AITI
Strategic Plan
2020 – 2025

AITI

Authority for
Info-communications
Technology
Industry of Brunei Darussalam

Connected Smart Nation

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Foreword from the Minister of Transport & Infocommunications

Yang Berhormat Dato Seri Setia Awang Abdul Mutalib bin Pehin Orang Kaya Seri Setia Dato Paduka Haji Mohammad Yusof

All praises be to Allah Subhanahu Wata'ala, salawat and salam upon our beloved Prophet Muhammad Sallallahu Alaihi Wassalam, his family, companions and faithful and honest followers till the end of time.

In giving unwavering support to realise Wawasan Brunei 2035, the Ministry of Transport and Infocommunications (MTIC) is guided by the Digital Economy Masterplan 2025 that provides strategic leadership on digital economy policies and initiatives of Brunei Darussalam. The main emphasis of the Digital Economy Masterplan 2025 has also shaped the Strategic Plan for Ministry of Transport and Infocommunications (MTIC 2025).

As the world moves rapidly towards digital economy that pervasively relies on digital technologies, the pivotal need for an agile and resilient digital industry has become more apparent. There is now, indeed, a resounding need to support a growing innovative industry as well as being an important enabler for other economic sectors. Hence, Brunei Darussalam is committed in developing its digital sector to enable economic diversification and

growth, drive digital innovation and technopreneurship, create lucrative employment opportunities and build a talent pool of digitally-skilled future ready workforce.

Against such landscape, I am very pleased to see that the vision of the Digital Economy Masterplan 2025, Smart Nation through Digital Transformation, is very much instilled in AITI Strategic Plan 2020-2025. I am also heartened to see the alignment of AITI Strategic Plan 2020-2025 with the Strategic Plan for Ministry of Transport and Infocommunications (MTIC 2025). I am confident that such well-thought alignment and complementing strategies between the Digital Economy Masterplan 2025, MTIC 2025 and AITI Strategic Plan 2020-2025, will lead to effective execution of strategies and initiatives. This, in turn, shall address the essential development outcomes in terms

of growing the digital industry, enabling smart digital connectivity and building digital capacity among businesses and the society.

While undertaking such journey, we also need to be mindful of challenges, both anticipated and unprecedented, as we strive towards achieving the desired vision and objectives. Underpinned by the implementation of supporting sets of policies, legislations and regulatory frameworks, AITI will strive towards achieving its desired vision and targets as stipulated in AITI Strategic Plan 2020-2025 in facing and mitigating those challenges.

Insya Allah, with full cooperation and participation of relevant key stakeholders under a Whole of Nation approach, we hope to address as effectively as possible and create sustainable contributions towards realising Wawasan Brunei 2035.

Members of Authority

From left to right:

Yang Mulia Awang Haji Malai Anwar Hussain bin Haji Syed Ahmad Hussain, BSJV IT Country Manager, Brunei Shell Petroleum Company Sdn Bhd;

Yang Mulia Ir. Awang Haji Mohammad Nazri bin Haji Mohammad Yusof, Permanent Secretary, Ministry of Transport and Infocommunications;

Yang Berhormat Ar. Dayang Siti Rozaimeriyanty binti Dato Seri Laila Jasa Haji Abd Rahman, Legislative Council Member;

Yang Mulia Dato Seri Paduka Awang Haji Matsatejo bin Sokiaw, Deputy Minister of Energy, Ministry of Energy and Chairman of AITI;

Yang Mulia Dr. Dayang Hajah May Fa'ezah binti Haji Ahmad Ariffin, Permanent Secretary (Economy), Ministry of Finance and Economy;

Yang Mulia Professor Dr. Dayang Hajah Zohrah binti Haji Sulaiman, Vice Chancellor, Universiti Teknologi Brunei; and

Yang Mulia Dayang Hajah Noor Sukhairiyani binti Dato Seri Laila Jasa Haji Kassim, Senior Counsel, Attorney General's Chambers.

The Chairman's Message

AITI's Strategic Plan 2020-2025 focuses on its effort in driving the development of the digital industry and ubiquitous digital connectivity in order to realise digitally-enriched businesses and societies in Brunei Darussalam under the guidance of *Wawasan Brunei 2035* and in alignment with the *Digital Economy Masterplan 2025* and *MTIC 2025.*

This strategic plan has been carefully devised, through extensive consultation and deliberation among AITI staff, management and Members of Authority, to foster close collaboration among all key stakeholders to deliver the expected strategic outcomes coherently to benefit the whole nation.

AITI has aspired to champion the transformation of the core digital industry by strengthening enabling environments such as policy and regulatory space as well as capacity building among businesses and societies at large. Given the context of rapidly advancing technology trends and increasing competition across all economic sectors globally, it is AITI's priority to prepare the businesses and individuals to be able to focus and compete in niche and high value opportunities presented by the digital sector such as data industry, digital media industry, and embarking on economics activities leveraging on emerging technologies such as IR4.0 environment.

AITI humbly acknowledges that the implementation of its strategic programmes requires enormous collaborative effort from various stakeholders. It is imperative that we are all inspired by the shared common goals to strengthen our collective ability to realise the desired state of development.

Lastly, as part of key enablers to the execution, AITI is committed to develop a high performing organisation fully run by an engaged workforce, efficient business processes and proper governance, made possible by modern and agile technological environment.

Yang Mulia
Dato Seri Paduka Awang Haji Matsatejo bin Sokiaw
Deputy Minister of Energy,
Ministry of Energy as Chairman of AITI

Senior Leadership Team

Front row, from left to right:
Norshahrul Nizam bin Othman
Assistant Chief Executive (Resource Management)

Julianah binti Haji Ali Ahmad
Deputy Chief Executive (Development)

Ir. Haji Jailani bin Haji Buntar
Acting Chief Executive

Tina Lim-Keasberry
Assistant Chief Executive (Market Regulation)

Back row, from left to right:
Mohd Mahmud Hadini bin Haji Mohd Taufik
Assistant Chief Executive (Data Protection & Technical Services)

Asimah binti Haji Hassan
Assistant Chief Executive (Corporate Services)

Marinna binti Haji Mahari
Chief Financial Officer

Haji Emran bin Haji Hasan
Assistant Chief Executive (National Infrastructure)

The Acting Chief Executive's Message

The pace of accelerated change in the digital industry has never been more visible than what we have been witnessing in the recent years. With current challenges of a global pandemic brought by COVID-19 as well as the pressing need to diversify Brunei Darussalam's economy and reduce graduate unemployment, it is a critical time for us to plan for the future to lay down an aspirational path that ensures continued success and overcome challenges for years to come.

I am pleased to introduce AITI Strategic Plan 2020-2025, which outlines where we are heading, how we are going to get there and what it means to the stakeholders. Our three strategic pillars and an enabler will keep us focused in delivering the outcomes of "a thriving digital industry", "a connected nation" and "a digitally-enriched society" in the

making of a "Connected Smart Nation". Our emphasis has always been on the development and enrichment of the digital sector through building digital capacity among businesses and the people, particularly in new and emerging digital skills and capability for Brunei to be able to participate effectively and competitively in the digital economy forefront in the era of Industry Revolution 4.0. The aspiration of our AITI Strategic Plan 2020-2025 also reshapes our approach in reaching out to people by partnering with key players in the industry and the community to ensure the right set of programmes are identified and implemented for impactful progress.

As the digital sector continues to evolve, our strategic direction will also allow room for changes in line with the rapidly changing environment. As such, we have prepared our strategic plan with the intention to regularly measure

our achievements and review our strategies and approaches in order to keep in pace with the advancement of technology. What remains unchanged is our focus on delivering an enabling environment for digital transformation to happen that could bring huge impact to the economic and societal development.

