

#### **NEGERI SEMBILAN DIGITAL ECONOMY BLUEPRINT 2027**

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# Contents

Foreword	5
Preface	6
Introduction	7
Executive summary	8
Chapter 1 – Malaysia's digital economy	11
Chapter 2 – Digital economy landscape in Negeri Sembilan	17
Chapter 3 – Vision and way forward	25
Chapter 4 – Governance structure	55
Chapter 5 – Conclusion	57
Glossary	59

List of Figures			
Figure 1: Overview of the Negeri Sembilan digital economy blueprint	9		
Figure 2: Key levers of a digital economy	13		
Figure 3: Digital economy GDP contribution to Malaysia, 2017-2020 [MYR billion]	14		
Figure 4: Digital evolution by country, 2020	15		
Figure 5: Vision, objectives and thrusts of the Malaysia Digital Economy Blueprint	16		
Figure 6: Shared Prosperity Vision 2030	20		
Figure 7: Guiding principle 7 of SPV 2030	20		
Figure 8: Twelfth Malaysia Plan 2021-2025	20		
Figure 9: Key enablers of RMK-12	20		
Figure 10: Malaysia Digital Economy Blueprint (MDEB)	21		
Figure 11: Key angles of MDEB	21		
Figure 12: National Fourth Industrial Revolution (4IR) Policy	21		
Figure 13: Focus technology of National 4IR policy	21		
Figure 14: Structural Plan of Negeri Sembilan 2045	22		
Figure 15: Relevant policies of the structural plan	22		
Figure 16: Negeri Sembilan Development Plan 2021-2025	22		
Figure 17: Digital-related focus areas of the plan	22		
Figure 18: Digitalisation Strategic Plan of Negeri Sembilan 2021-2025	23		
Figure 19: Strategic thrusts of the digitalisation plan	23		
Figure 20: Negeri Sembilan district documents	23		
Figure 21: List of identified gaps in Negeri Sembilan's digital economy	24		
Figure 22: Negeri Sembilan digital economy framework	26		
Figure 23: Negeri Sembilan Digital Economy Blueprint implementation phases	29		
Figure 24: Key development clusters in Negeri Sembilan	37		
Figure 25: Businesses' digitalisation journey and key sub-initiatives	41		
Figure 26: Overview of governance structure	56		

# **Foreword**



YAB Dato' Seri Haji Aminuddin bin Harun Chief Minister, Negeri Sembilan

The digitalisation of an economy is one of the most important enablers in developing a prosperous, inclusive, and sustainable state/nation.

With the right digitalisation in place, be it in skills or tools, governments are able to better serve its people, businesses are able to tap into a wider market, and society is able to connect to one another easier, to name a few.

Based on the culmination of months of comprehensive research, engagements and discussions, the Negeri Sembilan Digital Economy Blueprint sets the ambitious vision to create the foundation of a digital-centric economy by 2027. It charts the action the state must take in the coming 5 years to develop a digitalised government, business and society.

I want to emphasise that our goal of creating a digital economy is not a milestone to achieve, but a journey. To truly become one, we must constantly enhance our understanding and application of digitalisation in our everyday lives. Thus, the Negeri Sembilan Digital Economy Blueprint will serve only as a starting point.

As we set our plans in motion, experience and history have shown us that the climb ahead will be challenging. As such, during this critical formative period, we must join hands and put forward our best in creating a better and sustainable economy – for the future of our children and our state.

# **Preface**



YB Dato' Dr. Razali bin Ab Malik State Secretary, Negeri Sembilan

The path towards a digital economy is key for any government in unlocking a new world of opportunities, driving greater inclusivity in communities, and integration & efficiency within governments and industries.

The Negeri Sembilan Digital Economy Blueprint is a 5-year plan aimed at building the state's foundation towards becoming a digital-centric economy. This blueprint aims to complement the vision of the Negeri Sembilan Development Plan 2021-2025 and the Negeri Sembilan Structural Plan 2045 towards becoming a prosperous, inclusive and sustainable state. The plan also aims to contribute meaningfully to the Malaysia Digital Economy Blueprint 2030's vision of becoming a regional leader in the digital economy.

Formation of the plan was done through extensive engagements with relevant state-level stakeholders, governing and supporting bodies, including federal ministries and agencies. I would like to express my sincere appreciation and gratitude for all the contributions and invaluable input.

The core of the blueprint rests on the establishment of a digital-powered government, a digital-driven industry, and a digital-ready society.

Within the government, priority will be placed on digitalising-related services and kickstarting the journey towards transforming key Negeri Sembilan areas into smart cities.

Leveraging on our strengths and reputation as a strong investment hub in Malaysia, a key direction of the blueprint is to develop digital-related catalytic projects and strengthen the digital ecosystem for businesses. This will solidify our position as an attractive hub for investors, especially for the evergrowing digital industry.

