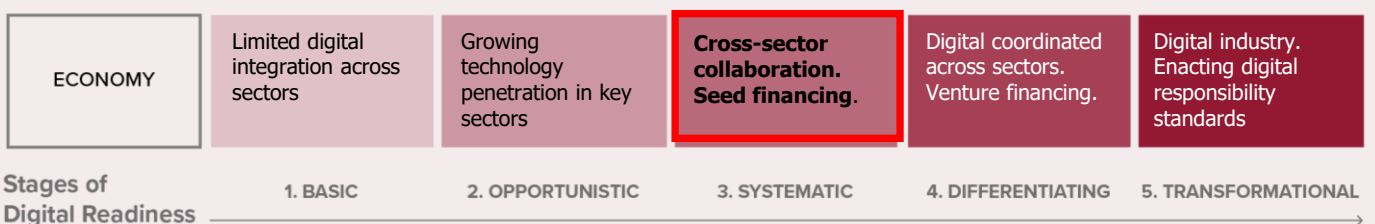
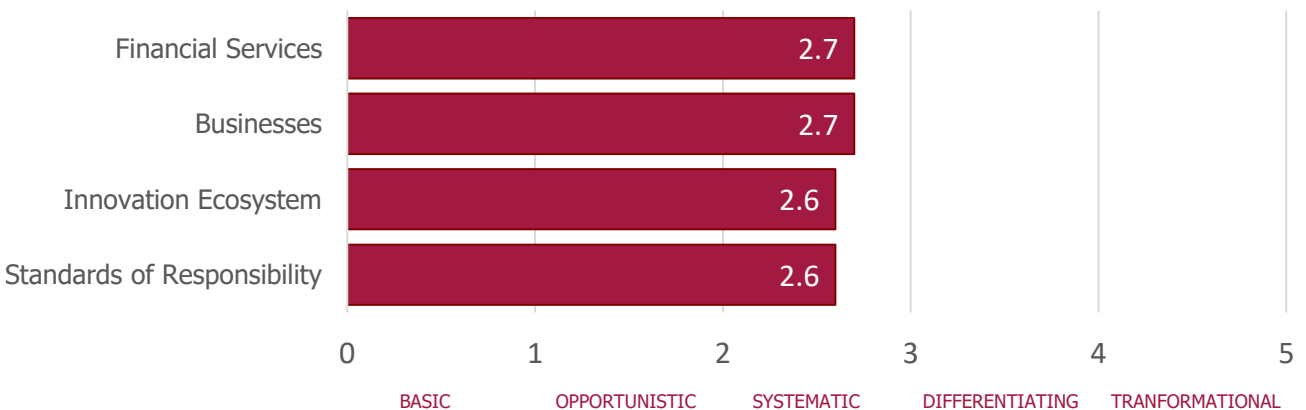
Score 2.6 Systematic Stage



The economy pillar assesses economic activity as a result of the enablement and use of digital technologies. This is the collection of networks, transactions and professional interactions driven predominantly by the private sector that digital technologies accelerate. It encompasses the extent to which digital technologies are embedded in businesses and financial services. It also covers the strength of the local ecosystem which can drive innovation and the adoption of responsible practices in the economy. Businesses and financial institutions should adopt international standards on data privacy, social responsibility, and governance to ensure ethical growth. Ultimately, a strong digital economy requires not only technological innovation but also a commitment to responsible and inclusive development that benefits all.

Eswatini is in a Systematic Stage of digital readiness for the Economy Pillar.

This means that there is cross sector collaboration and limited seed financing for start-up businesses. Also, there are some challenges, that include the lack of payment systems or gateways, lack of internal and external finance (e.g., bank credits, investment), and inadequate ICT infrastructure among others. The Economy Pillar reflects the integration of digital tools into various sectors, enabling businesses to thrive in an increasingly digital landscape while supporting sustained economic growth.



The business sub-pillar measures the market effect that digital technologies have on traditional businesses and more digitally based (or "tech") businesses. This includes the adoption of ICT and digital technologies by existing businesses, startups and e-commerce.

The assessment places this sub-pillar at systematic stage, meaning that digital progress has been made by businesses in Eswatini, however, a few challenges remain including the low uptake of e-Commerce, lack of pipeline investible ventures, lack of integrated and impactful support programs for businesses, and lack early-stage financing for start-ups.

Electronic Commerce (e-Commerce) in Eswatini remains relatively low.¹ E-Commerce uptake in Eswatini was reported to be at 5.2% in 2022.² The OECD (2009) defines e-Commerce as the sale or purchase of goods or services between businesses, households, individuals, governments, and other public or private organisations, conducted over the internet.

The low uptake of e-Commerce in Eswatini can be attributed to the low adoption of broadband services. In 2021, mobile broadband penetration was estimated to be 35%, when calculated with unique subscribers.³ According to the World Bank (2022), the low adoption rate of broadband services may be due to a lack of affordability of both fixed and mobile internet services. Generally, the expensive cost of the internet has also negatively impacted the rollout and usage of e-Government and e-Commerce services, as well as entrepreneurial growth in Eswatini.

The Stakeholder Survey highlighted the lack of payment systems and gateways, lack of tech providers, lack of external finance (e.g., bank credits, investment), lack of internal finance (e.g., due to lack of profitability), amongst others, as main challenges for e-commerce businesses in Eswatini. This affects the ability for local enterprises to access other markets and grow their businesses through the internet. A vibrant e-Commerce is important for Eswatini to fully take advantage of the trade opportunities presented by African Continental Free Trade Area (AfCFTA).

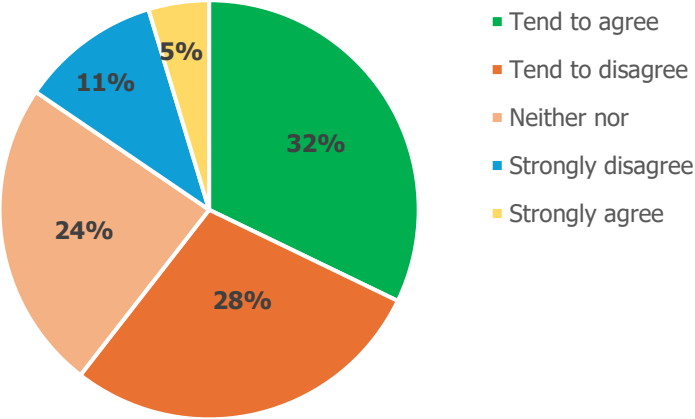
1. EU Africa RISE (2023). *Assessment of Eswatini's E-Commerce Readiness*. European Union Africa Reform for Investment & Sustainable Economies (EU Africa RISE).

2. ESCCOM (2022). *ESCCOM Annual Report 2022/2023*. Eswatini Communication Commission (ESCCOM).

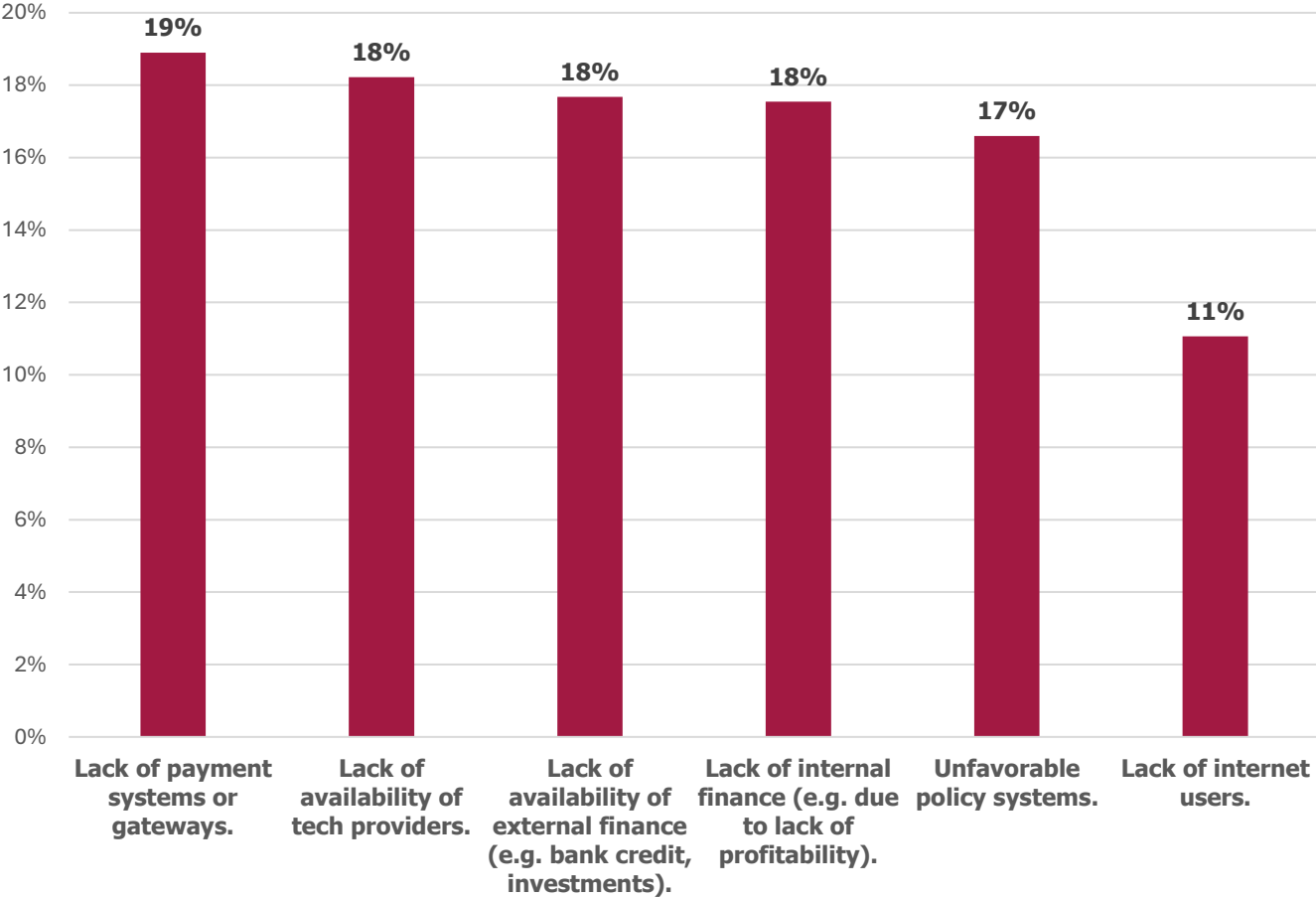
3. World Bank (2022). *Eswatini Digital Economy Assessment*. Washington DC: World Bank.

Despite having updated the regulatory environment to bolster the ICT sector and e-Commerce in general, findings from the e-Commerce Readiness Assessment by EU Africa Rise (2023) suggest that the levels of implementation of the laws remain low. The e-Commerce Readiness Assessment further finds that government support for start-ups and entrepreneurship is very weak. This is exacerbated by a weak capacity of micro, small and medium enterprises (MSMEs) in e-Commerce, presenting challenges in expanding their activities and keeping up with changing trends. The assessment recommends a review and adoption of the necessary implementation mechanisms needed to create a stable and improved e-commerce business environment. The Stakeholder Survey also confirms that the current status-quo is not conducive for growth of start-up business.