On behalf of AITI, I would like to express my gratitude to all those who shared their wisdom, thoughts and vision in the development of this strategic plan. In Sha Allah, true collaboration and commitment from all key parties shall help us realise the vision of "Connected Smart Nation".

Yang Mulia
Ir. Haji Jailani bin Haji Buntar
Acting Chief Executive of AITI

Introduction

His Majesty Sultan Haji Hassanal Bolkiah Mu'izzaddin Waddaulah, the Sultan and Yang Di-Pertuan Negara Brunei Darussalam consented to the long-term vision of Wawasan Brunei 2035 which aspires that by 2035, Brunei Darussalam develops into a nation which will be widely recognised for the accomplishment of its educated and highly skilled people measured by the highest international standards - quality of life and a dynamic and sustainable economy with income per capita within the top ten countries in the world.

As part of the nation's commitment towards realising Wawasan 2035 and advancing the ICT development, one of the cornerstones that enabled the pivotal role of ICT development was the creation of the Authority for Info-Communication Technology Industry of Brunei Darussalam (AITI), as the telecom regulatory body and national champion for ICT development.

AITI plays three significant roles in development work:

▷ as advisory to government;

▷ as facilitator to its key industry stakeholders; and

▷ as champion of specific development programmes to enable the digital sector to achieve a whole new level of development outcome.

As the world moves towards a more digital economy that rely heavily on the use of data, information and knowledge with emerging and smart technologies, digital technology plays a fundamental role, both as its own innovative economic sector and as an enabler for other economic sectors. The digital sector enables economic diversification and growth, develops a pool of talents and skilled knowledge workers, drives innovation and entrepreneurship, and creates rewarding employment opportunities.

Beyond the consideration of the sector's development, digital technology helps address social issues in terms of improving access to education, facilitating healthcare delivery, improving efficiency and effectiveness of government operations and citizens' online participation. It offers improvements in accessibility to differently-able people and other underserved population. Digital technology is instrumental in promoting a nation's heritage and culture through the digitisation of content. Eventually, it enriches the quality of people's lives through enablement of ubiquitous digital connectivity fostering empowerment, collaboration and interaction in a way people have never experienced before.

This strategic plan emphasises the need of a balanced approach in development work guided by the strategic pillars, which focuses on the industry, the regulatory environment and the human/business capacity development. The programmes outlined under each pillar carry the objective to fulfill short, medium and long-term development goals.

AITI's Role

Advisory
to government

◆

AITI is involved at national level in several areas including as a **Content Advisory Council member** to advise on issues related to online digital content.

◆

AITI is appointed as member in the **Manpower Industry Steering Committee (MISC)** under the Manpower Planning and Employment Council (MPEC) at the Prime Minister's Office and as a Co-Lead for the MISC Working Group for ICT Sector.

◆

AITI is involved in the development of **National Digital Infrastructure and Technology Roadmap.**

◆

AITI can provide recommendations of **relevant policies and regulatory frameworks** in developing the digital sector.

Facilitator
to industry stakeholders

◆

As a regulatory body in the telecommunications industry, AITI **facilitates the growth and development of the entire industry** from issuing license to mobile phone retailers to assigning radio spectrum to telecom service providers.

◆

With the upcoming corporatisation of Postal Services Department, AITI plays a **regulatory role to facilitate the development** of the postal services' market.

◆

AITI **facilitates the development of IT and media industries** through industry dialogues, technology seminars, workshops and trainings.

Champion
of development programmes

◆

AITI champions the **digital capacity building initiative** among students, youth, businesses and the general public through series of relevant programmes run annually.

◆

AITI also runs ICT Industry development programmes including **market creation, technopreneurship development, MSMEs digital transformation** and nurturing tech start-ups.

◆

AITI spearheads **programmes to instill innovation** among students of all levels, tech enthusiasts, start-ups and SMEs through various initiatives.

Vision

CONNECTED SMART NATION

AITI has adopted MTIC 2025's Vision as its vision to support the transformation of Brunei Darussalam into becoming a Smart Nation.

The vision statement paints the future state of Brunei Darussalam in the context of the Digital Revolution era in realising the Fourth Industrial Revolution (IR4.0), where all things are intelligent and connected in the most innovative fashion possible. This involves connectivity among people, businesses and government through smart and intelligent digital infrastructure, systems, applications and data in most effective and efficient manner. The vision also aspires AITI towards achieving the strategic outcomes in terms of a thriving digital industry, a connected nation and better quality of life among people.

To develop towards a
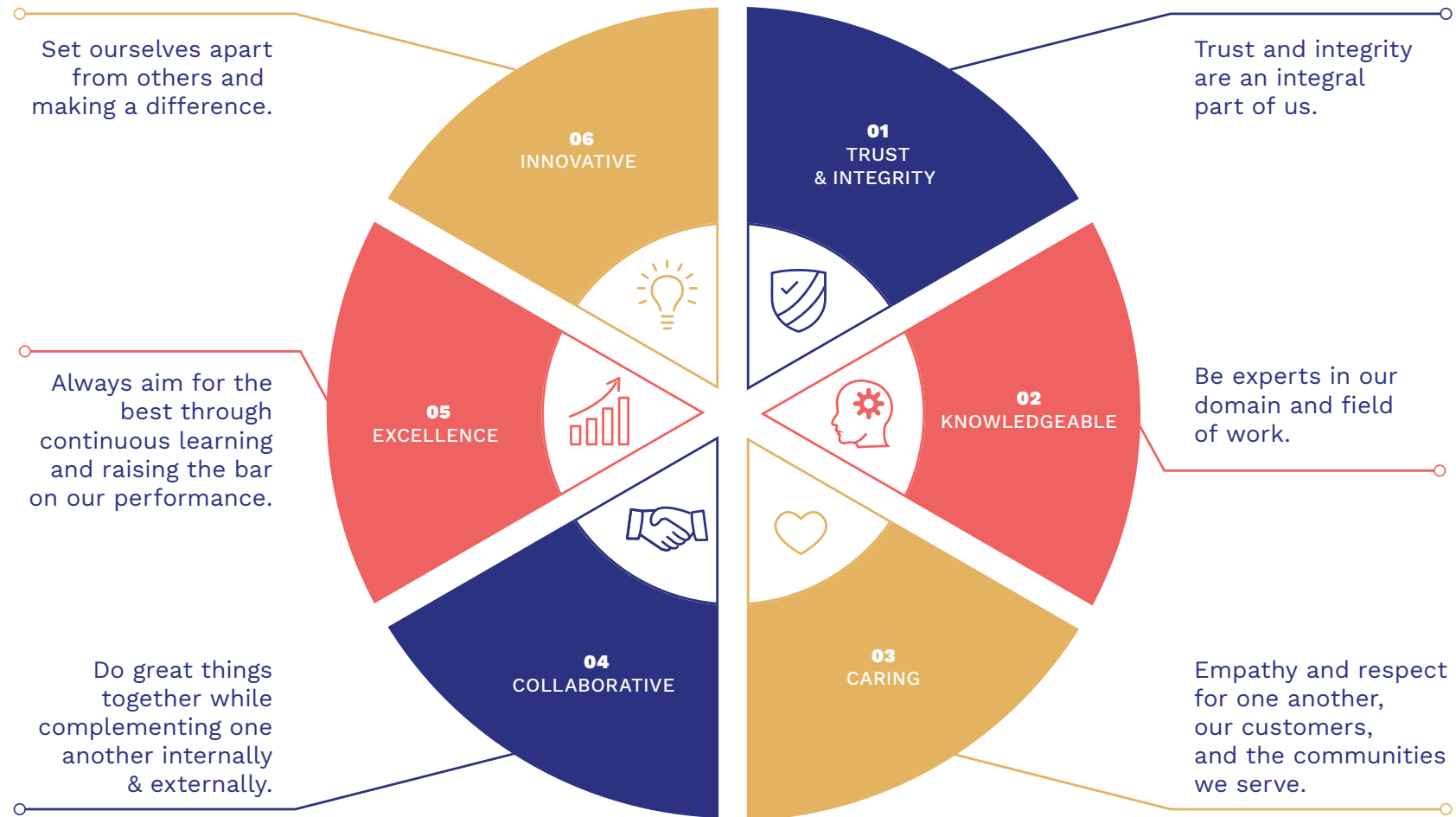thriving digital industry
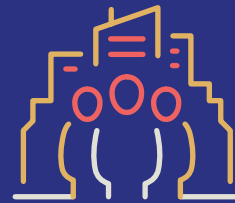
To develop digital
capacity for all

To enable conducive
regulatory environment

Mission

To enable organisational
excellence through its people,
processes and technology

Core Values

06 INNOVATIVE

Set ourselves apart from others and making a difference.