Concurrently, focus will be placed on raising citizens' digital literacy and access through various initiatives. This is to ensure our future generation can support the growth of the state.

While we have a clear plan in place, the success of the blueprint will ultimately lie on the commitment of all implementing parties, as well as the support from industries and society. Let us all work together for a better future and growth for Negeri Sembilan moving forward.

# Introduction



YBhg. Dato' Muhamad Nahar bin Mohd Sidek Director of State Economic Planning Unit, Negeri Sembilan

Over the years, Negeri Sembilan's journey of becoming a developed state has faced many difficulties and challenges. Despite that, we have always been able to rise above them, even during the COVID-19 pandemic. A key positive is our investments. which remained resilient throughout the pandemic and saw a strong investment of RM5.8 billion during 2021. Of the RM5.8 billion, 50% was contributed from the manufacturing sectors, with the rest coming from the services and primary sectors.

As we progress closer to our ambition in becoming a developed state, we must also be cognisant of the external environment, specifically the global move towards digitalisation. In the past few decades, we have witnessed profound shifts in the form of new business models, production patterns, as well as consumption preferences across the globe, all of which has been accelerated by the COVID-19 pandemic. In effect, the path towards digitalisation for any country/state is inevitable and must be prioritised moving forward.

This is also in line with the federal government's push for a digital economy. However, in this aspect, much remains to be done for Negeri Sembilan. Developed states such as Kuala Lumpur and Selangor currently take the lead in the digital economy. In 2019, total gross output from the ICT services in Malaysia stood at RM164 billion, 95% of which was contributed by Kuala Lumpur and Selangor. Negeri Sembilan only contributed a gross output of less than 0.1% (RM153 million).

To realise the goal of becoming a digital-centric economy, the Negeri Sembilan Digital Economy Blueprint is formulated to set the direction, as well as outline the strategies and targets that complement the visions of Negeri Sembilan Structural Plan 2045 and Negeri Sembilan Development Plan 2021-2025. Strategies detailed in the blueprint are geared towards positioning Negeri Sembilan as a strong contributor to Malaysia's digital economy in the long-term.

14 catalytic initiatives will be implemented, with focus placed on transforming the government, industry and society. The initiatives will be implemented over a 3-phase, 5-year period. The first phase will be aimed at accelerating the digital adoption in the state, followed by driving digital transformation and inclusion in the second phase. In the last phase, initiatives will focus on driving Negeri Sembilan towards a digital-centric economy, with goals to realise a data-driven government, a high-quality digital talent pool, and an increased awareness in cybersecurity amongst the citizens, to name a few.

Realisation of the blueprint will be achieved through the establishment of a comprehensive governance structure. The established structure will be responsible in driving the overall direction and implementation of the blueprint over the next 5 years.

With commitment, hard work and dedication, we will realise a digital-centric economy that is effective, integrated and inclusive.

# **Executive summary**

The Negeri Sembilan Digital Economy Blueprint is a 5-year strategic plan aimed at developing a digital-centric economy.

The Blueprint is in alignment with the Shared Prosperity Vision 2030, Twelfth Malaysia Plan 2021-2025, Malaysia Digital Economy Blueprint, National 4IR Policy, Negeri Sembilan Structural Plan 2045 and Negeri Sembilan Development Plan 2021-2025.

The Blueprint focuses on improving the digitalisation of government services, nurturing the state's digital sector (inclusive of ICT-related manufacturing, services, trade, content and media and other relevant industries), and enhancing citizens' access to digital tools and services.

3 focus areas, 8 strategies and 14 initiatives will be implemented in a 5-year timeframe.



Figure 1: Overview of the Negeri Sembilan digital economy blueprint

	STRATEGIES		INITIATIVES	
Digital-powered government	#1	Leverage public sector big data	1.1	Develop big data platforms and systems
	#2	Advance into an e- government	2.1	Develop and enhance e-government services
			2.2	Establish a centralised payment system for government services
	#3	Upskill into a digital public sector workforce	3.1	Introduce advanced digital upskilling courses
	#4	Transform into a digital- enabled smart city	4.1	Develop a Smart City Masterplan
Digital- driven industry	#5	Catalyse industry digitalisation	5.1	Advance digitalisation in key industries
			5.2	Establish a digital hub
	#6	Strengthen industry ecosystem	6.1	Support businesses' digitalisation journey
			6.2	Develop and upskill digital talents
Digital- ready society	<b>#7</b>	Develop and upskill the society	7.1	Introduce state-wide digital-related classes
			7.2	Support educators in the development of digital skills
			7.3	Increase digital awareness through emphasis on literacy and knowledge
	(#8)	Improve digital inclusion	8.1	Improve selected groups' access to broadband and digital devices
			8.2	Introduce internet subsidy scheme



Chapter 1
Malaysia's digital economy



# 1.1 Definition of Digital Economy

Digital and technological innovations are at the forefront of driving transformation for many countries. In the past few decades, they have permeated every facet of an economy and aspect of one's life, reshaping how individuals, businesses and markets interact with each other.