Environment is Conducive for Start-ups



Main Challenges for e-Commerce Businesses in Eswatini



Financial services

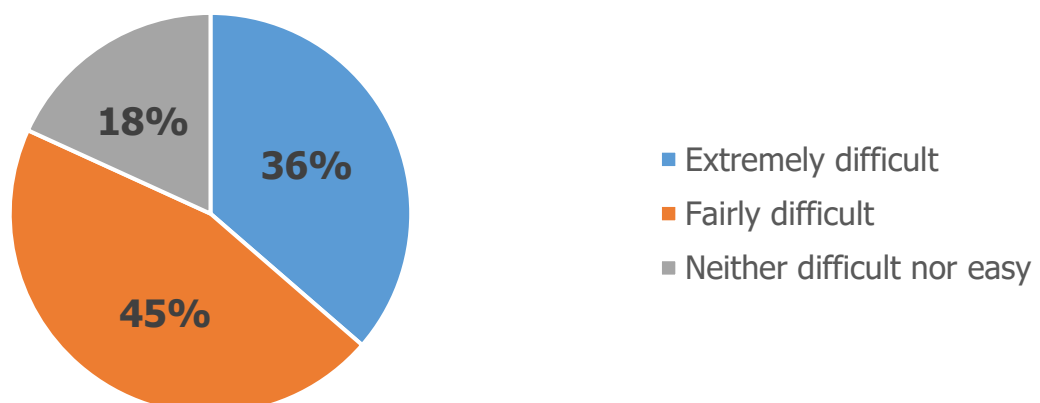
2.7

The financial services sub-pillar refers to the extent to which individuals and firms have access to financial services as well as the availability and usage of digital finance (including digital payments, saving, borrowing, insuring, and investing). Financial services are at the Systematic Stage in Eswatini. This means that access to financial services is widespread in Eswatini but there is need to develop a dynamic and inclusive financial sector that can leverage digital innovation and overcome traditional barriers.

Financial inclusion is high in Eswatini reported to be at 87% in 2023, yet the use of digital financial services is low. The Eswatini Fintech Landscape Report (2023) found that the Eswatini Fintech ecosystem is still nascent but shows great promise if the country is to take the opportunity to develop a dynamic and inclusive financial sector that can leverage digital innovation and overcome traditional barriers. In 2024, the Government launched the Eswatini National Financial Inclusion Strategy (NFIS) 2023-2028 which mainstreams digital transformation and innovation across all its priorities, suggesting how the financial sector can take advantage of digital transformation to move Eswatini forward.

The Expert Survey revealed that it is not easy for businesses in Eswatini to access financing to undergo digital transformation or to keep up with the changes in the way business is done digitally. This includes things like setting up online payment systems, creating websites or e-Commerce platforms, training staff on new digital tools, and maintaining their online presence.

Difficulty for Businesses in Accessing Financing for Digital Transformation

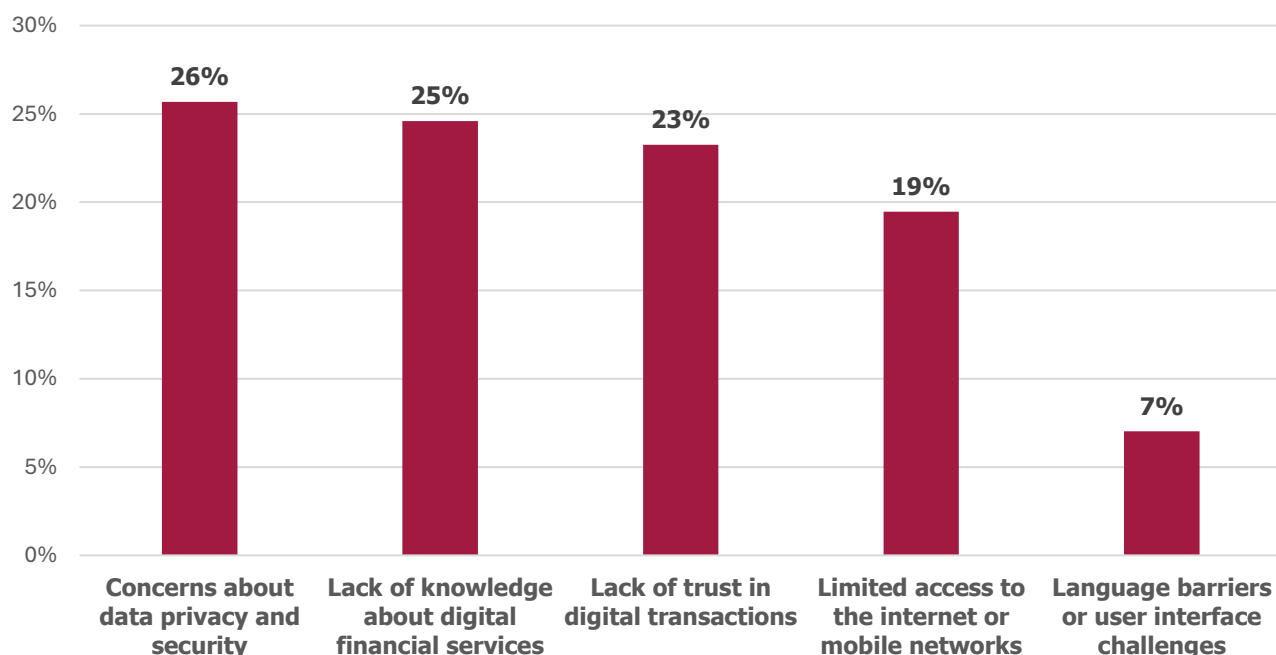


Financial services

2.7

The Stakeholder Survey results indicated several significant barriers hindering the use of digital financial services. Concerns about data privacy and security were highlighted by 26% of the respondents. The implementation of the Data Privacy Act 2022 should help to alleviate the concerns about business owners and consumers in the future. Additionally, 23% of the respondents reported a lack of trust in digital transactions, suggesting that building confidence in digital financial services is important to increase adoption. Limited access to internet or mobile networks was reported by 19% of the respondents, underscoring the importance of improving Eswatini's digital infrastructure. However, only 7% of respondents pointed to language barriers or challenges with user interface, hence, accessibility remains an issue for some users. Addressing these barriers could significantly enhance the uptake of digital financial services and promote financial inclusion.

Perceived Barriers for Using Digital Financial Services



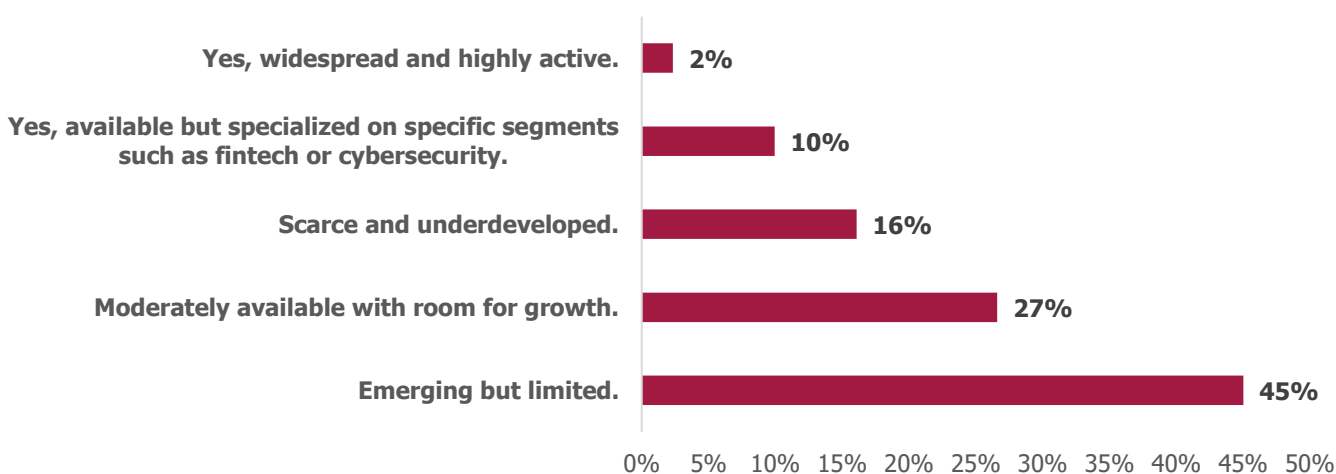
Innovation Ecosystem

2.6

An innovation ecosystem is made up of enabling policies and regulations, financial accessibility, informed human capital, supportive research, markets, ICT infrastructure, a culture supportive of innovation and entrepreneurship, and networking assets, all of which contribute to productive relationships between different actors and other parts of the ecosystem. The assessment situates Eswatini's innovation ecosystem at the Systematic Stage. This means that the innovation ecosystem in Eswatini is still at an infant stage, lacking coordination and collaborative action from all actors involved. COVID-19 exposed the country's weaknesses in digitalisation and innovation, which affected all sectors, particularly, the private sector, government and education. The NDP 2023-2028 prioritises the liberalisation of the ICT sector to achieve improved connectivity, access, modernisation of the economy and service delivery.

The Stakeholder Survey highlights a varied landscape when it comes to forums, networks, incubators, innovation hubs, and accelerators in the local digital space. While 2% of respondents report widespread and highly active support structures, a larger proportion (45%) indicates that these resources are emerging but limited. Additionally, 10% stated that such initiatives are present but specialized in specific areas like fintech or cybersecurity. On the other hand, 16% consider these resources to be scarce and underdeveloped, and 27% describe them as moderately available with room for growth. These insights suggest a digital support ecosystem that is developing but needs substantial investment and expansion to meet the needs of businesses effectively.