01 TRUST & INTEGRITY

Trust and integrity are an integral part of us.

05 EXCELLENCE

Always aim for the best through continuous learning and raising the bar on our performance.

02 KNOWLEDGEABLE

Be experts in our domain and field of work.

04 COLLABORATIVE

Do great things together while complementing one another internally & externally.

03 CARING

Empathy and respect for one another, our customers, and the communities we serve.

Development Progress and Challenges

AITI has made decent progress through the execution of numerous strategic programmes in the past five to seven years with a steady pace in the digital sector of Brunei Darussalam.

▷ Telecommunication infrastructure in Brunei Darussalam has gradually expanded nationwide with 4G LTE and Fibre to the Home (FTTH) high speed network coverage in the last 7 years. Joint investment between government and service providers for submarine cable network with international bandwidth capacity is sufficient to fulfill current and near future capacity demand for international connectivity.

▷ The recent change of telecom market structure by segregating wholesale and retail market segments is expected to see healthier competition and innovation among service providers.

▷ More digital government services are made available for public and businesses through unified eDarussalam digital services portal.

▷ Establishment of Digital Economy Council (DEC) at national level is set to steer the development of digital economy towards the smart nation.

These indicators demonstrate the current progress and act as a solid enabling foundation for further development of the digital sector of Brunei Darussalam.
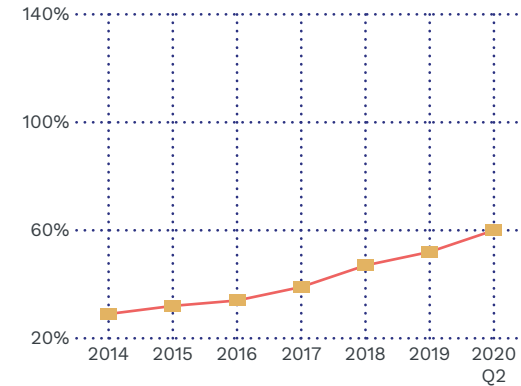
21% growth in mobile penetration from 111% in 2014 to 132% in 2020.
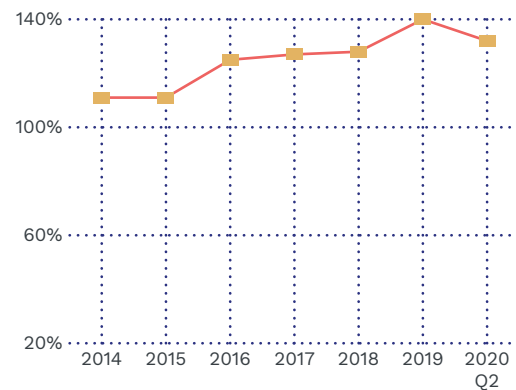
36% growth in mobile broadband penetration from 95% in 2014 to 131% in 2020.
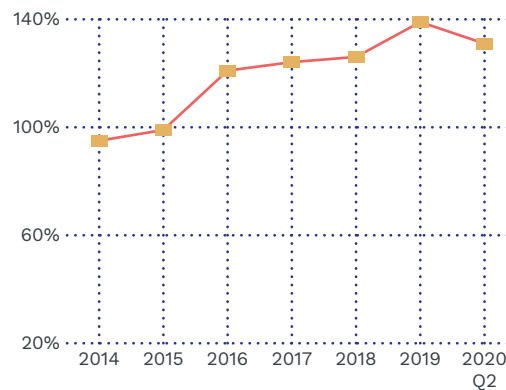
31% growth in fixed broadband penetration from 29% in 2014 to 60% in 2020.

3G network coverage and 4G network coverage improved 4% and 6% improved between 2017 and 2020.

2G   3G   4G
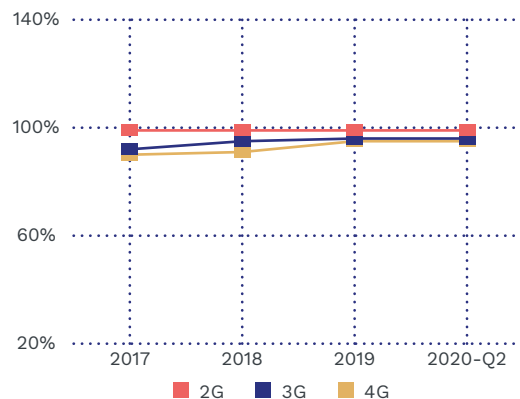
51% improved in FTTH network coverage between 2016 and 2020.
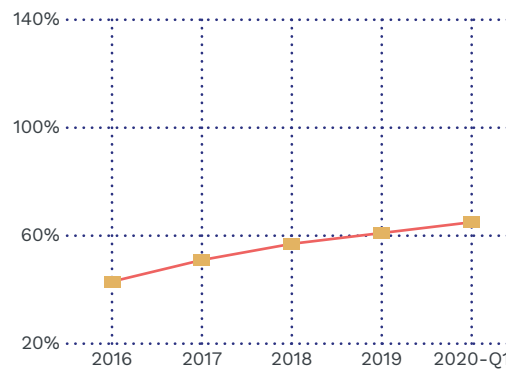
Telecommunications Infrastructure Index (TII) weighted one third of eGovernment Development Index (EGDI) where Brunei is ranked 2nd in ASEAN in terms of TII with more than two-fold improvements between 2016 to 2020.

As the growth of the digital sector is progressing steadily, there are some key challenges that demand a whole-of-nation approach to overcome in order to accelerate the development towards a sustainable growth and success in the future.

The challenges identified require collective response from multi-agencies in public and private sectors through extensive collabora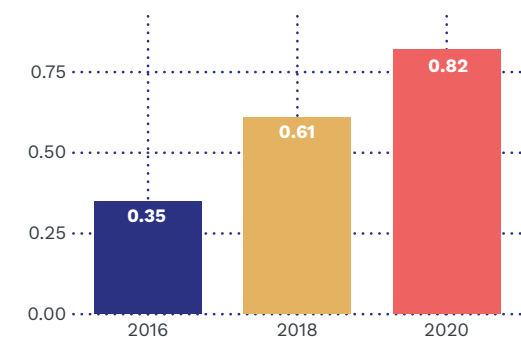tion with unparalleled drive to continue developing and enabling innovative, inclusive and competitive digital sector both locally and abroad to meet future needs of the country.

Digital Skills and Capacity

Brunei Darussalam shows no significant gap in basic digital literacy among its population. AITI's ICT Household Survey 2018 revealed that 88% of its people own smartphones and there was 94% internet penetration in Brunei Darussalam. However, many are still lacking a comparable digital skills and knowledge that are common among the peers in other developing or developed countries. Although the current education system in Brunei Darussalam has aligned itself in delivering necessary digital skills and knowledge, it falls short in delivering industry-ready digital skills, knowledge, and exposure. When it comes to general workforce, the self-employed and/or entrepreneurs, there is still room for improvement to acquire digital skills and knowledge that are geared towards high productivity and efficiency. There is also a limited pool of ICT talents and professionals available in Brunei that could hamper the development work in growth and innovation agenda.

