

# Economic Diversification Sectors Digital Transformation Operandum Framework

In light of rapid global advancements in frontier technologies and their applications, including artificial intelligence (AI) and its potential to amplify productivity and efficiency across myriad sectors, and with our profound recognition of the necessity to diversify sources of income through knowledge, technology, and innovation, we are resolutely intent on positioning the digital economy as a pivotal and central pillar of our national economy.

WE HAVE PROMULGATED DIRECTIVES TO INAUGURATE A NATIONAL PROGRAMME FOR THE ADOPTION AND LOCALISATION OF AI AND TO EXPEDITE THE ESTABLISHMENT OF LEGISLATIONS THAT WILL ENABLE AI TECHNOLOGIES TO BECOME AN INSTRUMENTAL FORCE IN OUR DEVELOPMENTAL SECTORS.

SPEECH OF HIS MAJESTY SULTAN  
**HAITHAM BIN TARIQ**  
INAUGURATING THE FIRST ANNUAL  
CONVENING OF THE 8TH TERM

14TH NOVEMBER 2023



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## Executive Summary

Oman has embarked on a comprehensive journey of digital transformation, positioning itself as a technologically advanced and innovative economy. Guided by Oman Vision 2040, the country is leveraging digital tools and technologies to drive economic diversification, improve government efficiency, and enhance citizens' quality of life.

The economic diversification and industry innovation theme leveraging digital transformation to reduce dependency on oil revenues, fostering growth in sectors such as logistics, tourism, energy & minerals, agriculture & fisheries, and manufacturing.

The digital tools are driving innovation in traditional industries like oil and gas through automation, AI, and data analytics with the government objectives of supporting entrepreneurship and the growth of tech startups, creating an innovation-driven ecosystem.

The digital transformation journey underscores its commitment to becoming a regional leader in technology and innovation. The National Digital Economy Program target of 80% of economic diversification sector by end year 2030. This target fulfilment is achieved by aligning investments, policies, and talent development with its Vision 2040 goals, Oman is poised to create a resilient, diversified, and knowledge-driven economy. Continued focus on inclusivity, sustainability, and innovation will be key to unlocking its full potential in the digital era.

“Our government will follow the process in various sectors, including small, medium entrepreneurship, particularly those based on innovation, artificial intelligence, and advanced technology”; his Majesty, Sultan Haitham bin Tariq.

### **H.E Dr Ali Amour Al Shidhani**

Undersecretary Communication and Information Technology

Ministry of Transport, Communications, and Information Technology.



## Background

Oman's Vision 2040 is a national development plan that aims to transition the country from an oil-dependent economy to a more diversified, knowledge-based, and sustainable one. The program sets ambitious objectives across several sectors, focusing on economic diversification, social development, environmental sustainability, and governance. Here are the key objectives of Oman Vision 2040's diversification program:

Oman Vision 2040 aligns with global sustainability goals, emphasizing balanced development to meet the aspirations of future generations. The program highlights the importance of international collaboration, technology adoption, and robust policy implementation in achieving these objectives.

Oman Vision 2040 emphasizes strategic sectors to guide the nation's transformation into a diversified and sustainable economy while improving the quality of life for its citizens. Technological and Digital Sectors is one of the strategic sectors and is central to achieving the vision's goals and addressing national priorities.

نتقدم بثقة  
Moving Forward  
with Confidence



## Focus areas

## Objectives

<b>Economic Diversification</b>	<ul style="list-style-type: none"><li>• Reduce dependency on oil and gas revenues by expanding contributions from non-oil sectors such as manufacturing, tourism, logistics, mining, and fisheries.</li><li>• Promote innovation and entrepreneurship to create a knowledge-based economy and foster growth in technology and research-based industries.</li><li>• Attract foreign investment by enhancing the business environment, reducing bureaucratic hurdles, and establishing free zones and economic clusters.</li></ul>
<b>Human Capital Development</b>	<ul style="list-style-type: none"><li>• Enhance workforce skills to meet market demands through improved education, training, and reskilling programs.</li><li>• Encourage private sector participation in job creation to absorb the growing Omani workforce, particularly in high-value industries.</li><li>• Empower women and youth by ensuring greater inclusivity in the workforce and decision-making processes.</li></ul>
<b>Sustainable Development</b>	<ul style="list-style-type: none"><li>• Support renewable energy projects and energy efficiency to diversify energy resources and reduce environmental impact.</li><li>• Preserve natural resources while promoting sustainable practices in industries like agriculture, fisheries, and tourism.</li><li>• Promote urban development that aligns with environmental and sustainability goals.</li></ul>
<b>Infrastructure and Connectivity</b>	<ul style="list-style-type: none"><li>• Enhance logistics and transportation networks, positioning Oman as a global trade hub through strategic use of ports, airports, and road networks.</li><li>• Invest in digital transformation by improving ICT infrastructure to support smart cities and e-governance initiatives.</li></ul>
<b>Social and Cultural Development</b>	<ul style="list-style-type: none"><li>• Elevate quality of life by improving healthcare, education, and social welfare systems</li><li>• Promote cultural heritage while fostering innovation and creativity in arts, literature, and media.</li></ul>
<b>Good Governance and Institutional Excellence</b>	<ul style="list-style-type: none"><li>• Strengthen governance frameworks to ensure transparency, accountability, and efficiency in both public and private sectors.</li><li>• Encourage public-private partnerships (PPPs) to drive infrastructure projects and social development programs.</li><li>• Ensure financial sustainability through prudent fiscal policies and enhanced public financial management.</li></ul>

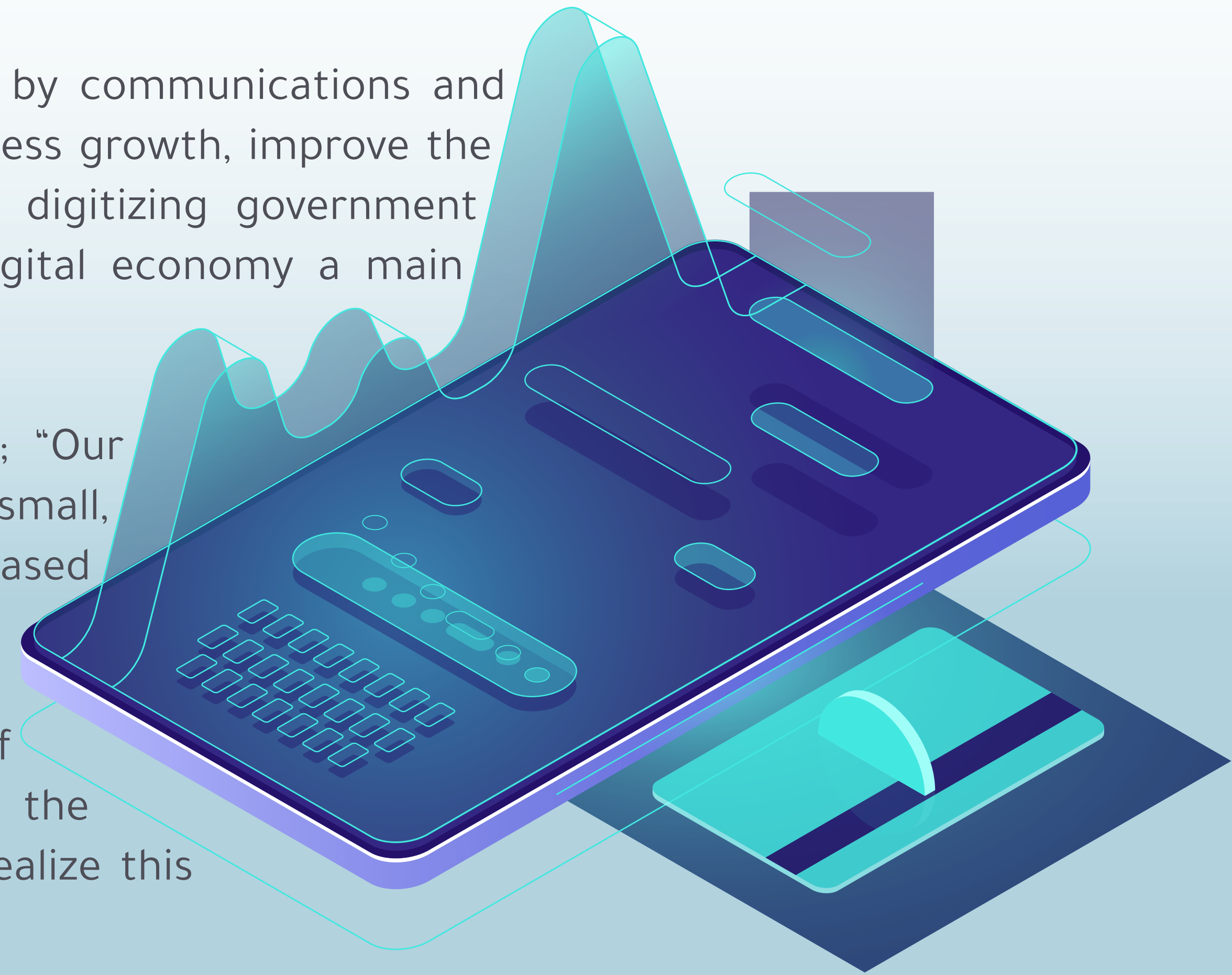
## Introduction

### Summary

The digital economy is an economic system that is enabled by communications and technologies to reduce costs, optimize operations, boost business growth, improve the quality of services and products. An economy reflected by digitizing government services, digitalizing the society and digitalizing business. Digital economy a main contributor to the knowledge-based economy.

As part of his Majesty, Sultan Haitham Bin Tariq's Directive; "Our government will follow the process in various sectors, including small, medium enterprises, and entrepreneurship, particularly those based on innovation, artificial intelligence, and advanced technology."

To fulfil the above directive and mandate; 80% digitization of economic sector by year 2030 is a national priority as per the National Digital Economy Program. MTCIT is a facilitator to realize this national goal.