Digital Innovation Ecosystem: Availability and Gaps

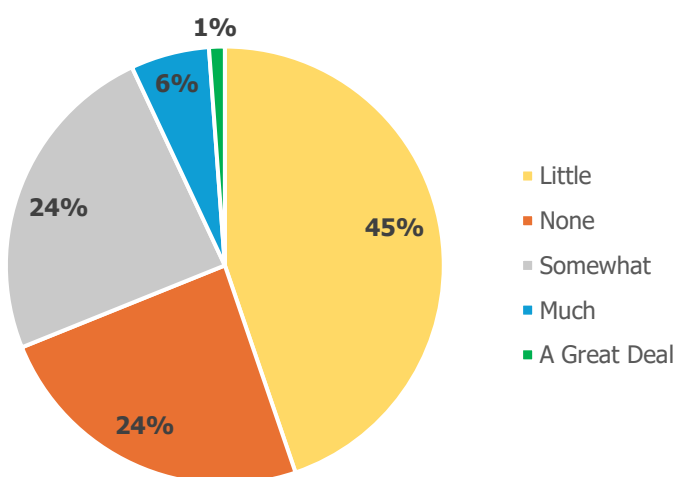


Innovation Ecosystem

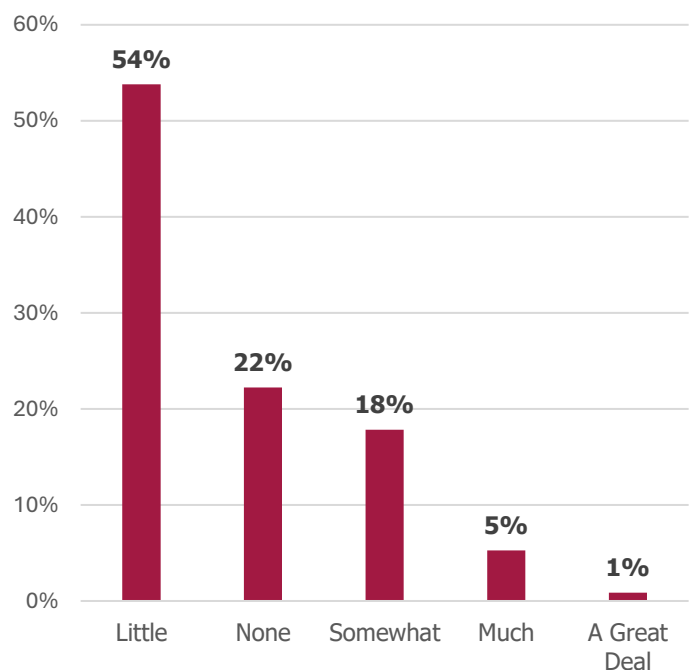
2.6

The establishment of the Royal Science Technology Park in 2018 positioned the institution as a technological hub for innovation capable of driving digital transformation across various sectors of the Eswatini economy. The RSTP provides services such as business incubation, an Advanced School of IT, Biotechnology park, a National Data Centre, and Special Economic Zones (SEZs). However, up to this day, the Park is yet to realise its full potential. Despite the establishment of the park, the Stakeholder Survey revealed that the government offers little to no financial incentives to encourage innovation and investment in digital technology. Furthermore, the results of the Survey highlights that there is little to no funding for research and development (R&D) in Eswatini. Eswatini's R&D expenditure as proportion of GDP was estimated to be 0.26% in 2015 – far from realising the R&D expenditure target of 1% of GDP that member states of the African Union committed to spending in order to drive innovation, productivity and economic growth. Data from the World Bank indicates that African countries spend an average of only 0.45% of their GDP on R&D, falling well below the global average of 1.7%.⁴

Government Financial Incentives to Promote Innovation



Availability of R&D Funding



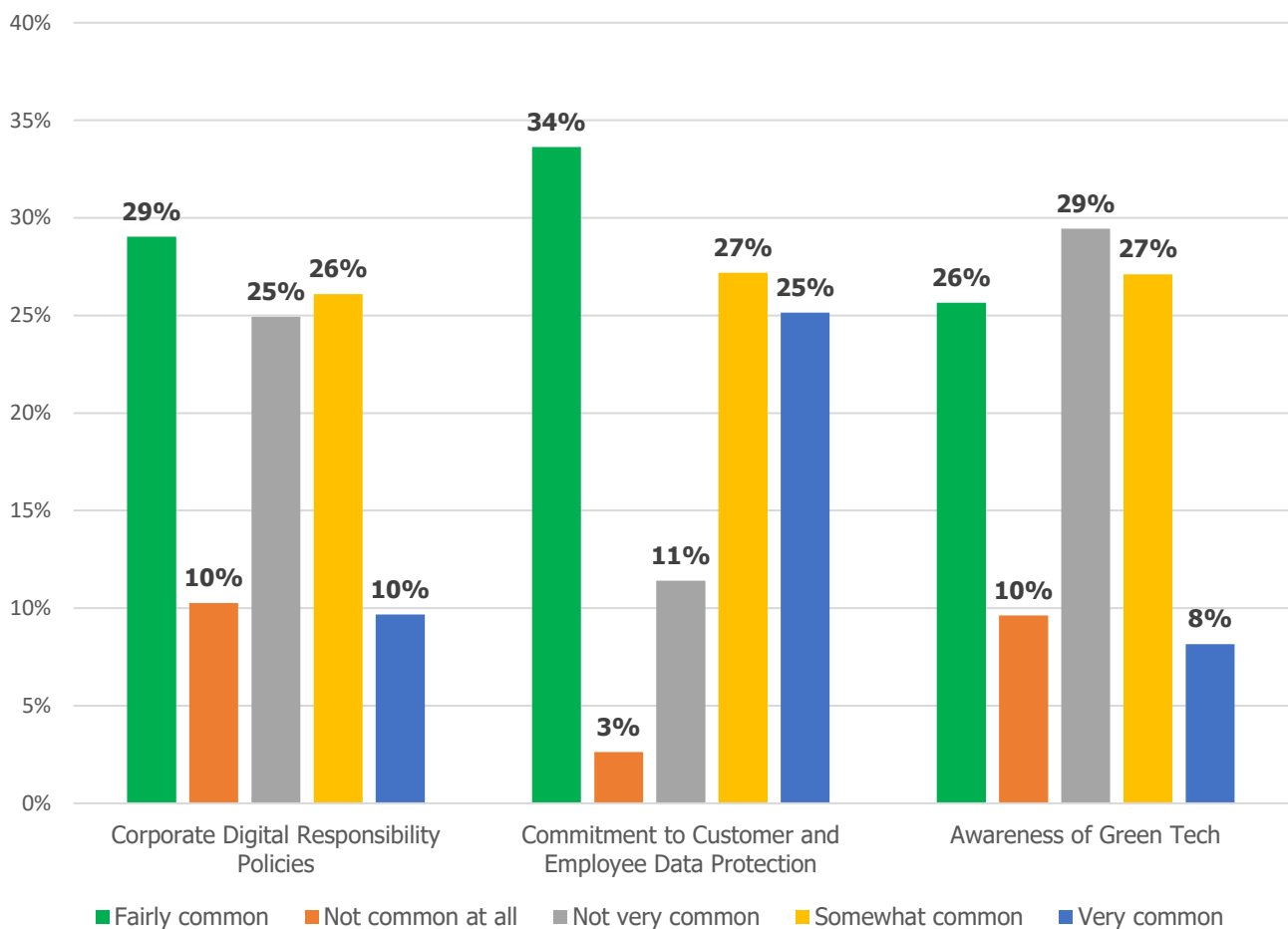
Standards of responsibility 2.6

Standards of responsibility pillar refers to the adoption of international good practices and standards by business and the financial sector. This could cover digital (e.g. data privacy and protection), social, environmental and governance (ESG) aspects. The assessment places standards of responsibility at Systematic Stage. Eswatini does not have a national regulatory framework for corporate governance or ESG guidance. However, companies have taken it upon themselves to align with international good governance practices, whether by adopting Corporate Governance Standards and or developing their own ESG policies on a voluntary basis. For example, The Eswatini Stock Exchange (ESE) has issued ESG reporting guidelines to encourage listed companies to disclose a set of ESG indicators and metrics in accordance with the recommendation of the Sustainable Stock Exchanges (SSE) Initiative and the World Federation of Exchanges (WFE).

Perceptions gathered from the Stakeholder Survey indicate varying levels of practices among private businesses. Corporate digital responsibility policies or reports are considered common, with 55% of respondents acknowledging their prevalence, while only 10% view them as very common. In terms of commitment to protecting customer and employee data privacy, the Survey results revealed that it is common for businesses in Eswatini to protect customer and employee data. This is shown by 25% of respondents believing that such commitment is very common, and 34% indicating that it is fairly common. The effectiveness of the Data Protection Act 2022 remains to be seen as far as safeguarding personal data against abuse is concerned. Businesses must continue to use data protection practices to demonstrate to their customers and users that they can be trusted with their personal data. Awareness of green technology appears less robust, with only 8% reporting it as very common and 27% stating it is somewhat common. Overall, corporate digital responsibility practices are moderately spread among private businesses, commitment to data protection is relatively strong, and green technology is an area that is developing with room for improvement.

Standards of responsibility 2.6

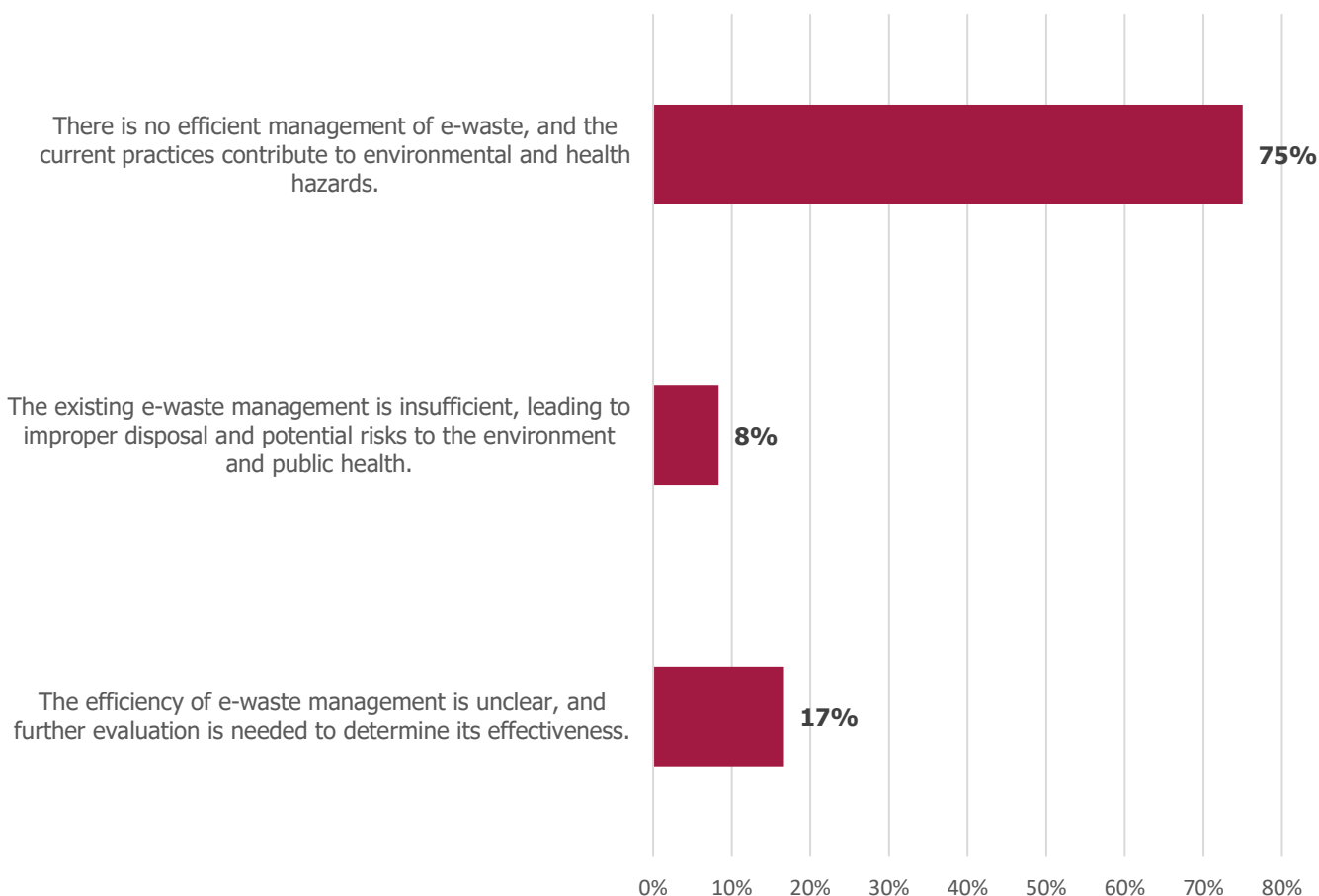
Prevalence of Corporate Digital Responsibility Practices Among Private Businesses in Eswatini



Standards of responsibility **2.6**

The Expert Survey revealed a concerning consensus on the management of electronic waste (e-waste) within the country. A majority of the respondents (75%) indicated that there is no efficient management of e-waste in Eswatini, and the current practices contribute to environmental and health hazards. Another 8% acknowledge that existing e-waste management efforts are insufficient, leading to improper disposal and potential risks to both the environment and public health. These findings underscore the lack of national policies promoting the recycling of electronic devices or waste in the country. As the country is moving towards renewable energy (e.g., solar), this needs to be coupled with a clear plan on how the solar panels will be disposed after their useful life.