Enabling Environment

The right environment is extremely important to create a thriving digital sector. A comprehensive approach to position the country's digital sector include policy priorities, legal requirements, market conditions, and technology choices that interact at national, regional, and global levels and involving partnerships between the public and private sectors need to be in place to achieve the expected development goals.

Connectivity

With the consolidation of national telecom infrastructure and the establishment of new market structure, coupled with the emergence of digital economy and Fourth Industrial Revolution (IR 4.0), more robust and ubiquitous connectivity will be highly demanded as digital economy takes its shape. The current digital infrastructure needs to be prepared for an upgrade to meet the future requirements of ultra-high bandwidth capacity and use of highly sophisticated devices and equipment which are deemed necessary in the digital economy and smart nation environment. Besides articulating the challenges above, there are many opportunities that Brunei Darussalam may take full advantage of from a developed digital sector.

From a cost efficiency perspective, a digital government can provide efficient public services; optimise cost without compromising quality in public healthcare, education, social welfare; address youth unemployment; inclusion and integration of differently-abled and all other underrepresented communities.

From the perspective of productivity and growth, the digital economy agenda towards Smart Nation could be accelerated to direct sustainable development initiatives by leveraging on digital technology to transform industries' landscape to enhance local market conditions as well as to enable businesses with better competitiveness for the regional and international market.

Moving Forward

AITI has developed a five-year strategic plan with a vision to turn Brunei Darussalam into a Connected Smart Nation, which AITI aims to realise through the execution of this plan.

The strategic plan focuses notably on developing the digital industry to a new level, highlighting the importance of a conducive regulatory environment and digital infrastructure that enables the nation's need for ubiquitous connectivity, and emphasising on a better future for its people and society at large.

The strategic plan articulates AITI's Vision and Mission, which consist of six core values and three strategic outcomes supported by three strategic pillars and one strategic enabler.

It also defines the strategic Key Performance Indicators (KPIs) under each pillar and enabler in order for AITI to stay focused and achieve measurable outcomes through its journey in executing the plan.

AITI Strategic Plan
2020 - 2025

Alignment to Digital Economy Masterplan 2025 and MTIC Strategic Plan 2025

AITI's five-year strategic plan has been developed to support in realising the outcomes outlined in Digital Economy Masterplan 2025. It is also aligned closely with MTIC 2025 strategic objectives that are related to the development of infocommunications sector. Three strategic outcomes will be acquired through strategic pillars which focus on stakeholder-oriented programmes while the strategic enabler acts as the foundation to help deliver the objectives and key results defined in each strategic pillar.

There are three strategic outcomes supported by three strategic pillars, enabled by its people, processes and technology as well as physical environments defined as organisational excellence.

Digital Economy Masterplan 2025 Outcomes

A vibrant and sustainable economy	A digitally conducive ecosystem	A digital and future-ready society

MTIC 2025 Strategic Objectives

SO2: Ensuring Sustainability of Infocommunications Sector **SO6:** Enhancing International Cooperation	**SO4:** Policy and regulatory framework conducive to investment and businesses	**SO1:** Digital Transformation

Connected Smart Nation

Strategic Outcomes

Thriving digital industry	**Connected nation**	**Digitally-enriched society**

Strategic Pillars

Facilitate digital industry development and innovation	Enable conducive regulatory environment and digital infrastructure	Empower businesses and society with digital capability

Strategic Enabler

Enable organisational excellence through its people, processes, technology

Strategic Outcomes

Thriving Digital Industry

The digital industry plays dual roles in adding value to the economy - being a sector on its own to drive economic growth while also acting as an enabling sector to fuel productivity and growth opportunities in other economic sectors.

Connected Nation

Availability and accessibility of high quality, resilient, up-to-date, smart and intelligent digital infrastructure, applications and platforms make up a ubiquitous connectivity. This shall underpin and contribute to a whole new level of development in Brunei Darussalam.

Digitally Enriched Society

A society where people's lives are enriched, and businesses thrive by acquiring future-ready digital skills, capacity and capability. This shall enhance quality of life as well as social and business values.

Strategic Pillars & Targets

SP1

Facilitate digital industry development and innovation

Focuses on striving towards further development and innovation in the digital industry to help realise a new level of development in terms of revenue, size or capacity among digital businesses.

SP2

Enable conducive regulatory environment and digital infrastructure

Ensures that conducive regulatory environment, guided by appropriate policies and legal frameworks, enables sustainability, vibrancy and competitiveness of the market to maximise the stakeholders' values (Government, Industry and Consumers). It also addresses continued development and modernization of digital infrastructure, investment in emerging technology platforms and to unleash the potential of a digital ecosystem.

SP3

Empower businesses and society with digital capability

Ensures development and enablement of businesses and society with continuous learning, updating skills and knowledge, ability to cope with new technologies and smart use of technologies to overcome the challenges of the digital society and stay competitive in the digital economy.

25% of 110

digital businesses will be developed

50 private organisations

adopted and practise Personal
Data Protection regulations.

All 5G spectrum bands
readily available

by 2022

**At least
20% of MSMEs**

adopted targeted technology/
application.

**1,000
participants**

to be trained with future
ready digital skills.

Strategic Enabler & Targets

Enable organisational excellence through its people, processes and technology

Aims to transform AITI into a high performing organisation through continuous improvements in its people, processes, technology and physical environment.
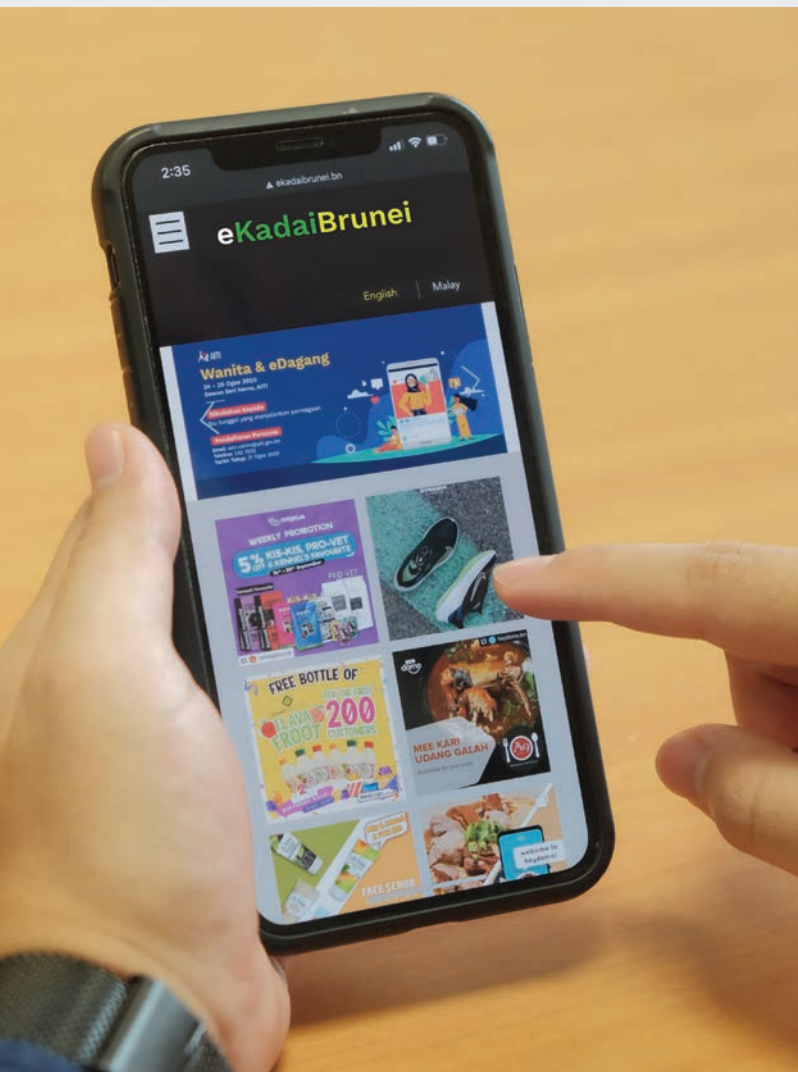
4 out of 5

rating on the Employee Engagement index

80%

of stakeholders

have positive perception towards AITI

SP1

Facilitate digital industry development and innovation

Number of digital businesses that achieve a new level of development in terms of revenue, size or capacity.