## Economic Diversification

## Objectives

<b>Energy</b>	<ul style="list-style-type: none"><li>• Transition to renewable and clean energy sources, such as solar and wind, to reduce carbon emissions.</li><li>• Enhance energy efficiency across industries and promote sustainable energy production.</li><li>• Maintain a competitive oil and gas sector while investing in green technologies.</li></ul>
<b>Manufacturing</b>	<ul style="list-style-type: none"><li>• Boost industrial innovation with advanced technologies like automation and robotics.</li><li>• Focus on high-value manufacturing, including petrochemicals, metallurgy, and food processing.</li><li>• Increase exports by ensuring global competitiveness.</li></ul>
<b>Logistics</b>	<ul style="list-style-type: none"><li>• Position Oman as a global logistics hub by leveraging strategic ports, airports, and free zones.</li><li>• Enhance connectivity with regional and global trade networks.</li><li>• Invest in infrastructure for efficient cargo handling and supply chain management.</li></ul>
<b>Tourism</b>	<ul style="list-style-type: none"><li>• Develop Oman as a unique tourist destination, emphasizing eco-tourism, heritage, and adventure tourism.</li><li>• Implement smart tourism solutions, such as digital platforms for bookings, AI-driven customer service, and virtual reality experiences.</li><li>• Develop green infrastructure in tourism hotspots to meet global sustainability standards.</li></ul>
<b>Fisheries and Agriculture</b>	<ul style="list-style-type: none"><li>• Modernize agriculture and fisheries with sustainable practices and advanced technologies.</li><li>• Promote aquaculture and food security initiatives.</li><li>• Increase the contribution of these sectors to GDP through value-added products.</li></ul>



# Technology

Technology and Digital Sectors play a pivotal role in driving the nation's transition to a knowledge-based economy. These sectors aim to leverage innovation and digital transformation to enhance economic diversification, governance, and quality of life.

Fulfill the above directive and mandate; the Ministry of Transport, Communication, and Information Technology (MTCIT) target is to achieve 80% digital transformation in the main economic sectors by year 2030, as stipulated by the National Digital Economy Program.

These mandates reflect Oman Vision 2040's commitment to harnessing technology as a cornerstone of its national development strategy, creating a digitally empowered and resilient society.

## The main goals to achieve technology and digital sector objectives are:

- Position Oman as a regional leader in technology and innovation.
- Ensure inclusivity in digital transformation by bridging the digital divide.
- Drive sustainable economic growth and improve governance through smart technologies.

Focus areas	Mandates
<b>Build a Robust ICT Infrastructure</b>	<ul style="list-style-type: none"> <li>• Develop world-class telecommunications networks, including 5G and broadband, to support advanced technologies and smart services.</li> <li>• Ensure widespread access to digital infrastructure in urban and rural areas</li> </ul>
<b>Enhance E-Government Services</b>	<ul style="list-style-type: none"> <li>• Transition government operations to digital platforms for efficiency and transparency.</li> <li>• Simplify public services through integrated digital portals and smart applications</li> </ul>
<b>Industry 4.0 Technologies</b>	<ul style="list-style-type: none"> <li>• Promote the use of Artificial Intelligence (AI), Internet of Things (IoT), Blockchain, and Big Data in public and private sectors.</li> <li>• Drive automation and digital solutions in key industries, including logistics, manufacturing, and energy.</li> <li>• Establish innovation hubs and technology parks to support research and development (R&amp;D)</li> <li>• Foster collaboration between academic institutions, startups, and industries for tech-driven solutions.</li> </ul>
<b>Cybersecurity and Data Protection</b>	<ul style="list-style-type: none"> <li>• Implement robust policies and systems to protect digital assets and critical infrastructure.</li> <li>• Enhance the nation's resilience against cyber threats by adopting global best practices.</li> <li>• Establish clear frameworks for data privacy and secure data sharing.</li> <li>• Encourage the development of a digital identity system to enable safe online transactions</li> </ul>
<b>Digital Skills and Workforce Development</b>	<ul style="list-style-type: none"> <li>• Introduce digital literacy programs in schools and higher education to prepare future generations for the digital economy.</li> <li>• Upskill and reskill the workforce to align with emerging technology needs, particularly in AI, coding, and cybersecurity.</li> <li>• Support tech startups and SMEs through funding, mentorship, and incubation program.</li> <li>• Encourage youth participation in the digital economy by fostering innovation and creativity</li> </ul>
<b>Smart Cities and Digital Integration</b>	<ul style="list-style-type: none"> <li>• Implement smart city initiatives to improve urban management, such as traffic control, energy efficiency, and waste management.</li> <li>• Integrate digital solutions into housing, transportation, and public utilities for sustainability and convenience.</li> <li>• Build platforms to connect government entities, businesses, and citizens, ensuring seamless communication and service delivery</li> </ul>
<b>Technology for Economic Growth</b>	<ul style="list-style-type: none"> <li>• Promote ICT as a significant contributor to GDP by supporting tech-related exports and services.</li> <li>• Attract global tech companies to invest and establish operations in Oman.</li> <li>• Integrate digital technologies into agriculture, fisheries, manufacturing, and tourism to enhance productivity and competitiveness</li> </ul>
<b>Research and Development in Technology</b>	<ul style="list-style-type: none"> <li>• Invest in technological research addressing local and global challenges.</li> <li>• Establish partnerships between academic institutions and industries for innovation.</li> <li>• Promote green tech solutions for energy efficiency, waste reduction, and environmental conservation</li> </ul>

### 3. Oman Strategic Direction for Digital Economy

Oman's strategic direction for the digital economy focuses on creating a competitive, innovative, and inclusive ecosystem that supports national goals. By investing in technology, empowering its people, and promoting sustainability, Oman is positioning itself as a leader in the regional and global digital economy, ensuring long-term resilience and prosperity.

#### **The main goals to achieve technology and digital sector objectives are:**

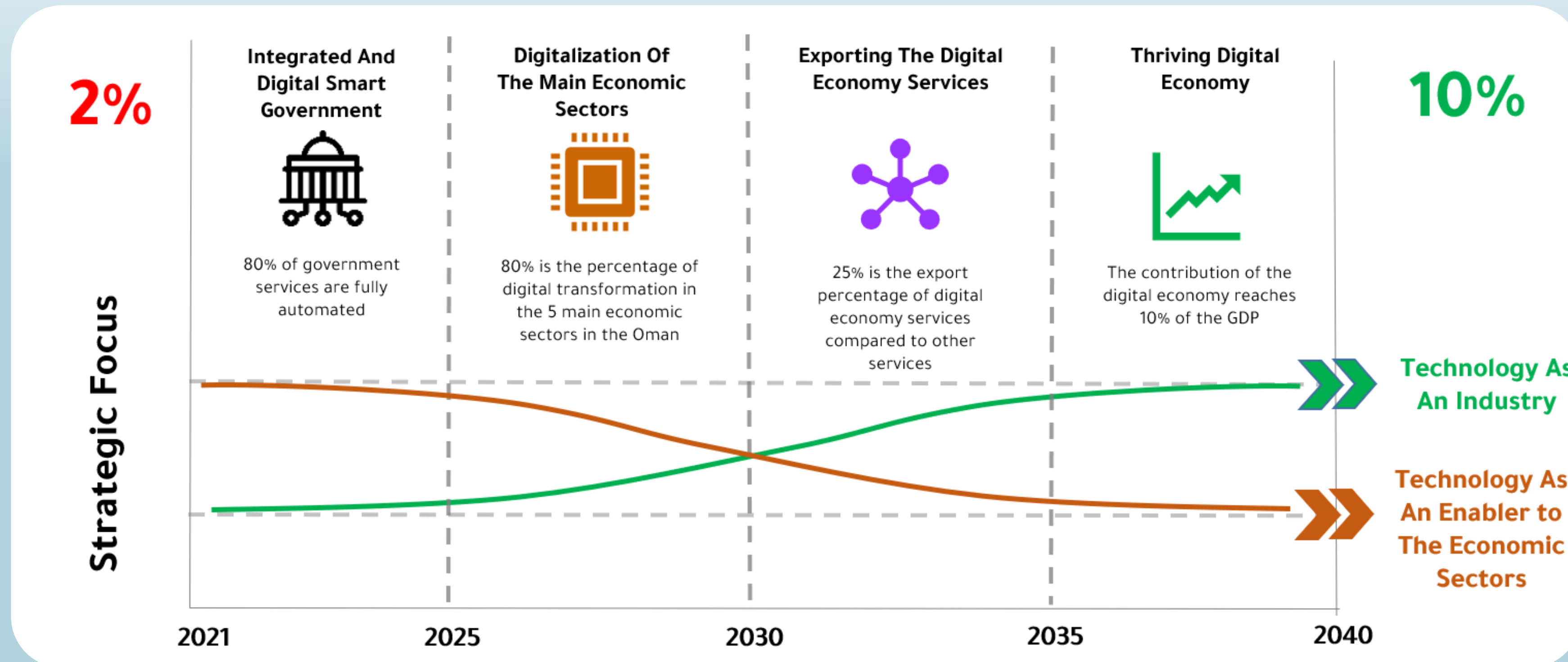
- Integrated and Digital Smart Government: target is 80% of the government core services are fully automated by year 2025.
- Digitalization of the Main Economic Sectors: target of 80% is the percentage of digital transformation in five main economic sectors in Oman by year 2030.
- Exporting the Digital Economy Services: target 25% is the export of digital economy services compared to other services by year 2035.
- Thriving Digital Economy: the contribution of the digital economy reaches 10% of the GDP by year 2040.

The National Program for Digital Economy aims to increase the total contribution of the ICT sector to GDP to multiply 5 times over the next 20 years to reach 10% of GDP by 2040. The Ministry of Transport, Communications and Information Technology is working with partners in the government and private sectors to increase the contribution of the information technology sector over the telecommunications sector by between 30% to 35% by stimulating investment in technologies related to the Fourth Industrial Revolution such as AI and others, localizing and transferring technology, entrepreneurship and innovation, and accelerating digital transformation in government services and economic sectors (the following figure provides an overview of the strategic direction for the development of the digital economy).

Transforming Oman's digital economy from an enabler to an industry involves shifting its role from being a supportive tool for other sectors to becoming a primary economic driver and contributor to GDP. This transition aligns with Oman Vision 2040's goals of economic diversification and global competitiveness.

### The main strategic initiatives to achieve digital economy goals:

- **Digital Oman Strategy (e.Oman):** A national initiative to drive digital transformation in government and private sectors.
- **Smart Cities Development:** Incorporate IoT, AI, and advanced technologies in urban planning and infrastructure.
- **Cybersecurity Roadmap:** Develop comprehensive policies to protect Oman's digital assets and ensure trust.
- **Skills and Talent Development Programs:** Provide training and education to equip the workforce for digital opportunities.