Management of Electronic Waste (e-waste)





Economy recommendations



1. Enhance Research and Development (R&D) and Innovation

Objective: Increase innovation funding and adoption through strategic partnerships and incentives.

Recommendations:

- Establish collaborative funding between government and private sector for R&D and innovation. Funding should be accompanied by an environment that encourages the adoption of innovation and the participation of young people whose ideas and innovations have the potential to create jobs.
- R&D Incentives: Offer tax credits or co-funding for businesses investing in research and development (R&D).
- Redirect budgeted for government resources to ICT solutions to fast track the transition: Conduct an assessment of all government services and operations to identify operational efficiencies that can be enhanced through digital solutions. The assessment should focus on identifying processes that can be digitised and foster investment into a digital solution to replace manual or cumbersome processes. For example, replacing handbooks with digital books
- Create a collaboration framework for government, private sector and research institutions/academia to invest in and commercialise R&D outputs. This should create a culture of collaboration at all stages of discovery, piloting and final sale of products, increase access to research for SMEs.
- Encourage Innovation: Create regulatory sandboxes to test and scale new financial products in a controlled environment.
- Strengthen Eswatini's innovation Hubs: Develop physical and virtual spaces where entrepreneurs can access tools, equipment, and resources for prototyping and testing. Offer subsidies for resources like workspace, utilities, and digital tools for early-stage innovators with a growth launchpad.
- Establish an innovation fund: Establish a national innovation fund to offer competitive grants, seed funding, and venture capital to local entrepreneurs with promising ideas.

2. Promote the development of e-commerce platforms and products

Objective: Create incentives to support entrepreneurs that want to develop e-commerce solutions and businesses

Recommendations:

- Payment Switch: Fast track the implementation of the national payment switch within the central bank of Eswatini to ensure seamless integration between banks, mobile money operators, and fintech platforms to facilitate easier transactions and broader service options.
- Tax Relief and Subsidies: Provide tax breaks, grants, or subsidies for startups and small businesses engaged in innovation-driven projects



Economy recommendations



- Public Procurement: Introduce procurement preferences for locally developed innovative solutions to encourage entrepreneurship.
- Business development: Assist local MSMEs to develop bankable projects
- Fast track the geo-mapping and zoning of the country to foster addressing for courier services to support the implementation of e-commerce
- Training and Mentorship Programs: Provide skill development initiatives tailored to innovation, including design thinking, business modeling, and intellectual property management.
- Product diversity: Support fintech startups to co-create innovative financial solutions and extend service reach by creating innovative low-cost products and services for individuals and SMEs to encourage saving, lending, insurance and investment for wealth-building.
- Corporate Innovation Programs: Incentivize large corporations to mentor and fund innovative startups through corporate social responsibility (CSR) initiatives.
- Alternative Financing Mechanisms: Facilitate platforms that connect local innovators with Angel investors willing to fund early-stage ventures and introduce microfinance options, crowdfunding platforms, and loan guarantees to bridge financing gaps.
- Optimize Delivery Systems: Support private sector logistics innovations, such as drones or decentralized pickup points, to enhance delivery efficiency.
- Promote Local Warehousing: Encourage the development of shared warehousing facilities to reduce operational costs for businesses.

3. Enhance public digital financial literacy

Objective: Raise awareness and educate Swazis on digitalisation of financial services and data protection at constituency level

Recommendations:

- Raise public awareness on general digital literacy for all Swazis in the country and conduct awareness campaigns on safe online shopping practices and fraud prevention.
- Educate Users on Security Practices: Train users on recognizing and avoiding digital fraud, phishing, and scams, and educate citizens on the benefits, risks, and proper use of financial services.
- Leverage Local Networks: Use community-based organizations and trusted local leaders to bridge gaps in trust and promote financial services.
- Digital Platforms: Develop secure and user-friendly mobile banking applications and USSD-based solutions for users with limited internet access.
- Establish a certification program for e-commerce platforms to validate their credibility



Economy recommendations



4. Expand Education Curriculum at all Levels to Include Digital Skills

Objective: Create a sustainable pipeline of skilled innovators through education reform.

Recommendations:

- Prioritise Science, Technology, Engineering, and Mathematics (STEM) subjects from as early as pre- and primary school levels. This should be coupled with internet connection, the creation of technology enabled classrooms, innovation clubs, regular science fairs and competitions.
- Encourage tertiary institutions to develop industry aligned curricula that will include advanced courses on Data Science, Cloud Computing, Software Development, Machine Learning, Artificial Intelligence, and Cyber Security.
- Promote the development of advanced skills in other social, economic, education or finance fields to cater for the growing demand for e-commerce and diversity in business development

5. Strengthen the policy and regulatory framework for the deployment of e-commerce

Objective: To foster a supportive business environment through clear and effective regulations.

Recommendations:

- Establish clear policies and regulations on data protection and intellectual property rights.
- Fast-track the development of the RSTP Act 2023 Regulations that will create a framework for efficient management and development of the RSTP, focusing on knowledge sharing, technology adoption, MSME empowerment, investment promotion, entrepreneurship development, and inclusive job creation.
- Strengthen Consumer Protection: Enforce robust regulations to protect users against fraud, hidden charges, and unfair practices and establish independent complaint resolution mechanisms to address grievances effectively.
- Enhance Transparency in the utilisation of financial platforms: Publish clear and accessible information about financial products, terms, and fees.
- Strengthen Cybersecurity Measures: Invest in advanced security technologies to protect customer data and financial transactions.
- Introduce a National Innovation Policy: Align policies to support innovation, including patenting processes, funding access, and cross-sector collaboration.



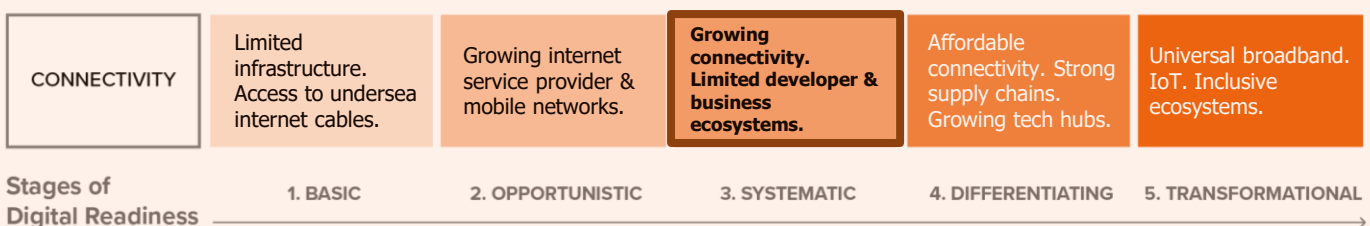
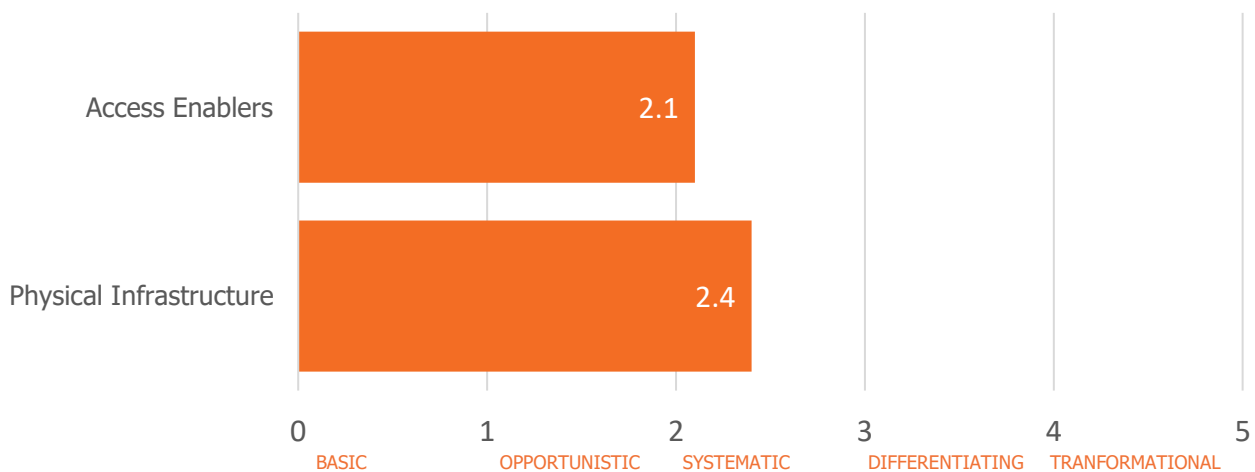
Connectivity

Score 2.3 Systematic Stage



It is important to have extensive coverage and high-quality connectivity to ensure that no one is left behind when it comes to access and participation in the digital space. Meaningful and inclusive digital connectivity is an intrinsic pillar of digital transformation. The connectivity pillar assesses both the physical and the softer social infrastructure required to provide the necessary level of access to everyone in society.⁵ A country should ensure inclusive availability and affordability of high-quality broadband internet. This should include wired and wireless (particularly mobile) technologies but also relevant and sustainable products and services. Key components, such as access and ownership of devices and access to electricity, must also not be forgotten.⁶

Eswatini is in a Systematic Stage of digital readiness for the Connectivity Pillar. This means that there are growing internet service providers (ISPs) and (limited) mobile networks. Usage and affordability remain a challenge. Moreover, there is an underdevelopment of innovation labs and the digital business ecosystem. Findings from both stakeholder survey and expert survey suggests poor or limited availability of network infrastructure facilities such as data centres, innovation hubs, and accelerator labs



5. UNDP (2023). *From Vision to Action: Explaining UNDP's Digital Transformation Framework*. United Nations Development Programme.

6. UNDP (2022). *Digital Readiness Assessment Report: Trinidad and Tobago*. United Nations Development Programme.

Physical Infrastructure

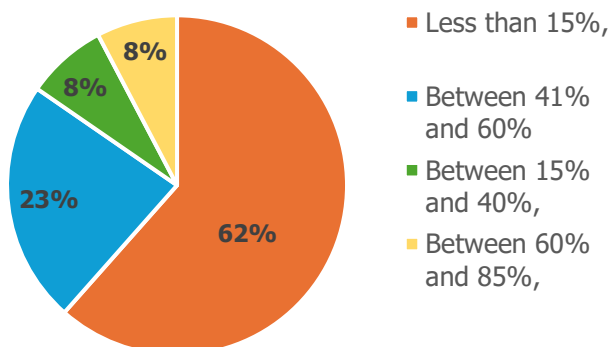
2.4

The physical infrastructure sub-pillar covers the availability and quality of digital infrastructure that carries digital data between devices, storage locations and services with a focus on broadband, mobile internet and electricity. The score for this sub-pillar places Eswatini in a Systematic Stage reflecting that there are growing connectivity efforts, although affordability and accessibility remain a challenge.