Description

This KPI measures the number of ICT businesses that have achieved development under the Post-BICTA Programme and Data Analytics initiatives.

Target

At least 25% of 110 digital businesses will be developed.

Facilitate digital industry development and innovation

Focus #1

Creation and Development of Data Industry

Leading Programmes

▷ Engagement with government agencies and businesses to identify strategic business value chains and usage of data to deliver desired growth.

▷ Development of technical skills and capacity for data analytics tools or app developers (Big Data, Machine Learning, Artificial Intelligence, Data Visualisation).

▷ Development of skills and capacity for data analysts and scientists who would man the data office of government agencies and business entities.

▷ Product development programme for data analytics tools or applications (End-to-end entrepreneurship and commercialisation programme in data analytics).

▷ Increasing the adoption of Internet of Things (IoT) by relevant industry verticals.

▷ Establishment of smart pilot projects such as smart campus or village to demonstrate and promote the use of data that can improve the economic value, environment value and quality of life in the designated areas.

Enabling Programmes

▷ Development of data protection and privacy policies, legislations, frameworks, and guidelines.

▷ Development and implementation of digital innovation framework.

▷ Collaboration with e-Government National Centre (eGNC) for consistent availability of structured, reliable and up-to-date government open data.

▷ Facilitate the establishment of data aggregators and/or Data as a Service (DAAS) providers.

▷ Influence and collaboration for government deployment and adoption of IoT (wearables, sensors network, geospatial network, traffic CCTVs, etc.)

▷ Facilitate the establishment of IoT service providers.

▷ Facilitate the establishment of cloud infrastructure and platform providers.

▷ Support relevant agencies in promoting FDI opportunity in data industry.

SP1   Facilitate digital industry development and innovation

Outcome

▷ Data use cases and demands identified, based on industry verticals.

▷ Data analytics tools and applications developed based on industry verticals.

▷ Data analysts and scientists developed, based on identified industry verticals.

▷ Big data infrastructure, platforms and service providers established

▷ Data products and services commercialised locally and regionally.

▷ Data use cases and benefits showcased through smart campus or village.

▷ Data as a new industry that contributes to the nation's economic growth.

Benefit/Impact

▷ Readiness to realise data-driven economic activities locally and regionally.

▷ Lowering unemployment rate.

▷ Preparedness for formulating insightful, intelligent and effective government policy for development.

▷ Improved business efficiency to better engage customers.

▷ Create network effect in economy in terms of demand and supply of data.

Facilitate digital industry development and innovation

Focus #2

Development of Broadcasting Content Industry

Leading Programme

▷ Facilitate the production of television content.

▷ Facilitate the hosting of Brunei Darussalam TV Content Festival (International Content Expo).

▷ Development of Young Content Makers programme.

▷ Facilitate Islamic content aggregation.

▷ Facilitate content export.

Enabling Programme

▷ Implementation of platform for content telecast.

▷ Development of sustainable financing scheme through Broadcasting Development Fund (BDF).

▷ Establishment of strong network of alliances and strategic collaborators with broadcasters, producers, marketers and investors locally and internationally.

Outcome

▷ A new Over The Top (OTT) service provider is established.

▷ Constant flow of supply and demand in broadcasting content industry.

▷ Improved creativity, quality and standard of locally-produced broadcasting content.

▷ Readiness to market Bruneian content internationally.

▷ Brunei as Islamic Content Hub.

Benefit/Impact

▷ Revitalise the TV content production industry in Brunei Darussalam.

▷ Lowering unemployment rate.

▷ Social and economic value enhanced by activities from Islamic Content Hub and export of content.

Facilitate digital industry development and innovation

Focus #3

Development of a Cashless Digital Ecosystem

Leading Programme
▷ Drive adoption of eCommerce among MSMEs.
▷ Implementation of eCommerce awareness programmes.
▷ Introduction of Cashless Society Pilot programme.

Enabling Programme
▷ Policy and financial support for MSMEs to strengthen local and cross-border eCommerce activities.
▷ Collaboration with Autoriti Monetari Brunei Darussalam (AMBD), financial institutions and fintech companies.
▷ Facilitate the enhancement of existing digital payment services and options.

Outcome
▷ More MSMEs offer products and services online.
▷ Increase technology adoption in society.

Benefit/Impact
▷ Support data-driven economic activities.
▷ Enhanced security for digital transactions and reduce cash-related risks.
▷ Realise network effect for the internet-based economic activities.

Number of private organisations adopt and practise Personal Data Protection regulations.

Description

A well-crafted Personal Data Protection (PDP) Law and its subsidiary tools for organisations (e.g. B2B, B2C) can be achieved by the implementation of PDP policy, governance, technology-neutral legislation, accountability, compliance, gaps assessment, awareness, capacity building, and technical requirement.

This KPI measures the effectiveness of data protection policy implementation and regulation, which refers to an individual's right to determine when, how, and to what extent their personal data can be collected and shared which is essential to our ability to trust the Internet. This could be in the form of corporate data breaches to inappropriate use of personal data while motivating data controllers and processors to improve their best practices and encourage constructive, beneficial innovation.

Target

50 private organisations adopt and practise Personal Data Protection regulations in compliance with Personal Data Protection Order (PDPO) and subsidiary legislations which include the following stages:

▷ Organisation's overall PDP strategy
▷ Data inventory management
▷ Identification of local and international requirements
▷ Privacy Impact Assessment (PIA)
▷ Policy and procedures
▷ Effective data management controls
▷ Technology tools
▷ Capacity building and training requirement
▷ Monitoring

SP2 — Enable conducive regulatory environment & digital infrastructure

Focus

Development and/or Strengthening of Policy, Legislation and Regulatory Framework

Leading Programme

▷ Development of Postal Regulatory Framework.

▷ Development of personal data protection policy, legislation and regulatory guidelines and framework.

▷ Review, update and implementation of Converged Regulatory Framework.

▷ Update and implementation of Universal Service Provision (USP).

Outcome

▷ Ability to properly regulate postal industry.

▷ Subjecting organisations to new rules that safeguard the personal data of individuals and organisations.

▷ Enabling the development of data industry.

▷ Closing gaps in availability and accessibility of telecommunications services.

Benefit/Impact

▷ Sustainable postal industry with better efficiency in handling movement of goods locally.

▷ Economic value added by data industry.

▷ New job creation in postal and data market.

▷ New minimal revenue stream to AITI from postal licensing and implementation of Personal Data Protection regulation.

SP2   Enable conducive regulatory environment & digital infrastructure

5G spectrum bands readily available by 2022.

Description

AITI facilitates the allocation of national spectrum. Therefore, adequate spectrum is to be allocated for future digital connectivity, such as 5G network.

A spectrum plan for 5G will be developed with due considerations of spectrum arrangements for millimetre-wave 5G network.

Target

Ensure **availability of all 5G spectrum bands** (sub-6GHz & Millimetre Wave) for commercial use by 2022.