## 4. Digital Economy Diversification Strategy towards Operandum Framework

The operandum framework is based on Enterprise Digital Governance which refers to the framework of policies, processes, and practices an organization adopts to oversee and manage its digital operations, technologies, and strategies. It ensures that the use of digital resources aligns with the organization's objectives, complies with regulatory requirements, and mitigates risks associated with digital transformation.

It is essential for modern enterprises navigating complex digital transformations. By establishing robust governance frameworks, enterprises can ensure sustainable growth, protect digital assets, and remain competitive in an increasingly technology-driven world.

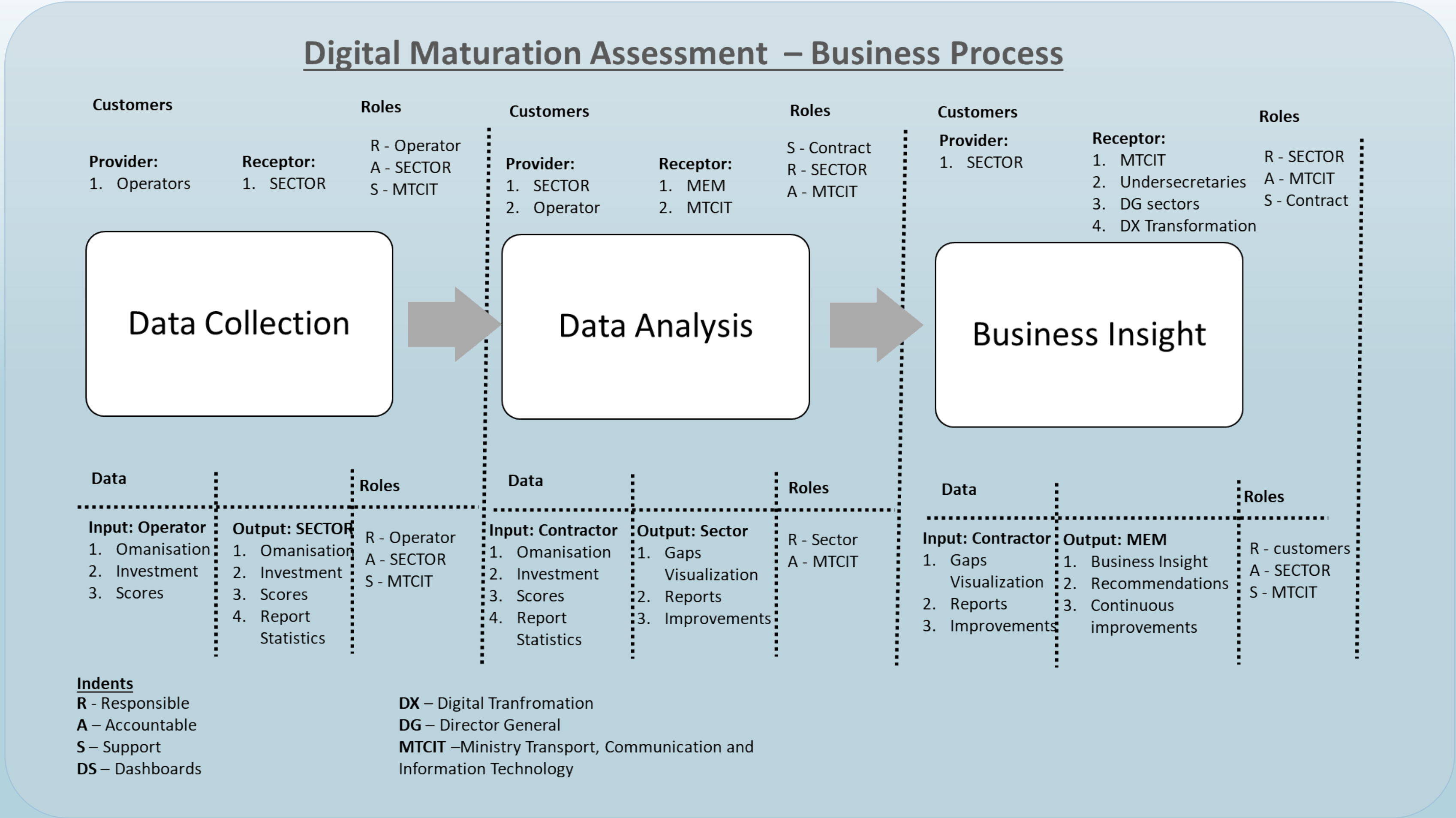
The strategy establishes a conceptual opportunity classification (3-bucket model), operandum framework, RASCI Matrix, Assurance, and authorities undertaken in the operandum framework.

The operandum framework consists of Sector digitalization Executive Committee (SDEC), Operation Steering Group (OSG) and Sectors Championship.

		Description	Mandates	Members
Operandum Framework	Sector Digitalization Executive Committee (SDEC)	Sets 5-years Sector portfolio strategy and improvement plan.	<ul style="list-style-type: none"> <li>Endorse and authorize sector digitization plan to reach 80% digitization no later than by 2030.</li> <li>Endorse annual program, resources, and budget.</li> <li>Endorse improvement plan on annual basis.</li> <li>Steer sector strategic decision.</li> </ul>	Chair: HEUS Sector; HEUS C&IT, DG Sector, DG DX, Core Team
	Operation Steering Group (OSG)	The team establish the overall sector maturation index and improvement plan.	<ul style="list-style-type: none"> <li>Drive the sector implementation plan.</li> <li>Support sector project execution plan.</li> <li>Support annual program, resources and budget and plan in strategic direction.</li> <li>Support Competitive Intelligence (collect, analyze, and use information from the industry that contribute to business's competitive advantage)</li> <li>Support and advise Benchmark study</li> </ul>	Chair: DG sector; DG Digital Transformation, Core team Members.
	Project Core Members (PCM)	The team establish the overall sector maturation index and improvement plan.	<ul style="list-style-type: none"> <li>Execute the sector implementation plan.</li> <li>Conduct Competitive Intelligence (collect, analyze, and use information from the industry that contribute to business's competitive advantage)</li> <li>Collect and data analysis; gap-to-potential prospects.</li> <li>Present improvement plan to all stakeholders</li> <li>Recommend for standardization across sectors.</li> </ul>	Chair: DG sector; Core team Members.
Sectors	Energy & Minerals	The champions for the improvement plan	<ul style="list-style-type: none"> <li>Steer the new development opportunities.</li> <li>Steer sectors practice worth for replication.</li> <li>Champion for sector deployment plan</li> </ul>	Chair: HEUS MBM, HEUS CIT, DG E&P, DG Mining
	Heritage & Tourism			Chair: HEUS MHT, HEUS C&IT, DG Tourist Devel..
	Industry			Chair: HEUS MCIP, HEUS CIT, DG Industry
	Agriculture, Fisheries & Water Resources			Chair: HEUS MAFW, HEUS CIT, DG xxx
	Transport & Logistics			Chair: HEUS Transport, HEUS CIT, DG Logistics

# 4.1 Digital Economic Diversification Sector toward Business Process

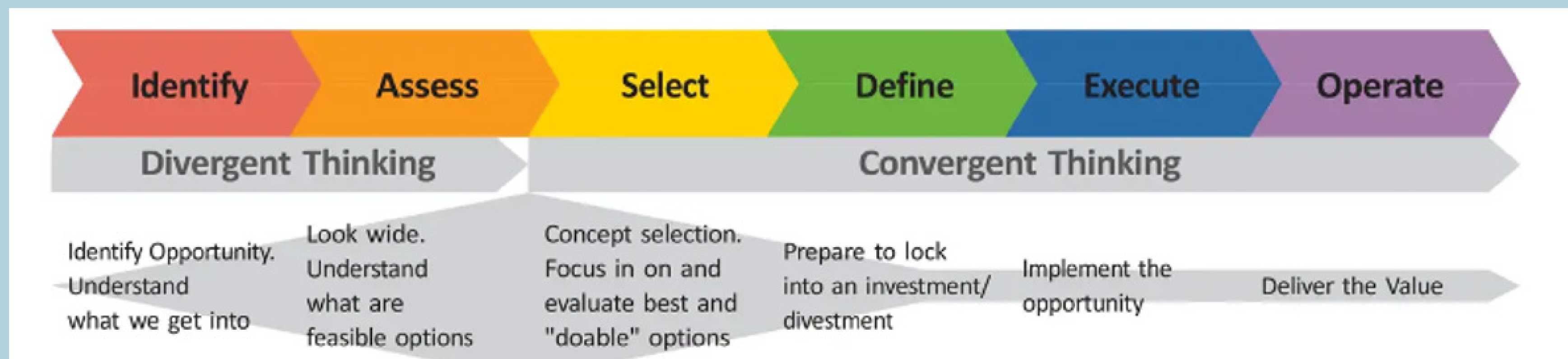
Business Process Mapping is the act of creating a visual representation of the steps, inputs, outputs, and stakeholders involved in a specific business process. It helps organizations understand how their processes function, identify inefficiencies, and improve performance. These maps serve as a guide to analysing and redesigning workflows, ensuring alignment with business objectives.



## 4.2 Digital Economic Diversification Sector toward Responsibility Matrix

A Digital Responsibility Matrix is a framework that defines and assigns roles and responsibilities related to the management, use, and governance of digital technologies and assets within an organization. This matrix ensures that accountability is clear across different stakeholders, supporting effective collaboration and compliance with organizational goals and policies.