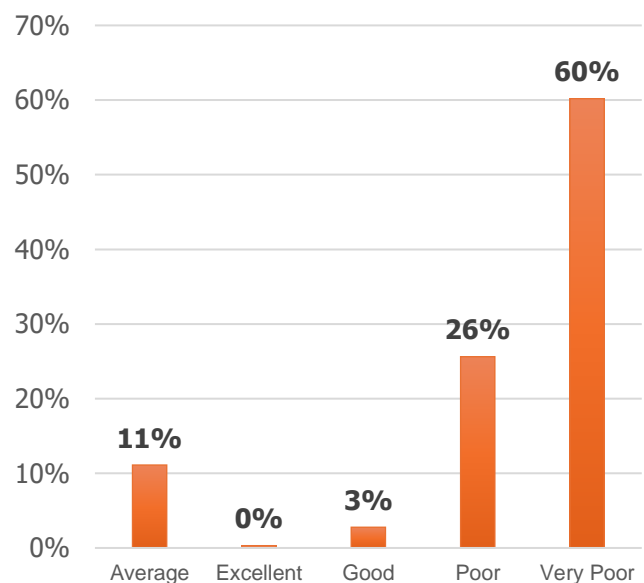
The NDP 2023-2028 emphasises investment in infrastructure to expand economic network and digital innovation. Digital infrastructure should be seen as a critical utility. In the same way as roads, transport systems, energy provisions, and water are normally viewed and measured.⁷ Government has a critical role to play in the country's digital transformation. There is a need for the Government to establish comprehensive policies and implementation plans that will address the lack of digital infrastructure in schools and universities and build digital skills in the education system, ensuring that the next generation of Emaswati are equipped with the tools they need to become Eswatini's digital future.⁸

The Expert Survey results depict that less than 15% of public-schools are connected to the internet. While the Stakeholder Survey suggests that availability of free Wi-Fi in public areas such as parks or libraries is poor in Eswatini. Schools represent an ideal starting point for connecting young people. Connecting schools and using them as a hub for young people's learning and local community activities has enormous potential to improve the quality of skills in the country, particularly in remote areas.

Connectivity of Public Schools



Availability of Free Public Wi-Fi



Physical Infrastructure

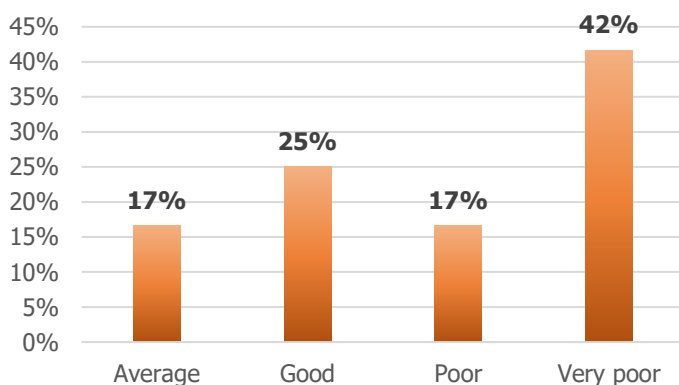
2.4

According to the Expert Survey, there is inadequate network infrastructure and facilities (e.g., data centres, network hubs) in Eswatini. Of the respondents 42% stated that infrastructure and facilities were very poor, 25% said that they were good, and 17% said that they were average.

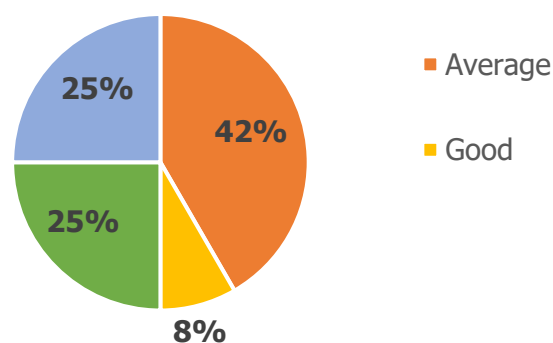
In the age of digital transformation, the need to process, store, and access data remains important. Data storage solutions are central in enabling countries' digital transformation strategies. In the context of digital transformation, data is the fuel that powers digital initiatives such as cloud computing, big data analytics, and artificial intelligence (AI). Powering these transformative technologies are data centres – facilities that house computing machines and related hardware that process, store, and transmit large amounts of data – and telecommunication infrastructure enabling information processing.⁹

On the other hand, the Eswatini Government established the National Data Centre housed at Royal Science Technology Park (RSTP) with the aim of providing secure, efficient and reliable Information and Communication Technology (ICT) services to enterprises as well as aiding in e-government development and promoting digital inclusion within the country. As Eswatini moves towards digital transformation, the data centre will play a crucial. Expert Survey respondents rated the overall capacity and scalability of Eswatini data storage infrastructure as poor to average. The Expert Survey results further revealed that the Eswatini Government does not have an integrated Data Management Strategy or Plan or Vision. However, different government departments may have disintegrated digitalisation strategies. This is an outcry for government to develop and setup a robust data storage and management system.

Adequacy of network infrastructure and facilities (e.g., data centers, network hubs)



Capacity and Scalability of Data Storage Infrastructure



Access enablers

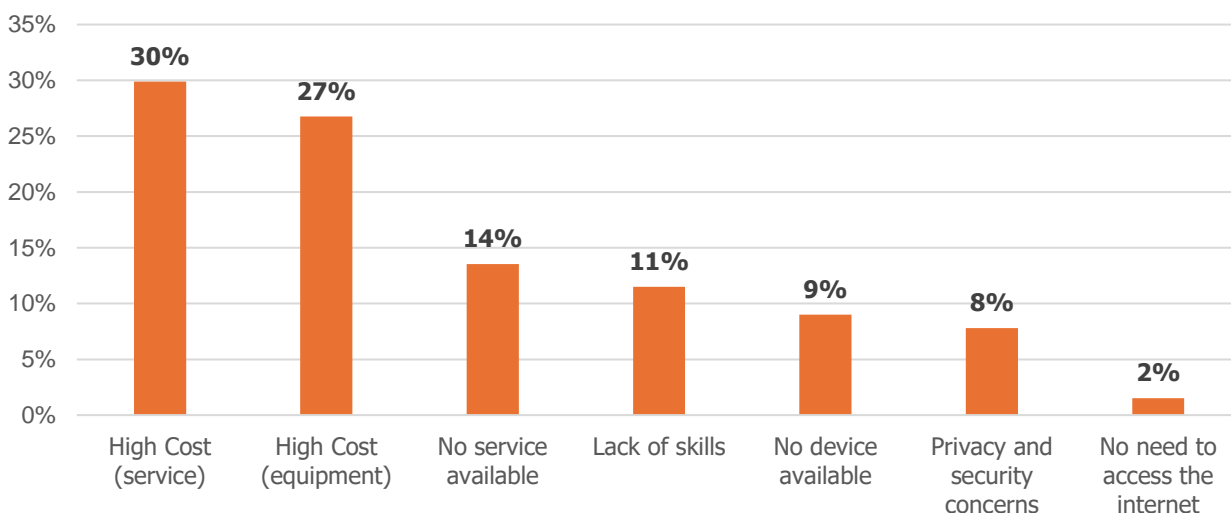
2.1

The focus of this sub-pillar is on access of disadvantaged socio-demographic groups to the internet and other technologies. The goal is to ensure universal access for the whole of society regardless of structural barriers such as infrastructure, income, culture, disabilities, geography and skills. Access enablers are placed in the Systematic Stage, meaning that efforts to enable access to the wider populations have been made, however, there still exists a digital divide between socio-economic groups and geographic areas.

Eswatini Communication Commission (ESCCOM), through the Universal Access and Service Fund (UASF) is implementing a three-year strategy (2021-2024) focused on administering the UASF to support projects that offer universal access, high-quality, and affordable services to promote inclusivity and connectivity in Eswatini.

According to the Annual ICT Market Indicators 2023/2024 published by ESCCOM, mobile cellular market penetration and mobile broadband penetration was 133% and 124%, respectively, in August 2024. Despite high mobile phone penetration, internet adoption rates in Eswatini are low, at only 47% of the population.¹⁰ One potential reason for this is the high costs associated with accessing the internet in Eswatini. The average price of 1 GB of data in Eswatini is SZL 99.50 (equivalent to US\$ 5.63 in September exchange rate US\$ = ZAR 17.67).¹¹ The high-cost acts as a barrier to greater internet access. High cost of service (30%) and equipment (27%), poor network coverage (14%), and the lack of ICT skills (11%), among others, are cited as one of the main connectivity barriers by those who responded to the Stakeholder Survey.

Main Connectivity Barriers

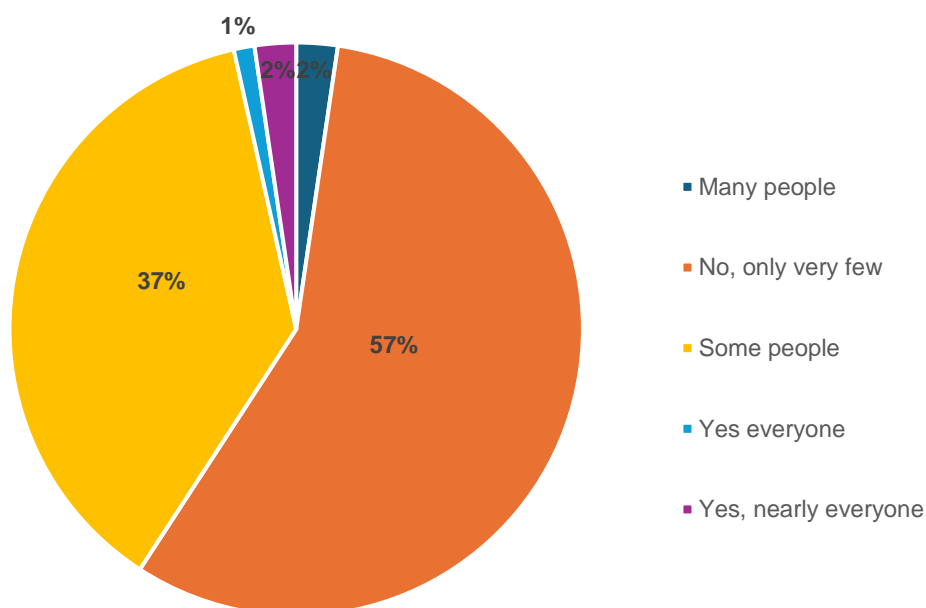


Access enablers

2.1

Stakeholder Survey responses point that the benefits of digital services and technology accrue only to a few people in Eswatini. The 2022 Information Communication and Technology Access and Use Survey (ICTAUS) report revealed that about 67% of households across the country have internet coverage, with 70% in urban areas and 63% in rural areas. Despite growth in internet penetration in Eswatini, elderly people or senior citizens, rural population, and people living with disabilities are one of the groups at risk of being excluded from the benefits of Eswatini's journey towards digital transformation. The disparity in access and affordability of the internet to different groups of people and geographic areas highlights the extent of the digital divide that exists in Eswatini.

Benefits of Digital Services and Technology Reaching Everyone



Connectivity recommendations

1. Establish a Nationwide Network for Equitable Internet Access

Objective: Improve network infrastructure across Eswatini to ensure that underserved and unconnected areas gain internet access, targeting both urban and rural areas.