Enable conducive regulatory environment & digital infrastructure

Focus #1

Facilitation and Enablement of Ubiquitous Digital Infrastructure

Leading Programme

▷ Initiate 5G action plan by establishing 5G Taskforce.

▷ Identify and develop 5G use cases.

▷ Implementation of 5G Pilot Programme.

▷ Facilitate 5G network trial and commercial rollout.

▷ Introduce 5G awareness programmes.

▷ Facilitate the establishment of IoT network, platform and related services.

▷ Facilitate the establishment of cloud infrastructures and services.

Enabling Programme

▷ Development and implementation of 5G policy and regulatory review.

▷ Prepare spectrum readiness for 5G deployment.

▷ Development and implementation of IoT and cloud policy.

Outcome

▷ Enable opportunity for a wider range of new products and services.

▷ Access to faster and better broadband services with full mobility.

▷ Enable the embarkment on autonomous applications and services.

Benefit/Impact

▷ Technological evolution comes with a level of productivity growth.

▷ Infrastructure to be leveraged by IR4.0 initiatives and programmes in the long run.

Enable conducive regulatory environment & digital infrastructure

Focus #2

Strengthening of Infrastructure Landscape, Quality of Service and Quality of Experience

Leading Programme

▷ Development and implementation of Quality of Experience (QoE) framework and measures for telecommunication services.

▷ Strengthen Quality of Service (QoS) measures for postal and broadcasting services.

▷ Development of Telecom Infrastructure Master Plan.

▷ Enhancement and development of Directive, Standards and Code of Practices (CoP) for telecom equipment, infrastructure deployment and installation.

Outcome

▷ Continuous improvements in quality of telecom, postal and broadcasting services offered by service providers.

▷ Compliance to standards and code of practices.

Benefit/Impact

▷ Improved consumers' satisfaction level in telecom, postal and broadcasting services.

▷ Enhanced infrastructure security and resiliency.

▷ Strong foundation in developing digital economy.

SP3 — Empower businesses and society with digital capability

Number of MSMEs adopting digital technology or application.

Description

This KPI measures the use of advanced digital tools or digitalisation as part of a business's back-end process.

Digital tools include:

▷ Finance and accounting systems
▷ Human resource management systems
▷ Point of sale systems
▷ Inventory management systems
▷ Enterprise resource planning softwares
▷ Customer relationship management
▷ Analytics & big data
▷ Automation
▷ Pure online business
▷ Order fulfillment
▷ Digital payment gateways
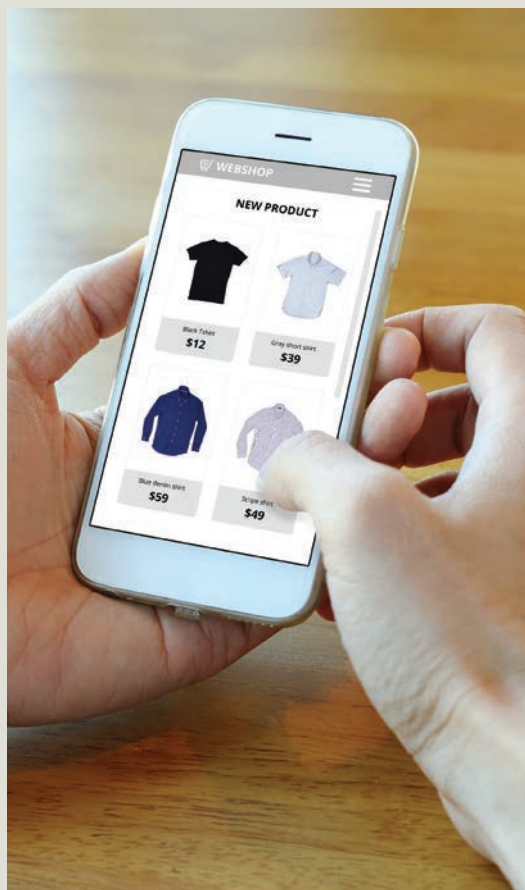▷ Augmented Reality (AR), Virtual Reality (VR) and Mixed Reality (MR)

Target

At least 20% (of ~6,000) MSMEs newly adopt targeted technology or applications and/or upgraded their existing technology/applications.

SP3 Empower businesses and society with digital capability

Focus

Driving MSME's Digital Transformation

Leading Programme

▷ Establish a baseline MSMEs' database with current state of digital adoption.
▷ Drive MSMEs' online presence with transactional features and attributes.
▷ Facilitate digital technologies and IR4.0 awareness to MSMEs.
▷ Facilitate MSMEs to embark on cloud solutions.
▷ Enhance MSMEs' digital marketing capability.

Enabling Programme

▷ Development and implementation of MSME Digital Transformation Framework that chart out MSMEs' digital transformation roadmaps.
▷ Enable access to business knowledge and international best practices.
▷ Enable MSMEs to gain regional market access.
▷ Stakeholder management, collaboration and attainment of mutual strategic goals.

Outcome

▷ Broaden the access to the use of IR4.0 technologies.
▷ Support and enhance SP1 focus and initiatives in developing thriving digital industry
▷ Majority of MSMEs have taken up digital transformation.

Benefit/Impact

▷ Increased business productivity and competitiveness locally and readiness to compete in the regional business landscape.
▷ Demand generated for the digital solutions and applications.
▷ Meaningful participation in IR4.0 and digital economic activities.

Empower businesses and society with digital capability

Number of manpower equipped with future digital skills.

Description

This KPI measures the number of participants in AITI's training programmes:

▷ Coding for Unemployed Youth
▷ Coding Academy
▷ Upskilling and Reskilling for Existing ICT Workforce
▷ MISC-WG ICT Programmes (e.g. MTA Certification and other related upskilling programmes for jobseekers)

Target

1,000 participants to be trained with future-ready digital skills.

Empower businesses and society with digital capability

Focus

Development of Digital skills and Capacity

Leading Programme

▷ Assessment of digital skills' supply and demand.
▷ Development of future-ready digital skills among youths and unemployed individuals through upskilling and reskilling programmes.
▷ Establishment of a Coding Academy.
▷ Development of Tech-Start Up Immersion programme.
▷ Initiate the development of digital skills for students, senior citizens and underserved groups to be championed by relevant stakeholders.

Enabling Programme

▷ Review, enhancement and implementation of Brunei ICT Industry Competency Framework (BIICF).
▷ Review policies to enable local business development in ICT sector.
▷ National Digital Manpower Masterplan.
▷ Stakeholder management, collaboration and attainment of mutual strategic goals.

Outcome

▷ Availability of manpower resources with relevant industry and future-ready digital skills and capacity.
▷ Minimised skill gaps and mismatch in the digital talent pool.
▷ Digitally-inclusive society.

Benefit/Impact

▷ Manpower readiness in realising smart nation's objectives.
▷ Readiness in realising the vision of Connected Smart Nation.
▷ Indirectly maximising the digital products and services demand among consumers as they are more digitally-inclined.

Enable organisational excellence

Improved employee engagement towards High Performing Organisation.

Description

This KPI addresses employees' understanding of AITI's business goals linked to:

▷ their roles & job satisfaction
▷ feeling proud & valued by AITI
▷ improved commitment in delivering their work
▷ exerting extra effort towards AITI's success
▷ creating a positive work environment

These engagement attributes - which will be tracked and monitored as a group-level KPI - are supported and facilitated by the following:

▷ instilling culture of accountability
▷ delivering projects' outcomes
▷ raising the bar of performance management
▷ learning and capacity development
▷ competency management
▷ career progression
▷ talent management
▷ leadership development

Target

Overall employee engagement measured at **4 out of 5 in Employee Engagement (EE) index** based on the defined attributes. The measurement shall be based on EE survey along with successful outcomes of programmes being implemented to reflect the true state of AITI in the context of a high performing organisation.