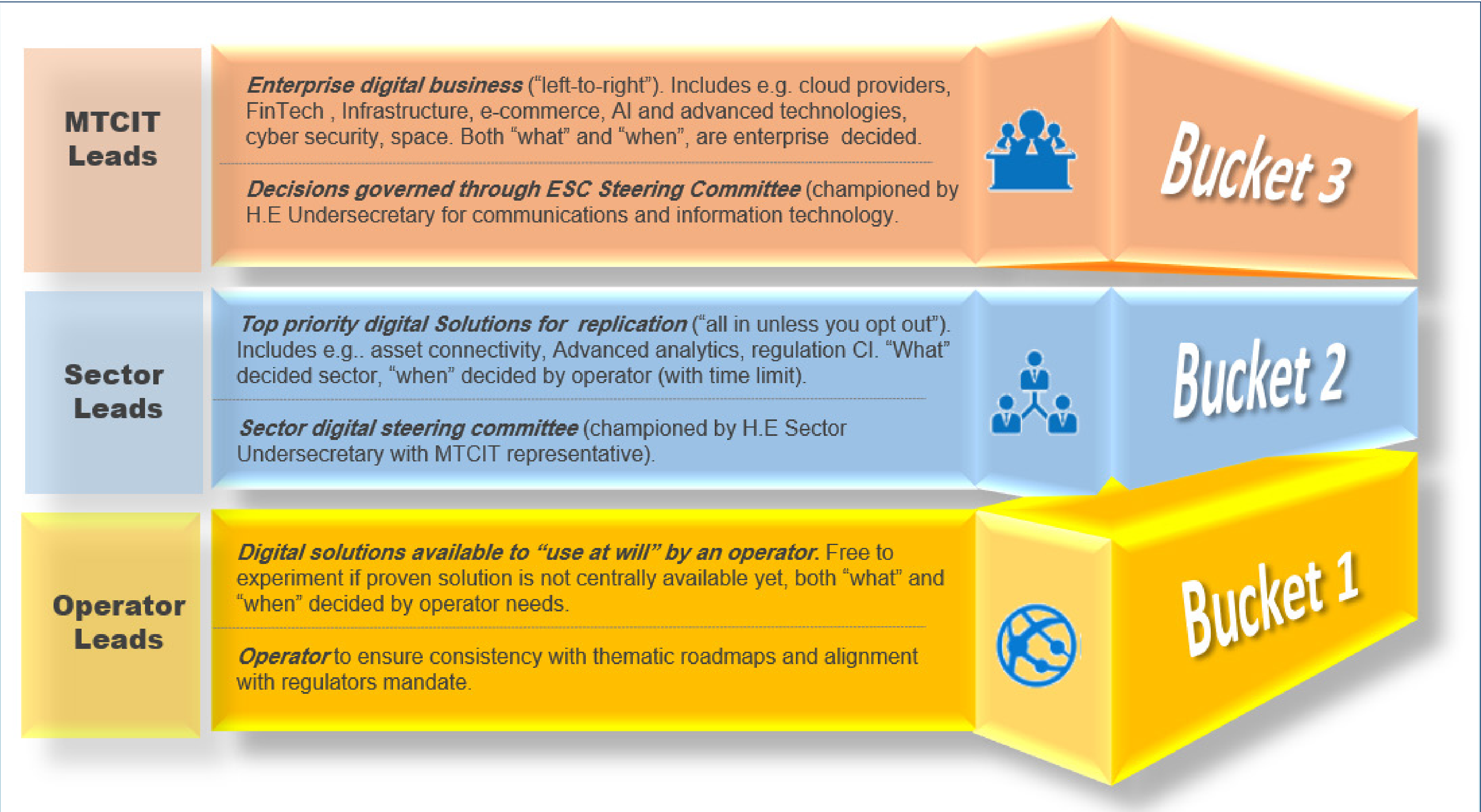
<b>R</b>	<i>(Those who do the work to complete the task)</i>
<b>A</b>	<b>Accountable</b> <i>(The one ultimately answerable for the correct and thorough completion of the deliverable or task)</i>
<b>C</b>	<b>Consulted</b> <i>(Those whose opinions are sought - Steer, SMEs)</i>
<b>I</b>	<b>Informed</b> <i>(Those who are kept up-to-date on progress, often only on completion of the task or deliverable)</i>



PROCESS	TASK	HEUS ICIT	HEUS Sector	DG Sector	DG DX Transformation	Sector Lead	DX Transformation Lead	Operator (CEO, MD, GM)	Sector Legal Advisor
Identify Identify Opportunities	<b>Prioritization:</b> Establish clear criteria for evaluating and prioritizing opportunities	A	C	C	C	I	R	I	I
	<b>Opportunity Ranking:</b> Score and rank identified opportunities based on the established criteria	A	C	C	C	I	R	I	I
	<b>Stakeholder Engagement:</b> A consensus on which opportunities will be pursued, ensuring stakeholder commitment and support	A	C	C	C	I	R	I	I
	<b>Resources:</b> Assess the organization's resources to determine which opportunities can realistically be pursued	A	C	C	C	I	R	I	I
Assess Feasibility & Options	<b>Legal:</b> Compliance, regulatory changes, and intellectual property rights.	C	A	C	C	I	I	C	R
	<b>Political:</b> policies, trade agreements etc.	C	A	C	C	I	I	C	R
	<b>Social:</b> Social trends, consumer attitudes, and cultural shifts.	C	A	C	C	I	I	C	R
	<b>Competitive:</b> Trends and disruptions that may affect future relevance	C	A	C	C	I	I	C	R
	<b>Technological:</b> Advancements, trends etc.	A	C	C	C	I	I	C	C
Select Optimum option	<b>Timeframe:</b> Estimated time to implement and deliver results.	C	A	R	C	C	R	C	I
	<b>Stakeholder:</b> Evaluate the level of support stakeholders are willing to provide i.e. Influence and Power	C	A	R	C	C	R	C	I
	<b>Working group:</b> right mix of skills, experience, and interpersonal qualities equipped to navigate challenges, and deliver successful results	C	A	R	C	C	R	C	I
	<b>Risk Assessment:</b> risks associated legal, business processes and their potential impact.	C	A	R	C	C	R	C	C
Define Definition & Plan	<b>Opportunity:</b> definition of the opportunity, highlighting its relevance to the organization's strategic priorities	C	A	R	C	C	R	C	C
	<b>Stakeholder Alignment:</b> engagement plan that aligns interests and fosters collaboration	I	C	R	A	R	R	C	C
	<b>Business Case:</b> outlining the value proposition, expected benefits, costs, and key risks	C	C	R	A	R	R	C	C
	<b>Plan:</b> Develop a details project plan	I	C	R	A	R	R	C	C
Execute Implementation	<b>Data gathering</b> - ensure it is accurate, reliable, relevant, and fit for its intended purpose.	C	C	R	A	R	R	C	C
	<b>Data mining:</b> extracting valuable patterns and insights. Ensure that the results are meaningful, accurate, and actionable	C	C	R	A	R	R	C	C
	<b>Data Analysis:</b> Ensure the insights generated from data mining lead to actionable recommendations	C	C	R	A	R	R	C	C
Operate Realize Value	<b>Value realization:</b> sharing insights across operators, and sector to drive continuous improvements and innovation	C	C	R	A	R	R	C	C
	<b>Collaboration:</b> fostering knowledge sharing for operators to achieve strategic goals, adapt to changes, and sustain growth in competitive markets.	C	C	R	A	R	R	C	C
Sustain Continuous Improvement	<b>Scalability:</b> practice worth for replication, accommodate future growth, shifting market conditions, integrating with existing processes	C	A	R	C	C	C	C	C
	<b>Stakeholder:</b> Impact on customers, partners, and shareholders	C	A	R	C	C	C	C	C
	<b>Thrive for Excellence:</b> embed continuous improvement practices to enhance value creation	A	R	R	C	C	C	C	C
	<b>Innovation:</b> Adoption of emerging technologies or innovative practices	A	R	R	C	C	C	C	C

### 4.3 Economic Sector Digital Opportunity Classification (3-Bucket Model)

To allow for efficient roadmap implementation, a conscious business led categorization of opportunities is needed to determine which opportunities (platforms, products) to mandate deploy and integrate cross business and for which areas to encourage operators creativity.





## 4.4 Digital Economic Diversification Prioritization - Value Driven

The prioritization driven by value is a strategic approach to selecting and ranking digital programs based on their potential to deliver measurable business outcomes, customer benefits, or organizational improvements. This method focuses on maximizing the return on investment (ROI) by aligning program selection with key value drivers such as revenue growth, cost savings, customer satisfaction, or competitive advantage



Criteria	Descriptions	Weight	MEM	MCIP	MHT	MTCIT	MAFW
<b>Strategic Alignment</b>	Opportunity aligns with the Oman 2040 long-term strategic goals, mission, and vision.	10%	10	10	10	10	10
<b>Potential Impact &amp; Value</b>	The potential sector benefits or value the opportunity could deliver e.g., revenue growth, cost savings, strategic assets etc.	30%	30	24	22	24	18
<b>Feasibility</b>	The practicality of successfully executing the opportunity given current capabilities, resources, and constraints	10%	8	8	8	8	6
<b>Risk Assessment</b>	The level of risk involved in pursuing the opportunity, including potential threats and uncertainties e.g. Potential for reputational, legal, or financial risks	10%	8	8	8	8	8
<b>Market Stimulation (ICV)</b>	potential in-Country Value opportunities within the sector – Employment's & Omanis and investments	20%	20	20	16	20	16
<b>Collaboration</b>	Good collaboration with sector personal and business insight - prospect enabler	20%	20	16	20	20	16
<b>Total Score</b>		<b>100%</b>	<b>96%</b>	<b>86%</b>	<b>84%</b>	<b>90%</b>	<b>74%</b>

## **5. Digital Economic Diversification Sector towards Value Creation and Realization**

Every operator needs its own strategy to advance its digital transformation journey. This strategy is the foundation and shows a operators business model that could spell success in the future. Ministry of Transport, communications and Information Technology outlines the pan enterprise strategy across all economic diversification sectors.

### **In summary:**

- Digital value creation is about designing and generating opportunities for value through digital means.
- Digital value realization is about ensuring that these opportunities lead to actual, measurable results.

Gap-to-potential process used for this study to establish baseline and direction forward which refers to the difference between an operator's and sector current digital maturity and the maximum potential it could achieve with full utilization of available digital technologies, processes, and strategies.

The objective of this study survey is to establish a baseline and to embed continuous improvement journeys for achieving our mandate.