Recommendations:

- Invest in alternative and stable internet infrastructure to reduce the cost of transmission.
- Use Tinkhudla centres as digital hubs. These centers could be equipped with internet-connected devices and staffed with personnel to support local community members, helping bridge the digital divide.
- Prioritise connectivity in public institutions, including schools, healthcare centers, and municipal buildings. Install public Wi-Fi access points in community centers to bridge access gaps.
- Expand fibre optic networks in underserved urban areas and explore satellite or alternative broadband technologies for rural coverage.
- Develop partnerships with telecom providers to support a phased expansion plan focused on high-need areas, with milestones to connect all public schools by 2026.

2. Increase Digital Literacy and Promote Broadband Adoption

Objective: Build digital literacy to drive adoption of internet services and maximise the benefits of increased connectivity.

Recommendations:

- Launch national digital literacy campaigns to educate citizens on the benefits of broadband and to provide practical skills for internet use, such as mobile banking and online learning.
- Offer digital literacy training at community centres, schools, and libraries, with a focus on underserved communities and groups, including women, youth, and older adults.
- Partner with educational institutions to integrate digital skills training into the curriculum at both primary and secondary levels, fostering an early understanding of digital tools.

3. Develop Accessibility Standards for Inclusive Digital Services

Objective: Create an inclusive digital environment that meets the needs of all citizens, especially marginalized and vulnerable groups.

Recommendations:

- Conduct a national study in collaboration with disability rights organisations to identify ICT usage patterns and barriers faced by people with disabilities.



Connectivity recommendations



- Implement web accessibility standards across government platforms to make digital services accessible to all, including the elderly, rural communities, people with disabilities, youth, women and girls, LGBTQ+ individuals, and refugees.
- Facilitate training for government web developers and content creators on best practices in digital accessibility, including using assistive technologies to improve digital inclusivity.

4. Establish an Integrated Data Management Strategy for Security and Interoperability

Objective: Ensure efficient data management across government and private sectors, enhancing service delivery while safeguarding data.

Recommendations:

- Develop a Data Management Strategy that emphasises data interoperability, security, privacy, and resilience against misuse.
- Implement standardised data collection, storage, and sharing protocols across government agencies, in alignment with ISO/IEC TR 10032:2003 standards for best practice in data storage and security.
- Encourage interoperability by mandating data management protocols across public and private sector partnerships, fostering a seamless exchange of information for better service delivery.

5. Expand Data Infrastructure with Scalable, Energy-Efficient Data Centres

Objective: Ensure that Eswatini has the data infrastructure needed to support rapid scaling of digital services while managing energy consumption and environmental impact.

Recommendations:

- Invest in modular, scalable data centers with energy-efficient cooling systems (e.g., liquid cooling) to handle future growth while minimizing electricity demands.
- Explore renewable energy solutions, such as solar and wind power, to power these data centers, potentially in partnership with green energy companies to offset environmental impact.
- Foster partnerships with private sector providers to share or lease data center infrastructure, reducing costs for government services and enabling interoperability between public and private systems.
- Adhere to international standards such as ISO/IEC TR 10032:2003 for data management to ensure security, privacy, and interoperability.



Connectivity recommendations



6. Promote Cross-Sector Collaboration for Continuous Improvement

Objective: Ensure continuous progress and improvements in connectivity through collaborative governance and private sector engagement.

Recommendations:

- Establish a digital connectivity advisory group composed of government, private sector, academic, and civil society stakeholders to provide ongoing feedback and address emerging connectivity challenges.
- Regularly assess connectivity gaps and infrastructure status through community feedback and annual reviews, adjusting policies to address changing needs.
- Foster collaborative research initiatives between local universities, private sector stakeholders, and government to innovate in affordable and energy-efficient connectivity solutions.

7. Enhance Affordability through Policy and Partnership Solutions

Objective: Ensure affordable internet access to improve adoption and reduce the digital divide.

Recommendations:

- Implement municipal broadband programs or incentivize public-private partnerships to deliver low-cost or free internet plans, particularly for low-income households and public institutions.
- Introduce targeted subsidies for low-income individuals, people with disabilities, and other marginalized groups to make digital services financially accessible.
- Explore regulatory measures to cap data prices and encourage competitive pricing from internet service providers (ISPs), improving affordability for households and businesses.



Regulation

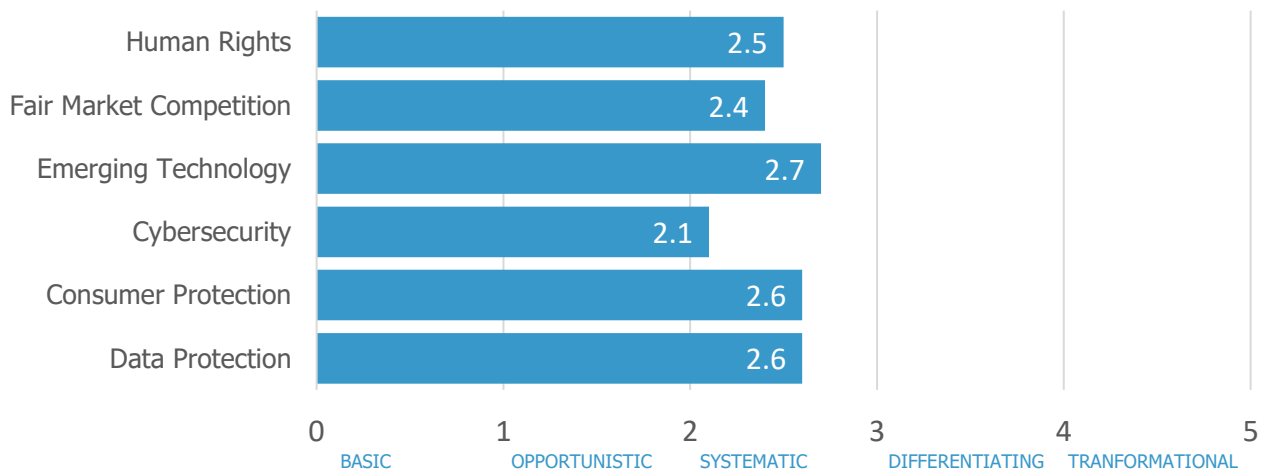
Score 2.5 Systematic Stage



Regulation, including legislation, oversight, guidelines, and policies, is needed to underpin digital transformation. This includes ensuring fundamental protections, such as data security and privacy, whilst also being dynamic in supporting and catalysing competition and innovation. Striking the above balance can be difficult, and the fast pace of technological development can risk regulation becoming quickly outdated or left behind. Regulatory priorities often focus on data standards and protection (from open data through to data privacy legislation), and those that drive the development of a broader digital economy. This latter category includes regulation to enable fair market competition, such as Intellectual Property, competition, and 'common carrier' legislation. However, regulation should not focus just on the market. Governments and legislative bodies must protect and support citizens. This includes in the context of e-commerce (such as digital payment protection), cybersecurity (from upstream work on security standards, through to tackling cybercrime), and ensuring that current and emerging technologies adhere to the highest ethical standards.

Eswatini is in a Systematic Stage of digital readiness for the Regulation Pillar.

This means that there is established legislation, which is clearly defined, but there is no enforcement capacity or lack of informal or formal cooperation. The Regulation pillar looks for the creation of an enabling environment for digital transformation, by implementing regulatory frameworks in accordance with the changing technologies, social environment, and national economy.



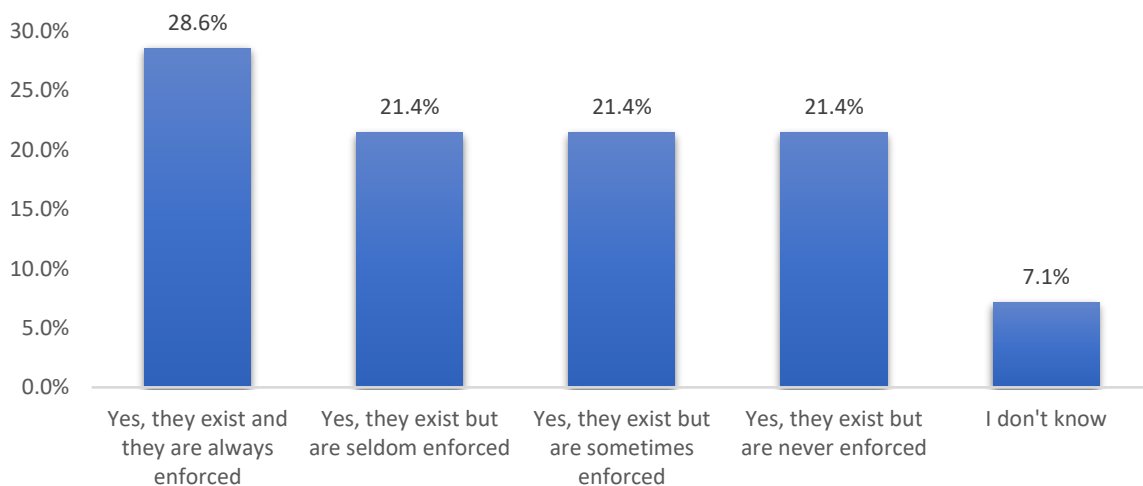
Data protection

2.6

This sub-pillar covers the laws and other legal mechanisms that ensure that processed data is shared or governed appropriately, where the right data assets go to the right place at the right time. The score for this sub-pillar situates Eswatini in a systematic stage reflecting that there is recognition of regulation, a Data Protection Authority is defined and functional and there is existence of standalone data protection regulation.

Survey responses indicate that 28.6% of the respondents are aware of the laws and their enforcement, while more than 70% of the respondents express that the laws are not always enforced. This shows that Eswatini should put more effort into the implementation and enforcement of current regulations and laws.

Is there a data protection and privacy law in place in your country?



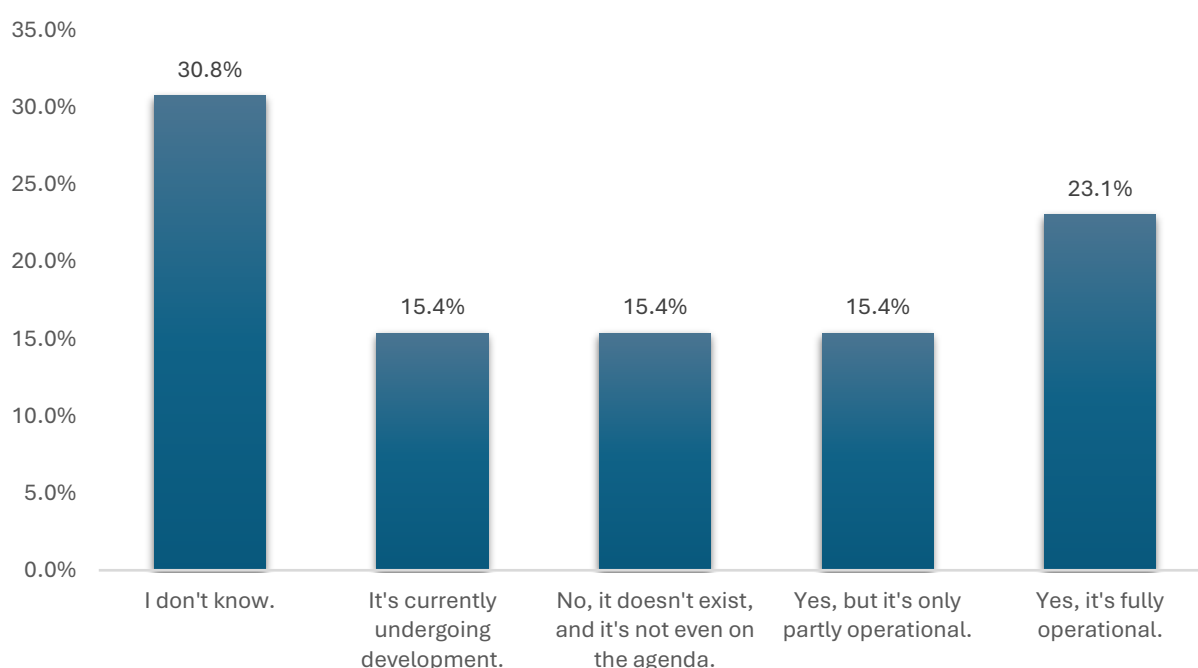
Consumer protection

2.4

This sub-pillar covers the specific legislation that ensures the protection of consumer rights in the digital domain. The score for this sub-pillar situates Eswatini in a systematic stage reflecting that a consumer watchdog body is established but does not have cases in practice, and there is a monopoly on many but not all services, or in certain geographical regions.