SE

Enable organisational excellence

Focus #1

Improve Employee Engagement

Leading Programme

▷ Organisation and development of programmes tailored to improve end-to-end performance management, career development, leadership capability with alignment to AITI's core values.

▷ Development of subject matter experts.

▷ Improvement of programmes for health, safety and physical environment.

▷ Development of change management programmes toward achieving organisation excellence.

Outcome

▷ Improved overall employee engagement.

▷ High performing organisation.

▷ Continuous improvements in people, processes, technology and environment.

Benefit/Impact

▷ Achieve intended business benefits with positive impact on stakeholder's expectation.

Enable organisational excellence

Focus #2

Strengthening Internal Control, Governance and Compliance

Leading Programme

▷ Development of corporate Governance, Risk Management & Compliance (GRC) Policy and Framework.
▷ Communication and engagement of framework for internal adoption.
▷ Implementation of corporate GRC framework.
▷ Strengthening revenue assurance and collection.
▷ Setup Internal Audit Business Unit.

Outcome

▷ Enhance corporate reputation and improve trust and integrity of organisation.
▷ Improved cooperation among internal-audit, risk-management and compliance-related functions.
▷ AITI has better internal control, governance and compliance.

Benefit/Impact

▷ Improving top-level decision-making.
▷ Assuring internal controls.
▷ Enabling better strategic planning.

Improved stakeholders' and customers' experience.

Description

This KPI aims to improve stakeholders' and customers' experience through a multi-faceted approach, including:

▷ Excellent communication

▷ Digital transformation and enhancements of customers' touch points

▷ Customer-oriented and responsive service

▷ Responsible and influential leadership behaviour in engaging and managing stakeholders

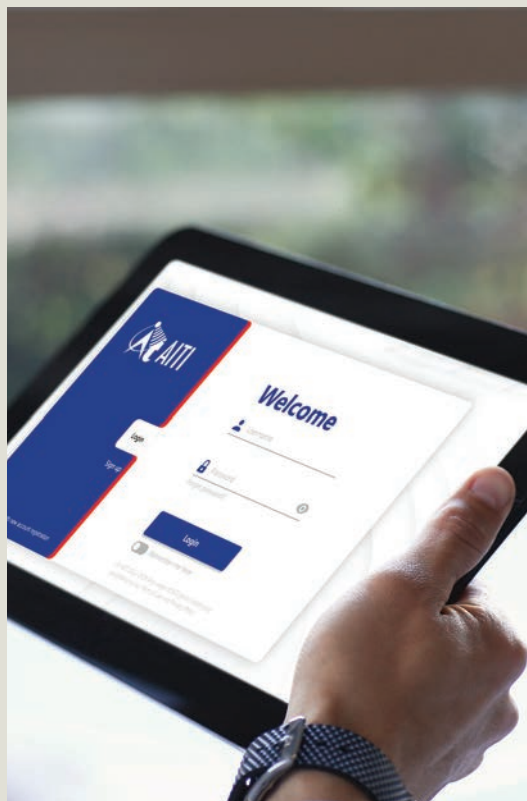▷ Effective collaboration towards achieving mutual strategic goals.

Target

80% of stakeholders have positive perception towards AITI measured via AITI Annual Stakeholder Perception Survey.

Enable organisational excellence

Focus

Improvement in Stakeholder & Customer Engagement

Leading Programme

▷ Digital Transformation Programme to further enhance customer experience and engagement in doing business with AITI.

▷ Development and implementation of stakeholder management and engagement plan.

▷ Development of customer and stakeholder feedback mechanism and assessment methodology for continuous improvements.

Outcome

▷ Improved overall stakeholder/customer experience and engagement.

▷ Positive perception of stakeholders towards AITI.

Benefit/Impact

▷ AITI is seen as a reputable and admirable organisation.

▷ Ease of doing business with AITI will potentially contribute to the overall ease of doing business in the World Bank's ranking.

Aspiration and Future Outlook

Socio-economic value added by the digital industry

Improved industry competitiveness and ubiquitous connectivity

Strategic Focus and Priorities

Digital and broadcasting industry development

Closing gaps in policies, legislations, regulations

Enabling digital ubiquitous infrastructure
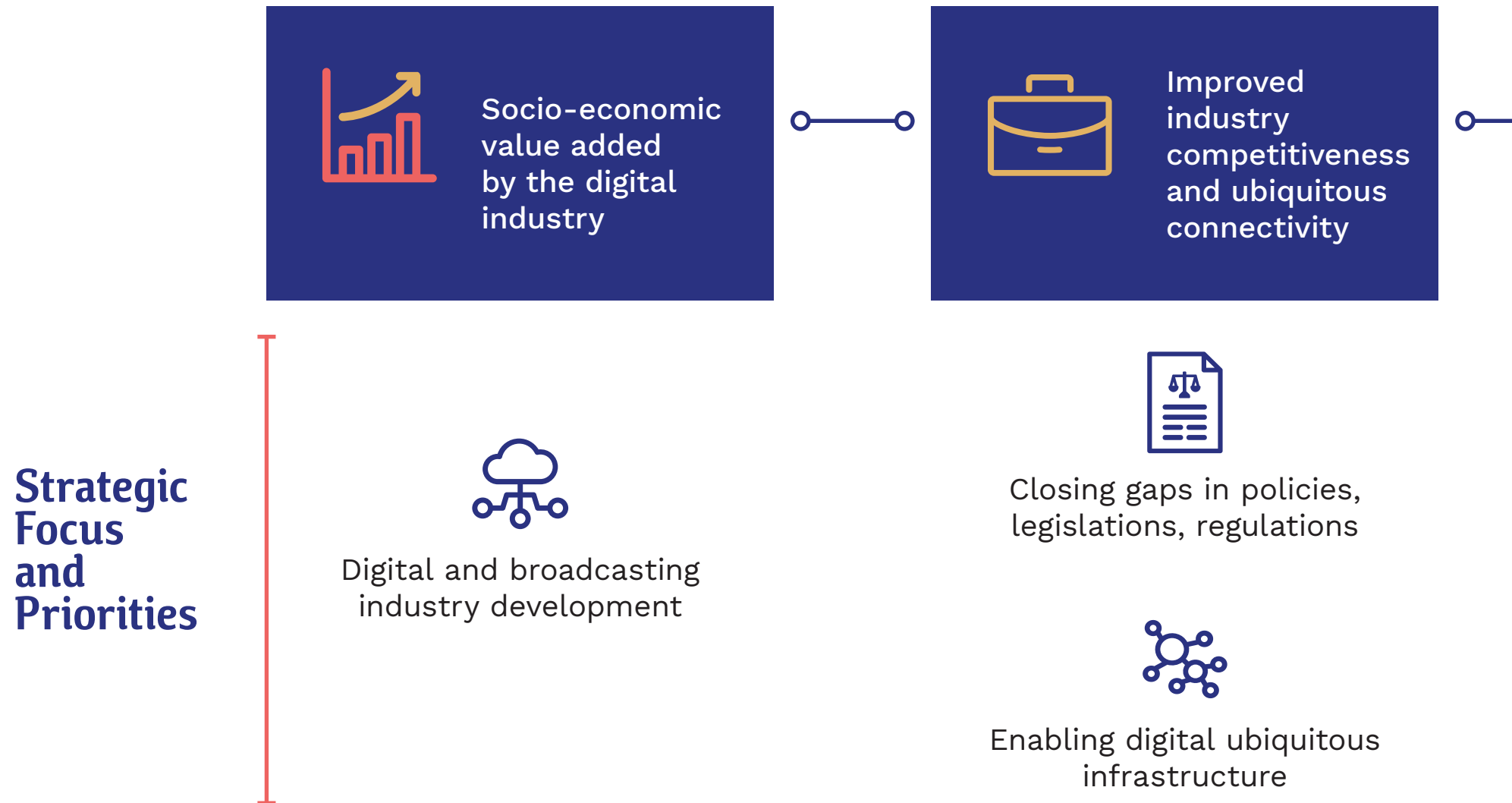
Readiness of Manpower with future-ready skills