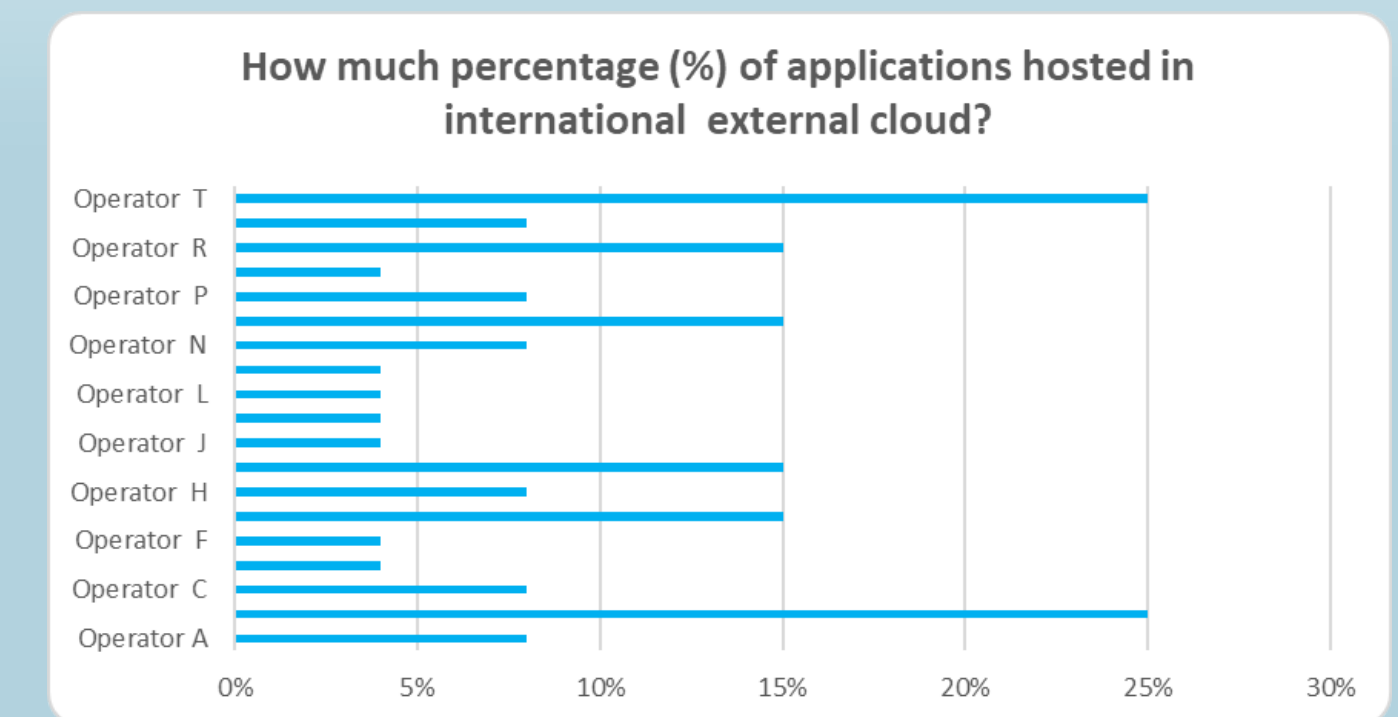
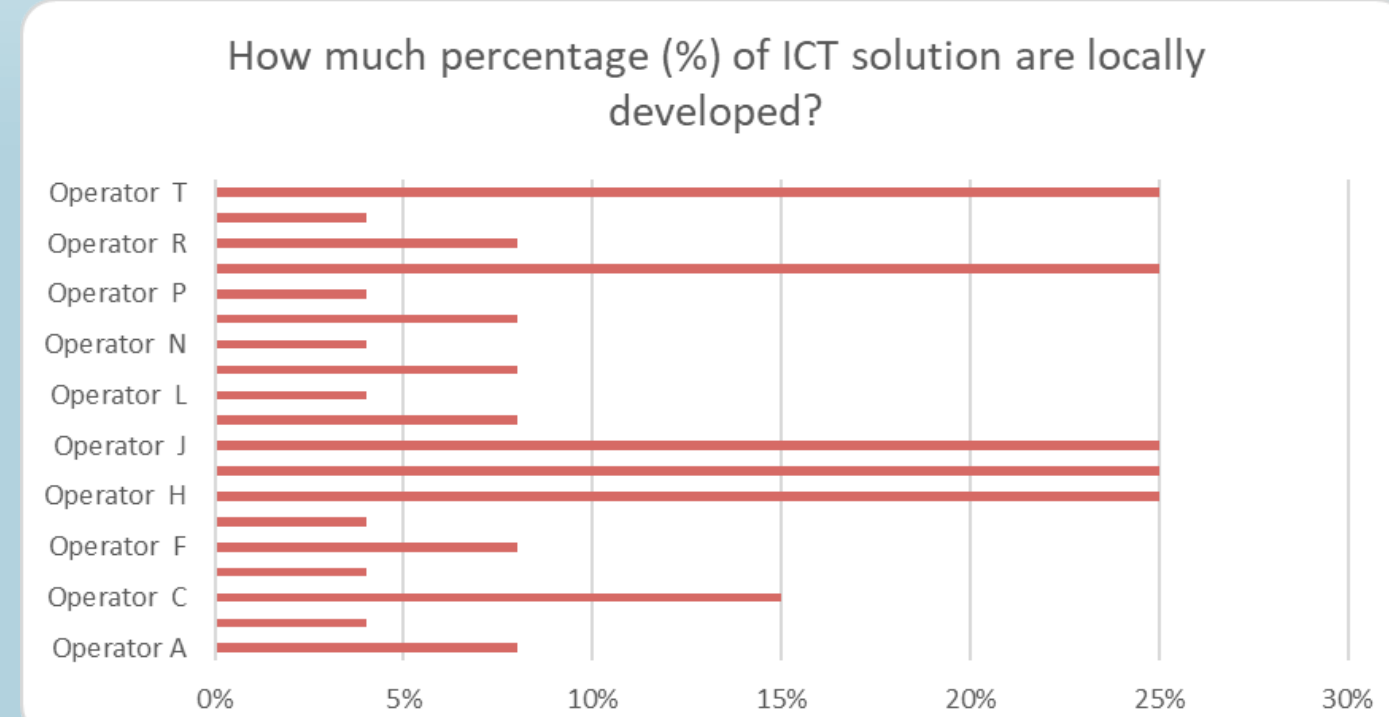
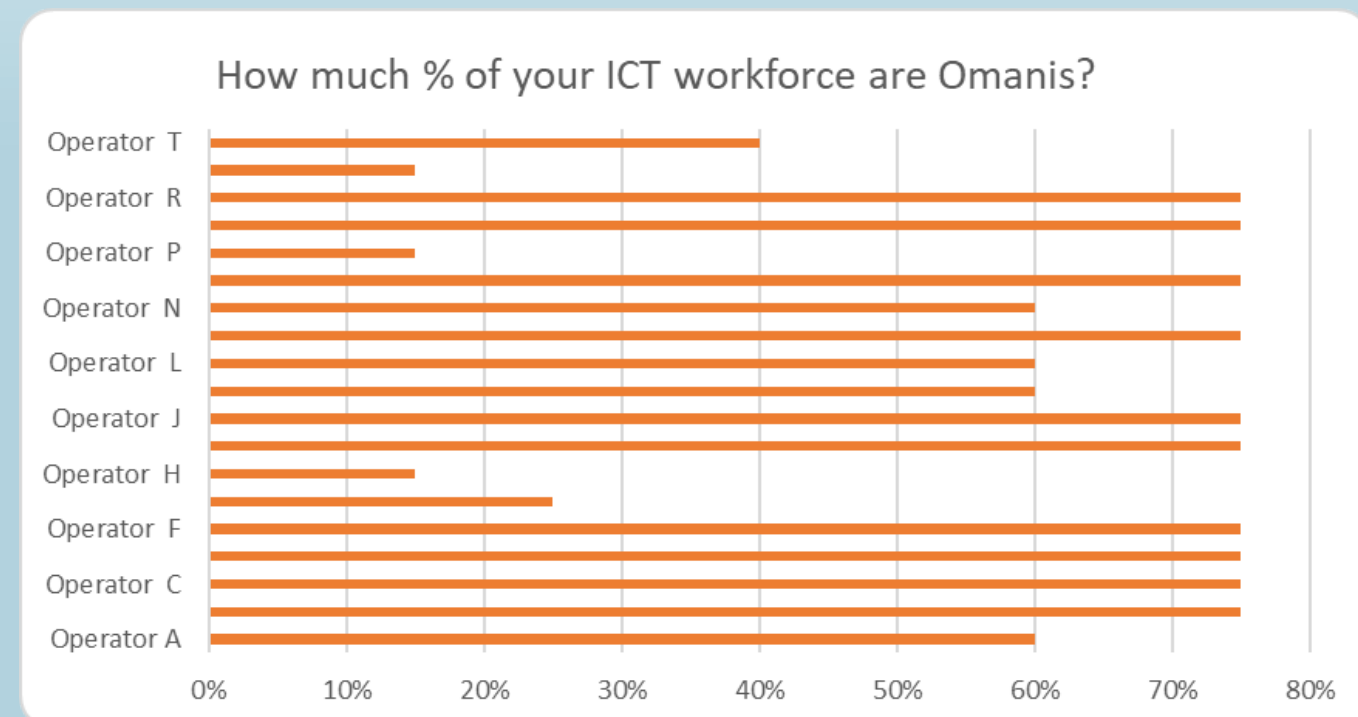
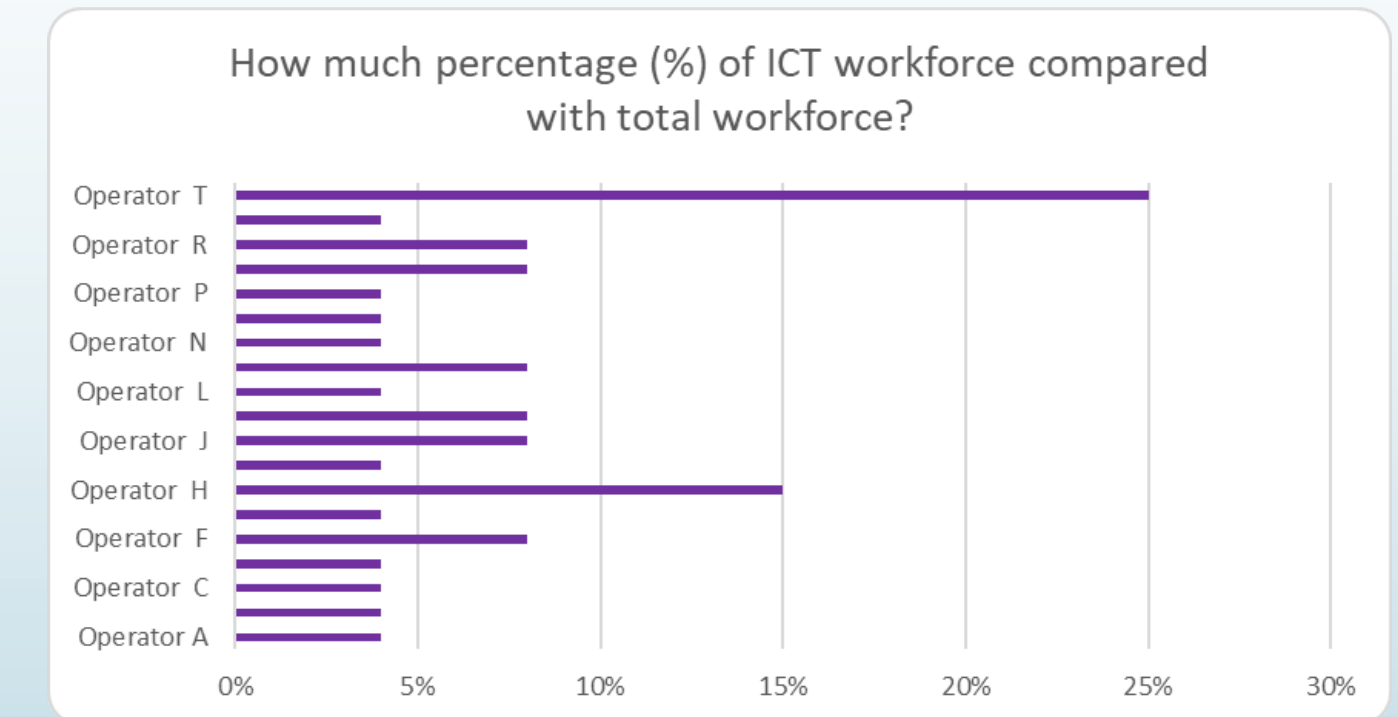
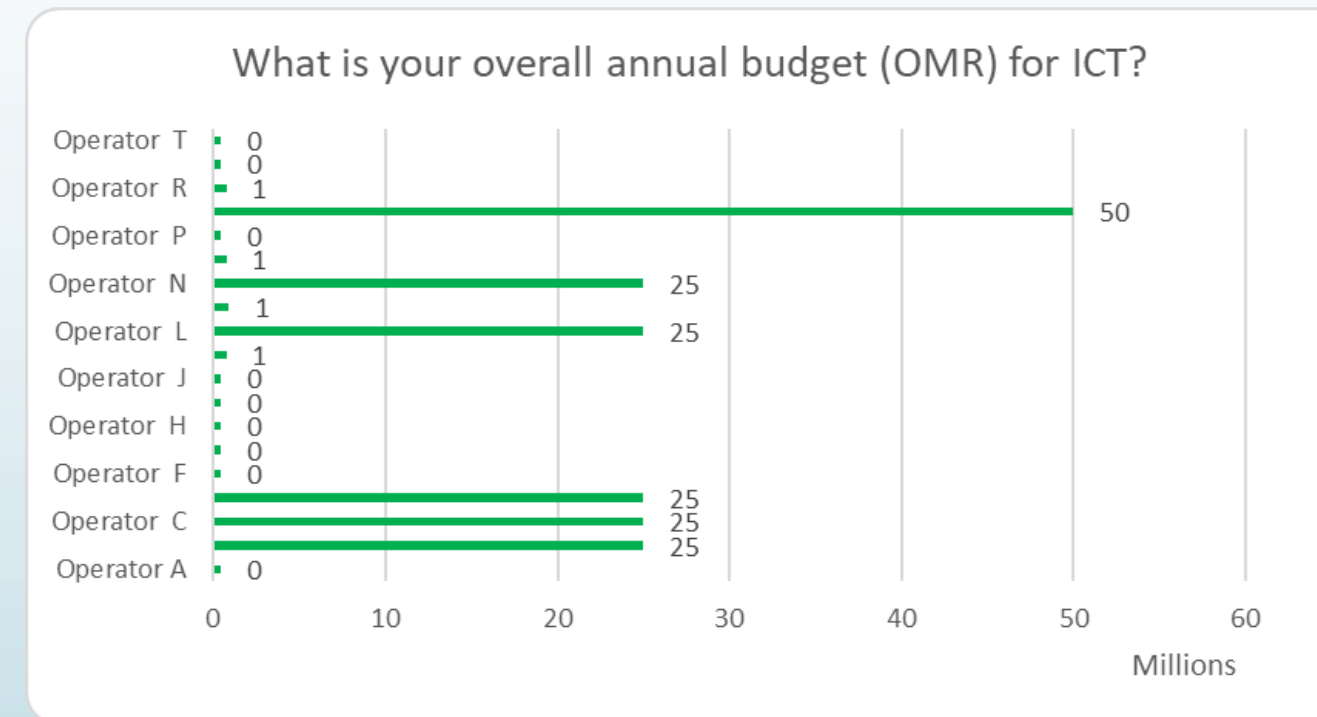
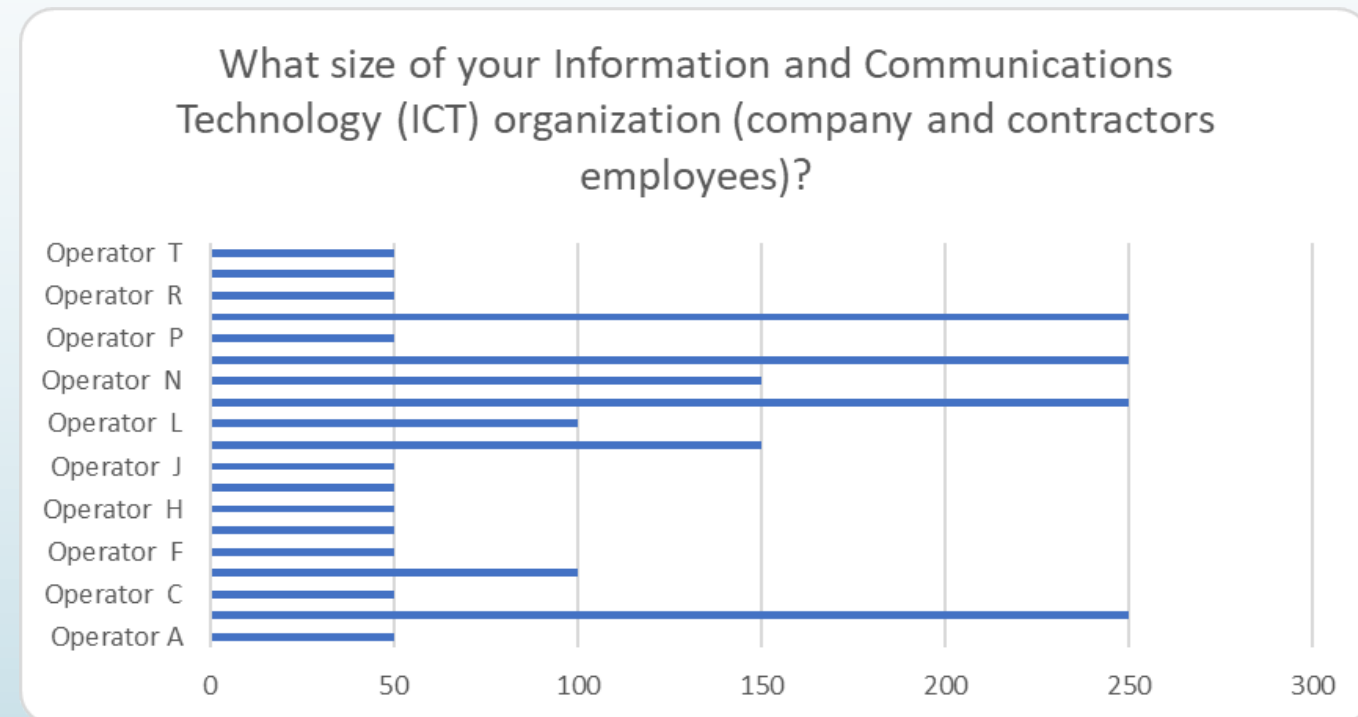
The survey contains 4 dimensions; Digital Governance, Digital Technology, Digital Workforce Dynamics, and Digital Market Intelligence which are vital for building digital economy at sustainable pace, benchmarking with Top-20 (T-20) Information and Communications Technology (ICT) companies and to affirm operational excellence.