The DRA expert Survey responses highlight that while 30% of the respondents do not know of the consumer protection authority or law more than 20% know of the authority and its level of development. The inconsistency in responses suggests a need for clearer communication and possibly strengthening of digital consumer protection measures, as highlighted in the SADC Model Law on Electronic Transactions and E-commerce (2020) recommendations for member states. UNCTAD Cyberlaw Tracker (2022), notes that while Eswatini has made progress in e-transaction legislation, specific consumer protection laws for e-commerce are still developing. The country has developed the Electronic Communication and Transaction Act, 2022.

Is there a digital consumer protection authority in the country?



This sub-pillar covers the existence of laws and other regulatory action against various forms of cybercrimes. The score for this sub-pillar situates Eswatini in a systematic stage reflecting that there is recognition that cyber crime needs tailored legislation to handle it, there are relevant resources for the law enforcement bodies and support is sought for the development of cyber security.

Eswatini has strengthened its cybersecurity framework with the enactment of the Computer Crime and Cybercrime Act (2022), which criminalizes cyber offenses and grants the Eswatini Communications Commission the authority to regulate cybersecurity matters. This legislative framework is supported by the National Cybersecurity Strategy (2022-2027), which outlines a coordinated, multi-stakeholder approach to safeguard the nation's digital assets and prioritize critical areas like infrastructure security and capacity building. However, the evolving nature of cyber threats demands ongoing updates to Eswatini's legal and technical defences. Additionally, regional partnerships, such as Eswatini's membership in SADC, aid in addressing cross-border threats, but substantial national challenges remain.

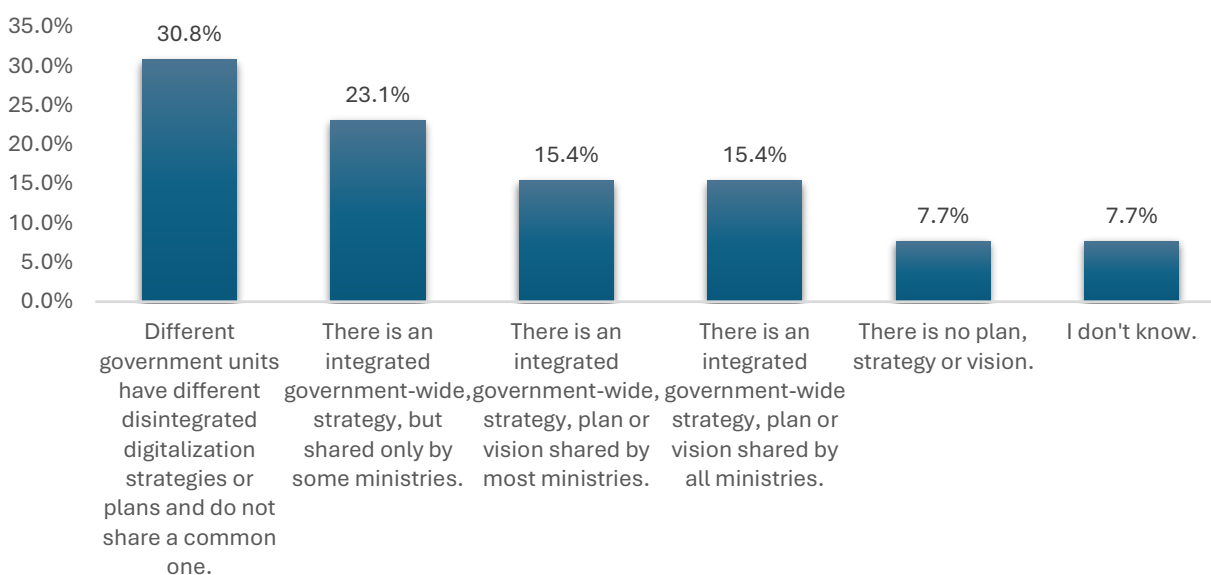
Cybersecurity

2.1

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Insights from the Digital Readiness Assessment (DRA) Survey highlight a fragmented approach within the government's digital strategy. According to the survey, 30.8% of respondents reported that different government units operate under disconnected digitalization strategies without a unified framework. Meanwhile, 23.1% noted an integrated strategy shared by only some ministries, and only 15.4% indicated a government-wide strategy accessible to most ministries. Another 15.4% reported that a unified strategy is shared across all ministries, while 7.7% were unaware of any strategy, and 7.7% indicated no strategy exists.

Expert Survey on Government Cybersecurity Strategy Integration in Eswatini



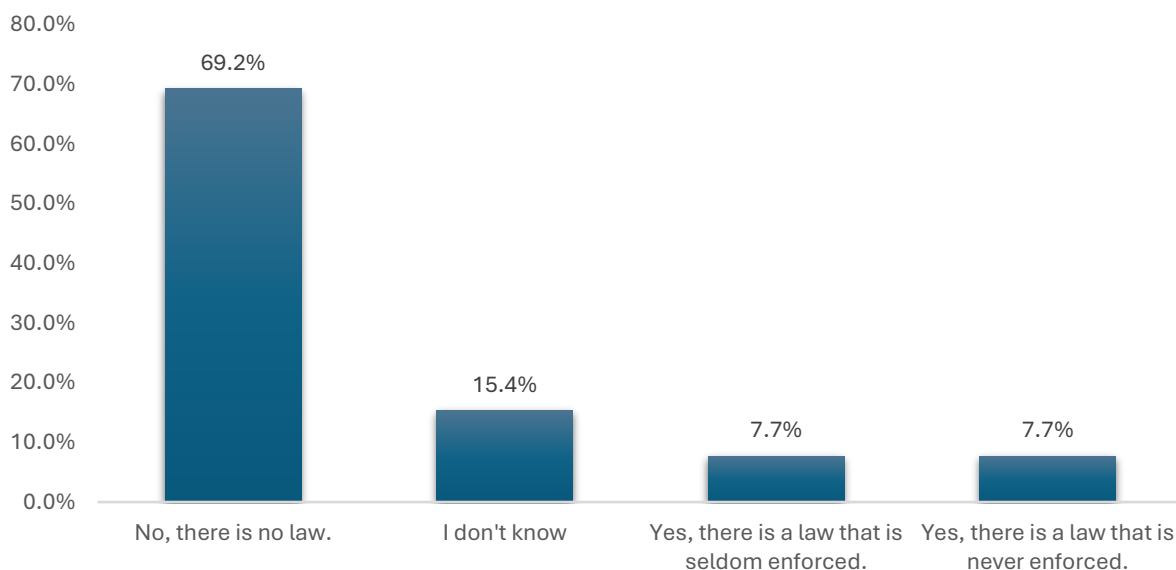
Emerging Technology

2.7

The Emerging Technology sub-pillar covers the laws, regulations and policies that govern those technologies currently in development or expected to be available within the next 5 years that can create significant social or economic effects. The score for this sub-pillar situates Eswatini in a systematic stage reflecting that the government accepts uniform regulation to govern emerging technologies on one-off basis, but the negative and positive impact of emerging technologies on the society are not observed, and not taken into account.

Survey responses reveal that Eswatini's legal framework for emerging technologies is limited, with most respondents indicating no existing laws (69.2%) in this area. Where laws are reported, they primarily cover specific technologies like drones, AI, biometrics, and IoT, pointing to a need for more comprehensive regulation to address the broader spectrum of digital innovations.

Is there a law that covers the use of emerging technologies in your country?



Fair Market Competition

2.4

This sub-pillar covers the laws and other legal mechanisms that ensure that processed data is shared or governed appropriately, where the right data assets go to the right place at the right time. The score for this sub-pillar situates Eswatini in a systematic stage reflecting that there is recognition, a Data Protection Authority is defined and functional and there is existence of standalone data protection regulation.

Eswatini is actively enhancing fair market competition within its telecommunications sector, recognising its importance for a robust digital economy. The unbundling of the Eswatini Post and Telecommunications Corporation (EPTC) is a reform aimed at separating infrastructure from retail services.

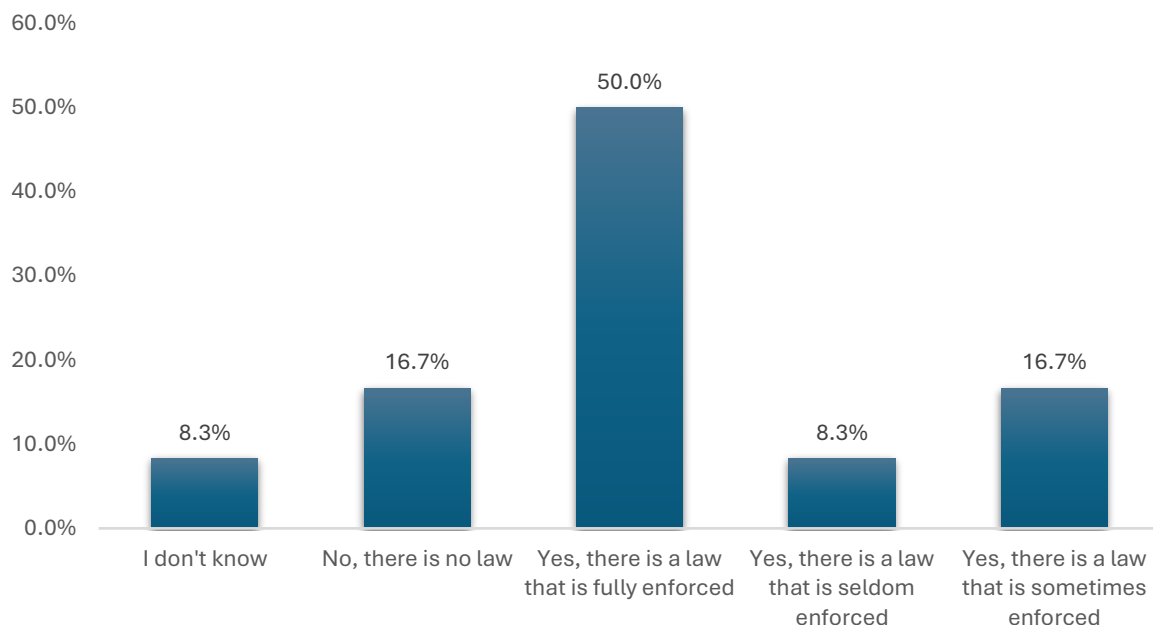
The establishment of an independent regulatory authority (ESCCOM) in 2013 marked a turning point, enabling the issuance of new full-service licenses to multiple operators like Eswatini Mobile, leading to increased prices and improved service offerings. Despite these developments, challenges persist in the broadband market, where high prices and limited penetration outside urban areas continue to hinder growth. Nonetheless, Eswatini's commitment to regulatory enhancements is evident through recent legislative efforts, including the Data Protection Act and the Computer Crime and Cybercrime Act, which align with international best practice. However, survey results indicate that while these data protection laws exist, they are seldom enforced, highlighting a gap between legislation and implementation.