Becoming a High Performing Organisation

Digital capacity development

Achieve organisational excellence

Digital transformation of MSMEs

Programme Implementation Approach

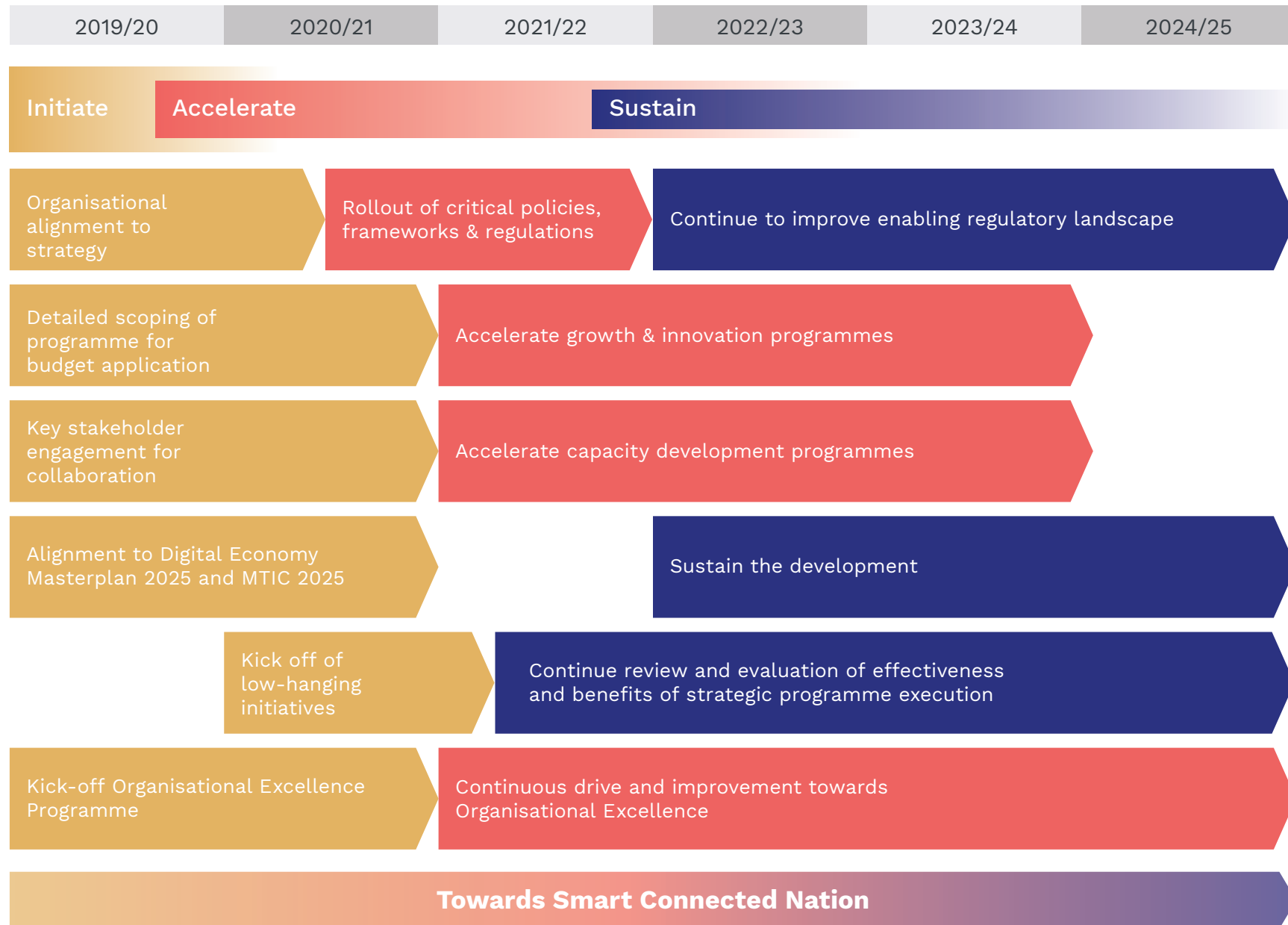| Phase 1: Initiate	Phase 2: Accelerate	Phase 3: Sustain

In this phase, all existing Business as Usual (BAU) programmes and groundwork for newly-developed programmes will kick-start. Some programmes have started in FY 2019-2020 and overlaps with Phase 2, while some programmes will start in FY 2021-2022 as refinement is still required.

This phase is designed to boost the breadth and depth of the programmes which have been initiated in Phase 1, where a more substantive scope is executed as most of the programmes are designed in the manner of building blocks.

This phase is essential to continue the execution of the strategic programmes which are designed to repeat annually since their initiation in Year 1, and acceleration in Year 2 and 3. Although the programmes may repeat annually due to its nature, the substance and content of the programmes may differ from one year to another.

2019/20	2020/21	2021/22	2022/23	2023/24	2024/25

Initiate   **Accelerate**   **Sustain**

Organisational alignment to strategy → **Rollout of critical policies, frameworks & regulations** → **Continue to improve enabling regulatory landscape**

Detailed scoping of programme for budget application → **Accelerate growth & innovation programmes**

Key stakeholder engagement for collaboration → **Accelerate capacity development programmes**

Alignment to Digital Economy Masterplan 2025 and MTIC 2025 → **Sustain the development**

Kick off of low-hanging initiatives → **Continue review and evaluation of effectiveness and benefits of strategic programme execution**

Kick-off Organisational Excellence Programme → **Continuous drive and improvement towards Organisational Excellence**

Towards Smart Connected Nation

Programme Implementation Timeline

Initiatives
Development of Data Industry
Development of Broadcasting Content Industry
Development and Strengthening of Policy, Legislation and Regulatory Framework
Implementation of Approved Orders and Regulations
Facilitation to Enable Ubiquitous Digital Infrastructure
Capacity Building Programme and Digital Transformation for MSMEs
National Digital Competency Framework
Organisation Development Programme
Multi-stakeholder Collaboration (Local & International)
Strengthening of Internal Control and Governance Framework

2020	2021	2022	2023	2024	2025

▷ Data Sharing Platform ▷ Data Analytics Product Development ▷ Demand Generation

▷ Content Co-production ▷ Platform for Telecast of Content ▷ TV Content Festival ▷ Review of BD Fund Guidelines
▷ Young Content Maker ▷ Content Platform ▷ Islamic Content Aggregation ▷ Content Export

▷ PDP ▷ Postal ▷ Broadcasting ▷ USP ▷ 5G ▷ IR4.0

▷ Postal ▷ PDP ▷ Converged ▷ USP

▷ Taskforce ▷ Regulatory Sandbox
▷ 5G Pilot ▷ Spectrum for 5G
▷ Facilitation for Implementation of 5G, IoT and Smart Kampung

▷ Digital for All ▷ Coding Skill Development Programme ▷ MSME Tech Savviness ▷ Future Digital Skills Development
▷ Digital Volunteer Programme ▷ Emerging Tech Adoption

▷ Review & Enhancement of BIICF ▷ Stage Rollout and Adoption of
BIICF by Businesses

▷ Leadership Development ▷ Succession Planning ▷ Talent Management ▷ Improve Performance Management
▷ Continuous Improvement in Employee Engagement

▷ Collaboration ▷ Perception Survey ▷ Continuous Improvement in Stakeholder / Customer Engagement and Experience

▷ Development of Corporate GRC Policy and Framework ▷ BCP Plan
▷ Programme Benefit Management Framework ▷ Customer Charter