### **5.1 Business Insight - Data Analysis**

Digital business insight is about turning raw data into meaningful information that will establish baseline, targets, and continuous improvement journey.

## 5.1.1 Digital Demographic Data

Digital Demographic is designed to capture the organization statistics as a means understanding its overall organizational structure, its workforce and overall budget. This demographic data is vital input for digital strategy development.



## 5.1.2 Digital Maturation Business Insight Index

A Digital Maturation Business Insight Index is a structured framework or measurement tool used to evaluate and benchmark an organization's progress in adopting and integrating digital technologies to drive business value. This index enables businesses to assess their digital maturity, identify areas for improvement, and prioritize strategic investments for growth and transformation.

### 5.1.2.1 Report Reading Guidelines

Benchmark reading report is a structured that provides an analysis of an organization's performance relative to industry standards, competitors, or predefined goals. It helps identify gaps, strengths, and areas for improvement by comparing key performance metrics against benchmarks.

Abbreviations		Scores		Actions	
OP	Operator	Green	Top Twenty 80% - Y2030 Target	Green	Sustain
BU	Business Unit	Yellow	Middle T-20 70% -Y2024 Target	Yellow	Continuos Improvements
SEC	Sector	Red	Bottom T-20 60% - Y2024 Target	Red	Focus Areas
T-20	MTCIT Target Y2030				

Benchmarks differ across dimensions and questions. Use the color coding and abbreviations as a guideline in the interpretation of the results.

## 5.1.3 Digital Governance

Digital governance is the management and oversight of digital technologies, digital capabilities, data, and processes to ensure that they align with an organization's overall strategy and goals, while also ensuring compliance with relevant laws and regulations. It includes the development of policies, standards, and procedures to manage and secure digital assets, as well as the management of data, including data privacy, data security, and data governance.

Digital Governance		SECTOR	BU A	BU B	BU C
1	How well does your organization digital strategy & vision aligns with overall corporate governance.?	7	6	7	8
2	How well does your organization governance prioritize its digital investment and oversees the digital initiatives.?	6	7	6	6
3	How well does your organization governance manages risks associated with digital initiatives, as well as roles and responsibilities of the key stakeholders.?	7	6	7	6
4	How well does your organization manages its performance metrics of digital initiatives, as well as the regular reporting to key stakeholders.?	6	6	6	8
5	How well does your organization manages its digital standards and procedures to ensure compliance with legal and regulatory requirements.?	8	6	8	8
6	How well does your organization foster digital culture to support and encourages digital experimentations and innovations.?	7	7	7	6
7	How well does your organization assess the technology compliance with laws and regulations, as well as the potential impact on the organization's cybersecurity posture, risk management and data privacy.?	8	8	8	8
8	How well does your organization manages digital technology adoption to mitigate environmental impact (i.e., Energy Efficiency, Green Energy, Decarbonization, and Electronics waste.).?	6	6	6	7
9	How well does your organization assess the potential impact of new digital technology for business operations and processes (i.e., cost savings, improved efficiency and increased revenue).?	7	7	7	6

### 5.1.3.1 Digital Technology

Digital Technologies refers to the various technologies used for processing, storing, retrieving, transmitting, and manipulating information, as well as for facilitating communication. This includes hardware such as computers, smartphones, and servers, as well as software applications and platforms, and communication networks and infrastructure, such as the Internet and wireless networks. It plays a crucial role in the modern world and has transformed many aspects of our daily lives, including the way we work, communicate, and access information.