Fair Market Competition

2.4

ESCCOM plays a crucial role in regulating the telecommunications sector however its capacity to address broader competitiveness challenges in the digital economy requires strengthening. Laws regulating competition among telecom networks are present, however, there is less clarity regarding regulations for mergers and acquisitions among licensed operators. This inconsistency highlights the need for clearer guidelines to foster a competitive environment that benefits consumers. Survey results indicate a mix of opinions regarding the existence and enforcement of laws regulating competition between telecom networks in Eswatini. While many respondents reported that such laws are fully enforced (50%), a smaller percentage (25%) stated that they are only sometimes or seldom enforced.

Is there a law that regulates competition between telecom networks?



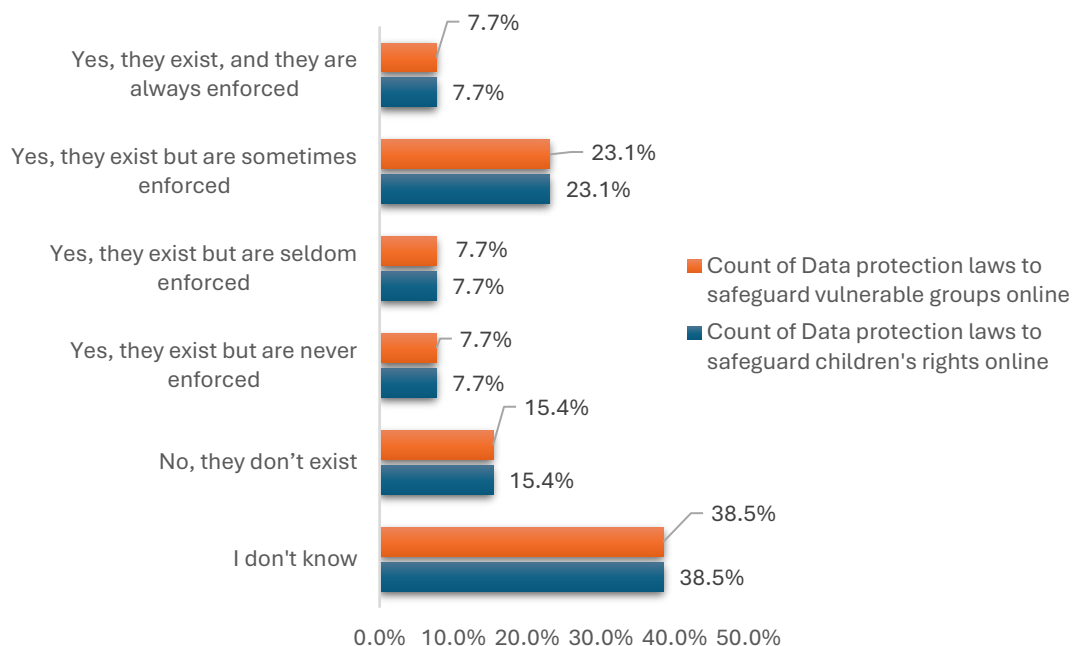
Human Rights

2.5

The Human Rights sub-pillar covers the laws and other legal mechanisms that ensure that processed data is shared or governed appropriately, where the right data assets go to the right place at the right time. The score for this sub-pillar situates Eswatini in a systematic stage reflecting that there is recognition, a Data Protection Authority is defined and functional and there is existence of standalone data protection regulation.

The survey findings reveal a concerning landscape regarding data protection laws aimed at safeguarding children's rights online and protecting vulnerable groups. Some of the respondents (38.5%) indicated uncertainty about the existence of such laws, with many stating they "don't know" if these protections are in place.

Data protection laws to safeguard children's rights and vulnerable groups online.





Regulation recommendations



1. Develop Emerging Technology Regulations Framework

Objective: Create comprehensive regulations for emerging technologies that ensure ethical standards, consumer protection, and innovation support.

Recommendations:

- Establish regulatory frameworks specifically addressing artificial intelligence, blockchain, and IoT technologies to ensure responsible innovation and deployment.
- Develop clear guidelines for ethical technology use, including data privacy standards, algorithmic transparency, and consumer protection measures.
- Create monitoring and enforcement mechanisms to ensure compliance while maintaining flexibility for technological advancement.

2. Implement Comprehensive Data Management Strategy

Objective: Create an integrated approach to government-wide data management that enhances service delivery and operational efficiency.

Recommendations:

- Develop and implement a comprehensive Interoperability Framework with clear technical standards and protocols for cross-agency data sharing.
- Create secure data sharing guidelines that protect sensitive information while enabling necessary inter-agency collaboration.
- Establish streamlined processes for data management that reduce operational costs and improve citizen service delivery.



Regulation recommendations



3. Strengthen Data Protection Enforcement

Objective: Ensure effective implementation and enforcement of existing data protection laws, particularly focusing on vulnerable groups.

Recommendations:

- Enhance enforcement mechanisms for the Data Protection Act of 2023, including clear penalties and compliance monitoring systems.
- Develop specific protection measures for children's rights and vulnerable groups in the digital space.
- Create awareness programs about existing data protection laws and their implications for different stakeholders.

4. Enhance Digital Services Communication

Objective: Improve public understanding and engagement with digital services and protections through strategic communication.

Recommendations:

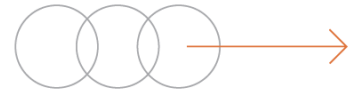
- Implement a comprehensive communication strategy targeting all citizen groups, with a special focus on young entrepreneurs and marginalised communities.
- Create clear information channels about available digital services, protections, and support initiatives.
- Develop targeted outreach programs to enhance the visibility and accessibility of digital resources.

5. Establish Regular Regulatory Assessment System

Objective: Maintain the effectiveness of regulatory frameworks through continuous evaluation and stakeholder engagement.

Recommendations:

- Implement regular assessment cycles for data protection, cybersecurity, and emerging technology regulations.
- Create formal consultation mechanisms with stakeholders across all economic sectors to gather feedback and insights.
- Develop update protocols for legislation to address identified gaps and emerging technological challenges.



Looking Forward

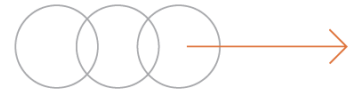


GOVERNMENT: Eswatini is systematically advancing on the government pillar



Recommendation	Priority	Timeline	Funding	Capacity
Strengthen political commitment to digital transformation	High	Short	Available	Limited
Establish a centralized digital transformation office	High	Short	Available	Strong
Fast-track the implementation of the "Government in your hand" project	High	Short – medium	Limited	Weak
Enhance communication of digital transformation strategies	Medium	Short	Limited	Limited
Encourage Citizen Participation Through Interactive and User-friendly Platforms and raising awareness about government services	Medium	Medium	Not Available	Weak
Leverage GovTech Innovations for Improved Service Delivery	Medium	Medium	Limited	Limited
Enhance Transparency Measures Through Open Data and Accessible Information	Low	Medium	Not Available	Weak





Looking Forward



DIGITAL PUBLIC INFRASTRUCTURE: Eswatini is systematically advancing on digital transformation



Recommendation	Priority	Timeline	Funding	Capacity
Create a standardised interoperability framework for seamless integration and secure data sharing among government systems	High	Short to Medium	Limited	Limited
Build a comprehensive digital ID system integrated with public and private sectors, prioritising privacy and data control	High	Short to Medium	Available	Limited
Improve visibility and adoption of digital initiatives through targeted communication and accessible information portals	Medium	Medium	Available	Strong
Establish a framework for regular assessment and stakeholder engagement to ensure effective digital initiatives	Medium	Medium	Limited	Strong
Develop a unified approach to ICT infrastructure investment through coordinated partnerships and public-private collaborations	Medium	Short to Long	Not available	Limited





Looking Forward

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PEOPLE: Eswatini is systematically advancing on the People pillar



Recommendation	Priority	Timeline	Funding	Capacity
Reduce Technology Costs and Improve Accessibility	High	Short	Limited	Strong
Expand Digital Literacy Through Inclusive Training Programs	High	Short	Limited	Strong
Enhance ICT Accessibility for People with Disabilities	High	Medium	Available	Limited
Build Trust in Digital Platforms Through Transparent Citizen Engagement	Medium	Long	Limited	Limited
Diversify Platform Usage for Enhanced Civic Engagement	Medium	Medium	Not Available	Weak





Looking Forward

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ECONOMY: Eswatini is systematically advancing on the Economy pillar



Recommendation	Priority	Timeline	Funding	Capacity
Enhance Research and Development (R&D) and innovation	High	Medium	Not available	Strong
Promote the development of e-commerce platforms and products	High	Short	Limited	Limited
Enhance public digital financial literacy	Medium	Short	Available	Strong
Expand education curriculum at all levels to include digital skills	Medium	Long	Limited	Limited
Strengthen the policy and regulatory framework for the deployment of e-commerce	Low	Medium	Not Available	Weak





Looking Forward

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CONNECTIVITY: Eswatini is systematically advancing on digital transformation



Recommendation	Priority	Timeline	Funding	Capacity
Invest in scalable, energy-efficient data centres with renewable energy solutions to support digital services growth	High	Short to Medium	Not Available	Limited
Improve network infrastructure for equitable Internet access in underserved urban and rural areas	High	Short to Medium	Limited	Strong
Ensure affordable internet access through policy measures, subsidies, and partnerships with ISPs	High	Medium	Limited	Strong
Build digital literacy to increase internet adoption, focusing on underserved and marginalised groups	Medium	Medium	Limited	Strong
Create inclusive digital services by implementing accessibility standards for all citizens, especially marginalised groups	Medium	Medium	Not Available	Strong





Looking Forward

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REGULATION: Eswatini is systematically advancing on digital transformation



Recommendation	Priority	Timeline	Funding	Capacity
Create regulatory frameworks to ensure ethical standards, consumer protection, and innovation support in emerging technologies	High	Short to Medium	Limited	Strong
Develop an integrated data management strategy across government for enhanced service delivery and operational efficiency	High	Short to Medium	Limited	Limited
Ensure effective enforcement of data protection laws with a focus on vulnerable groups	High	Short to Medium	Not Available	Limited
Improve public understanding and engagement with digital services through strategic communication	Medium	Medium	Limited	Strong
Maintain effective regulatory frameworks through continuous evaluation and stakeholder engagement	Medium	Short to Long	Limited	Strong