Digital Technology		SECTOR	BU A	BU B	BU C
1	How well does your organization assess the technology ability to interact and integrate with existing technological landscape towards the overall digital ecosystem.?	7	6	7	7
2	How well does your organization assess the full-scale deployment (scalability) of the new digital technologies, as the organization evolves.?	7	6	7	7
3	How well does your organization embraced the adoption of new digital technologies and innovation.?	7	6	7	7

### 5.1.3.2 Digital Workforce Dynamics

Digital Workforce Dynamics is characterized by the integration of advanced technologies such as artificial intelligence, the Internet of Things, and automation into various industries. The evolution of workforce dynamics in the digital world refers to the changes and challenges that arise in the workforce because of these technologies. This can include the displacement of certain jobs by automation, the need for up-skill, re-skill and training, changes in the structure and organization of work, and the impact on employee morale and job satisfaction. The 4IR may also bring changes in terms of management and leadership, as well as the relationship between employees and employers.

Digital Workforce Dynamics		SECTOR	BU A	BU B	BU C
1	How well does your organization support the acquisition, development and retention of digital skills among its employees.?	7	6	7	6
2	How well does your organization embraced digital citizenship with ethic and responsible behaviour in digital environment, including online safety, privacy, and security.?	7	6	8	6
3	How well does your organization manages its cultural integration of digital and social skills within its workforce.?	6	6	7	6
4	How well does your organization support remote working and collaboration across the organisation.?	8	9	8	8
5	How well is your organization prepared in protecting digital assets, data threats, breaches, and safeguard to maintain cybersecurity posture.?	8	7	8	7

### 5.1.3.3 Digital Market Intelligence

Digital market intelligence refers to the process of collecting, analyzing, and interpreting information about a specific market, industry, or competitor using digital tools and methods. This information can include data on consumer behavior, market trends, competitor activities, and technological advancements. The goal of digital market intelligence is to provide businesses with a comprehensive understanding of the digital market landscape, including the opportunities and challenges they may face. This information can be used to inform strategic decisions, such as product development, marketing, and sales.

Digital Market Intelligence		SECTOR	BU A	BU B	BU C
1	How well does your organization understand the overall digital market landscape, including trends, growth drivers, and key players within the industry.?	7	6	7	7
2	How well does your organization identifies and analyse the strategies, products, and performance of key competitors in the market?	6	6	7	6
3	How well does your organization monitors and interprets digital technology trends, advancement and potential impact on its core business.?	7	6	7	7

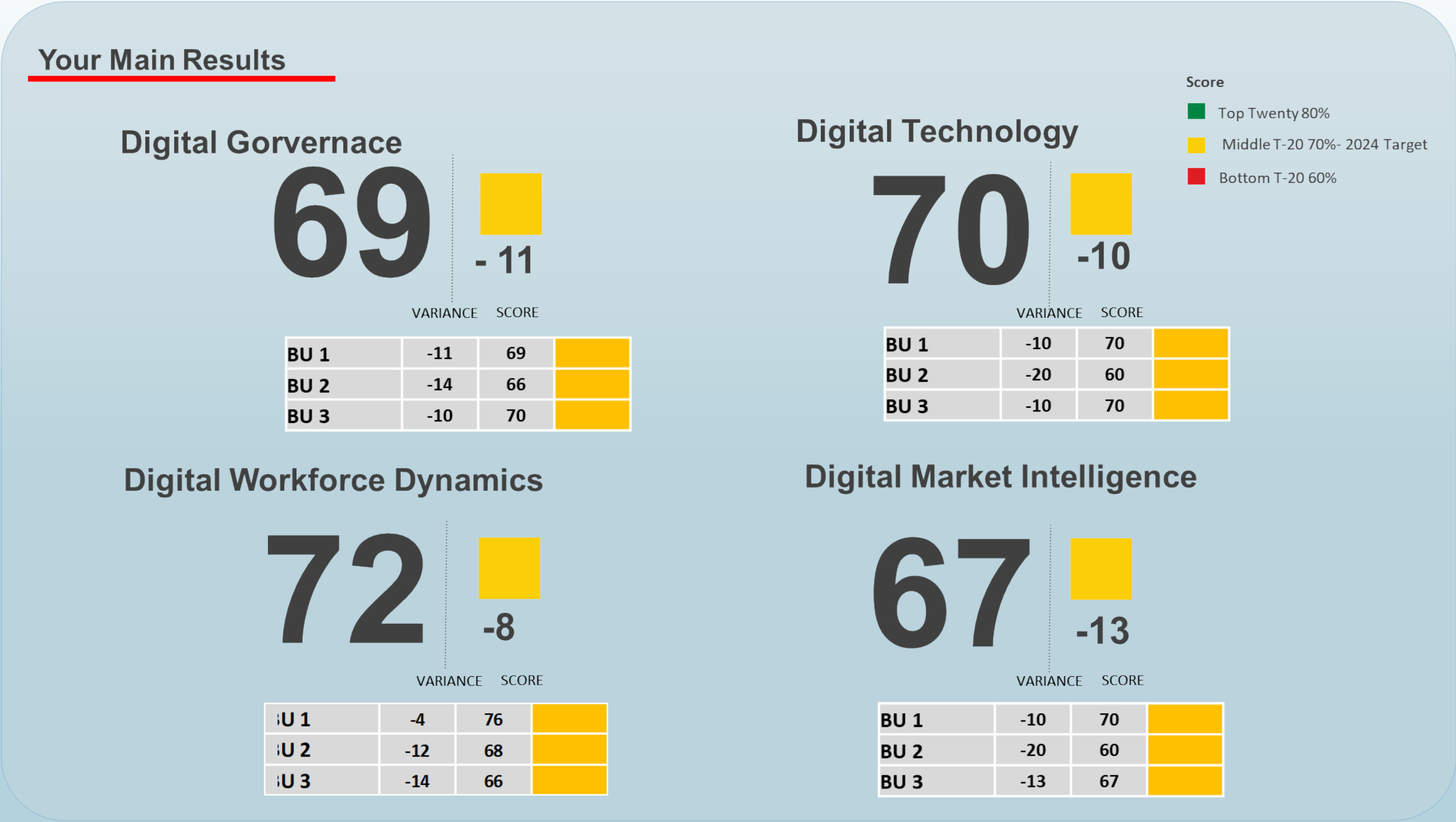
### 5.1.3.4 Heat Map Business Insight

Heat map for business insights is a visual representation of data where individual values are depicted as colors within a grid or spatial layout. It is used to quickly identify patterns, trends, or areas of focus by highlighting variations in intensity, frequency, or performance through a color gradient.

Operator Name	Digital Governance								Digital Technology			Workforce Dynamics			Makert Intelligent			Comments			
Operator A	9	7	9	9	9	7	9	8	8	8	9	8	9	9	9	9	8	9	9		
Operator B	6	6	8	7	7	5	8	6	7	7	7	7	8	7	6	9	6	5	5	6	
Operator C	8	7	7	7	8	7	8	7	8	8	7	7	7	8	7	8	7	6	7	7	
Operator D	8	7	8	6	9	7	9	6	6	8	7	8	8	9	5	9	8	6	7	5	
Operator F	8	6	6	8	8	6	8	7	6	7	7	7	6	6	6	3	7	7	4	7	
Operator G	7	8	7	7	8	8	9	7	8	7	7	8	6	8	7	9	8	7	7	7	
Operator H	8	7	7	6	7	7	7	8	7	7	7	7	7	7	7	8	7	7	6	6	
Operator I	3	3	7	3	7	7	4	4	8	6	9	10	7	7	5	8	5	7	5	9	
Operator J	6	5	5	6	8	7	10	7	5	4	5	7	7	9	8	4	9	6	8	8	
Operator K	5	6	6	7	5	8	7	5	6	4	5	7	5	4	6	8	7	5	3	3	
Operator L	8	8	8	8	8	7	7	6	9	9	7	6	7	8	8	9	9	8	8	8	
Operator M	7	7	8	6	8	6	9	7	7	6	7	7	6	9	6	8	9	6	6	6	
Operator N	4	4	7	5	8	4	8	3	6	8	8	6	4	6	3	9	9	7	7	3	
Operator O	7	6	8	7	8	6	8	6	7	7	6	6	6	8	7	8	8	7	7	7	
Operator P	7	7	7	6	7	7	8	8	8	7	7	7	7	7	7	9	7	6	6	6	
Operator Q	8	9	9	9	9	9	9	9	9	8	7	8	9	9	8	9	8	9	8	8	
Operator R	5	6	5	7	9	6	6	7	7	5	3	4	5	4	5	10	8	9	8	8	
Operator S	8	6	9	4	8	7	9	5	7	8	8	8	8	10	7	10	9	5	5	5	
Operator T	7	7	6	5	7	7	8	5	6	7	5	5	6	6	6	9	8	6	7	6	

### 5.1.3.4 Sector Consolidated Report

A sector high-level report is a concise designed to provide a summarized overview of key information, insights, and recommendations to stakeholders. It avoids excessive detail, focusing instead on the essential points necessary for strategic decision-making or high-level understanding.

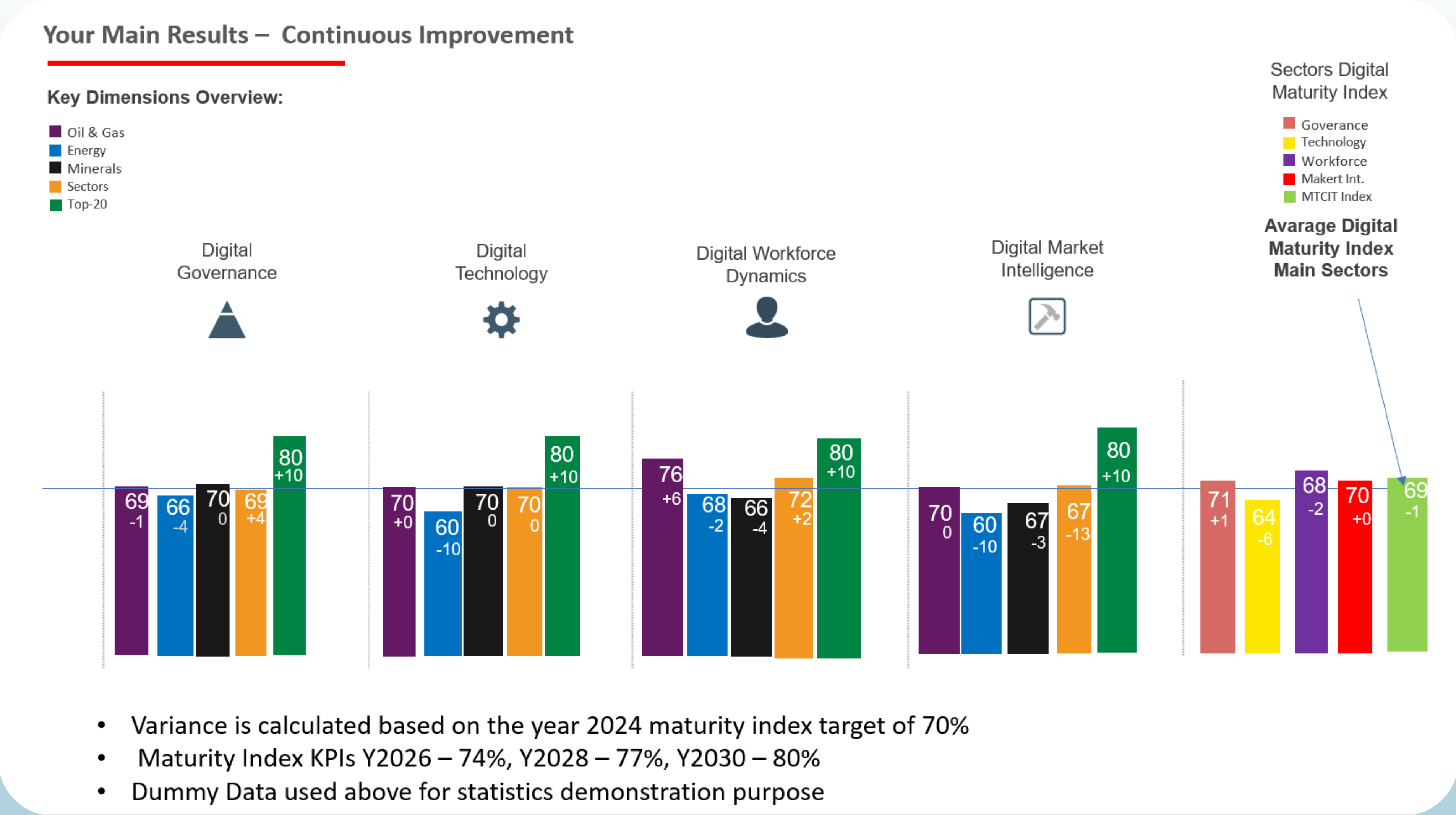


Score

- Top Twenty 80%
- Middle T-20 70%- 2024 Target
- Bottom T-20 60%

### 5.1.3.4 Sectors Continuous Improvement

The evolution criteria is not a one-time project but a dynamic, iterative process that requires constant reassessment and adaptation to remain competitive and relevant, this is achieved through sectors feedback as part of the continuous improvement journey.





## 6. Digital Economic Sector towards Change Management

Change management is a structured approach to transitioning individuals, teams, organizations, or systems from a current state to a desired future state. It involves strategies, processes, and tools to manage the human, organizational, and technical aspects of change, ensuring its adoption and minimizing resistance to achieve successful outcomes.

### 6.1 Change Management Dimensions

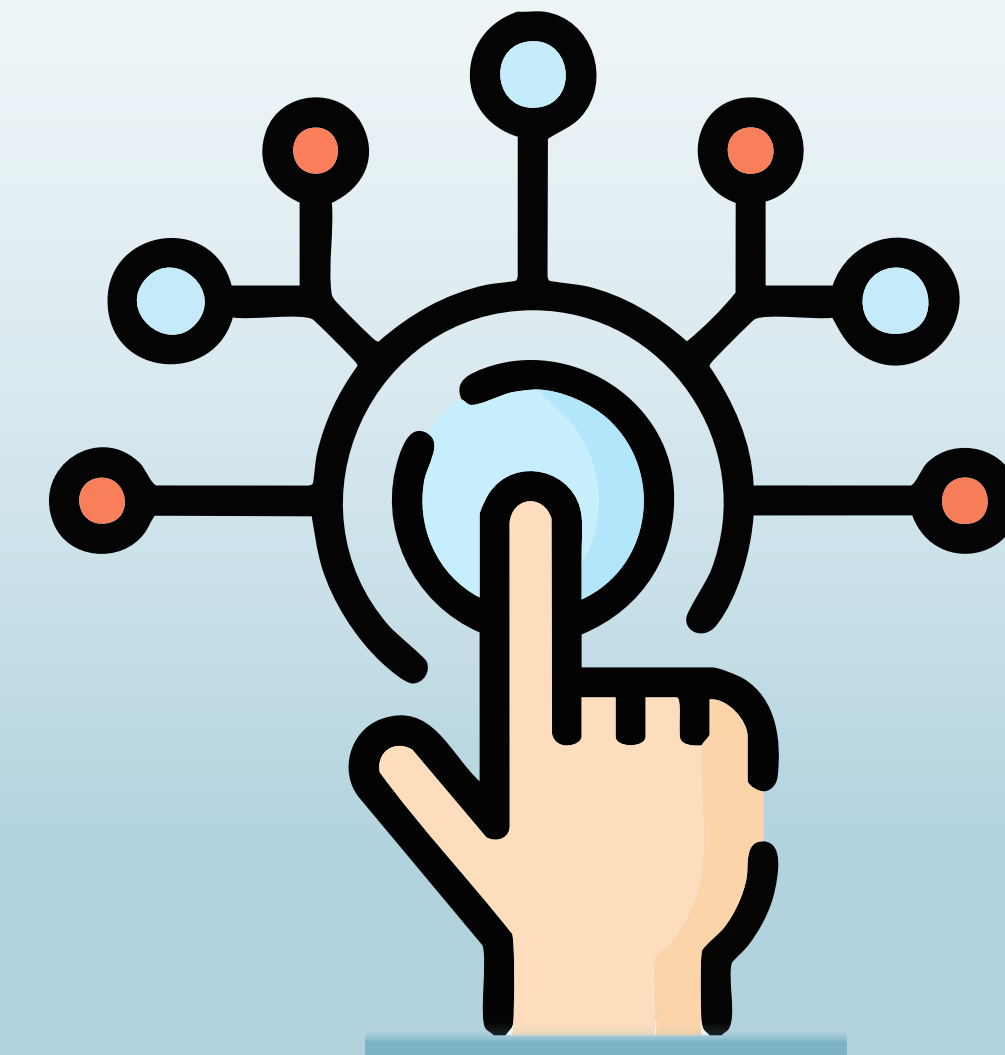
By focusing on these key aspects, organizations can create a structured and comprehensive approach to managing change, increasing the likelihood of achieving desired outcomes.

Dimensions	Definitions	Objectives
<b>Purpose</b>	Establishing a clear purpose for the change ensures alignment with organizational goals and helps inspire stakeholders	<ul style="list-style-type: none"> <li>Define the change objectives and desired outcomes.</li> <li>Align the change initiative with the organization's mission and vision.</li> <li>Create a roadmap for implementation</li> </ul>
<b>Leadership and Sponsorship</b>	Effective leadership drives the change, providing direction, resources, and support	<ul style="list-style-type: none"> <li>Engage leaders to act as change champions.</li> <li>Secure visible and active sponsorship from executives</li> <li>Model the desired behaviors.</li> </ul>
<b>Communication</b>	Transparent and consistent communication minimizes uncertainty and builds trust	<ul style="list-style-type: none"> <li>Develop a communication plan tailored to stakeholders.</li> <li>Use multiple channels to share updates, address concerns, and reinforce messages.</li> <li>Encourage two-way communication for feedback and dialogue</li> </ul>
<b>Stakeholder Engagement</b>	Engaging those affected by the change ensures buy-in and reduces resistance	<ul style="list-style-type: none"> <li>Identify and analyze stakeholder groups.</li> <li>Involve key stakeholders in the planning process.</li> <li>Address concerns and manage resistance proactively</li> </ul>
<b>Resistance Management</b>	Resistance is a natural response to change; addressing it effectively prevents disruption	<ul style="list-style-type: none"> <li>Identify sources of resistance through stakeholder feedback</li> <li>Use empathy to understand concerns.</li> <li>Develop strategies to address and mitigate resistance</li> </ul>

## 6.2 Risks and Dependencies

The risks and dependencies in digital projects are key areas where potential challenges or uncertainties may arise, threatening the successful delivery of the project. Understanding these dimensions helps organizations identify, mitigate, and manage risks proactively.

Risk	Impact	Probability	Mitigation
Organizational misalignment or resistance among stakeholders.	<b>HIGH</b>	<b>MEDIUM</b>	<ul style="list-style-type: none"><li>Engage stakeholders early and frequently</li><li>Communicate the project's value and benefits effectively</li></ul>
Risks associated with project planning, execution, and governance	<b>HIGH</b>	<b>HIGH</b>	<ul style="list-style-type: none"><li>Use project management tools and frameworks (e.g., Agile, Scrum)</li><li>Maintain a strong governance structure</li></ul>
Risks associated with Legal implications and compliance with regulations.	<b>MEDIUM</b>	<b>LOW</b>	<ul style="list-style-type: none"><li>Conduct legal reviews of contracts and licenses.</li><li>Engage legal counsel during project planning.</li></ul>



By addressing these dimensions comprehensively, organizations can reduce uncertainties and improve the likelihood of success in digital projects.

## 7 Acknowledgment

I would like to express my sincere gratitude to our program team for their dedication and hard work, to our stakeholders for their invaluable feedback and support, and to the leadership team throughout this process. This accomplishment would not have been possible without their collective efforts

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The following is a summary of the most recent revisions to this document. Details of all revisions prior to these are held on by the issuing undersecretary office - MTCIT.

Version No	Date	Author	Scope / Remarks
1.0	20-Dec-24	Nasser Al Mahrooqi	New release