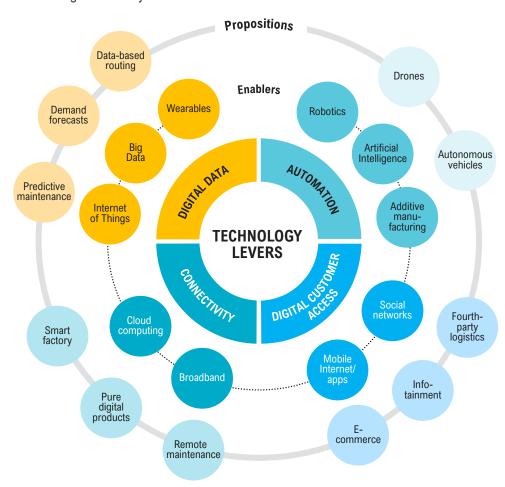
Better known as the digital economy, it consists of a multitude of activities that are enabled by information and communications technologies (ICT). At a broad level, the realisation of a digital economy relies on 4 key technology levers, namely digital data, automation, digital customer access and connectivity (Figure 2) and is supported by a number of enablers such as cloud computing, broadband network, etc. In effect, the levers and enablers facilitate new market positions and value propositions such as ecommerce, smart factory, drones, etc.

According to the Organisation for Economic Cooperation and Development (OECD), digital economy "incorporates all economic activity reliant on, or significantly enhanced by the use of digital inputs, including digital technologies, digital infrastructure, digital services and data. Key players who utilise the digital inputs in their economic activities include both the producers and consumers, including the government."

In Malaysia, digital economy encompasses both economic, as well as digital-related social activities. Within the Malaysia Digital Economy Blueprint (MDEB), digital economy covers the "economic and social activities that involve the production and use of digital technology by individuals, businesses and government".

The sector is closely linked to the development of the nation's fourth industrial revolution (4IR), covering sub-areas of digital, physical and biological 4IR technologies.

Figure 2: Key levers of a digital economy





#### Digital data

Capturing, processing & analysing data allows better predictions & decisions to be made



#### **Automation**

Combining traditional technology with AI has given rise to systems that work autonomously



#### **Digital customer access**

Internet gives intermediaries direct access to customers, offering more choices & services



#### Connectivity

Connecting value chain via networks to synchronise supply chains & shorten production lead times

Source: Roland Berger

Growth in the digital economy sector is primarily driven by increased accessibility to digital data and platforms. Through the access to a wealth of data, individuals, governments and businesses are able to establish insightful patterns and turn them into meaningful actions.

The benefits of embracing a digital economy extends beyond the common advantages of

production efficiency and quality. When properly leveraged, it can enhance businesses' and government's decision making. More importantly, the transition to a digital economy allows a country/state to build a future-proof, competitive and resilient population.

# 1.2 Digital Economy in Malaysia

Malaysia's digital economy witnessed an 8% growth from 2017 to 2020, largely contributed by ICT services and manufacturing sub-sectors (Figure 3). As of 2020, the sector contributed RM320 billion in Gross Domestic Product (GDP), covering 22.6% of the country's total GDP. One of the key reasons contributed to this growth was the acceleration in digitalisation following the onset of the COVID-19 pandemic.

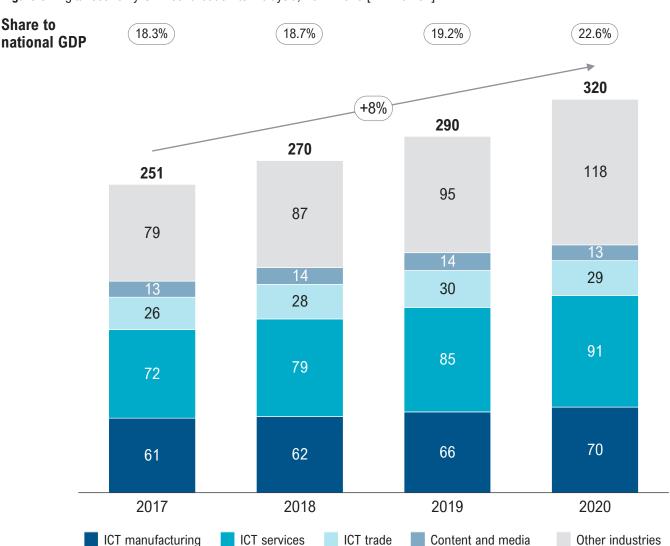
Malaysia also performed well in its efforts to create an inclusive digital ecosystem. According to global consulting firm Roland Berger's Digital Inclusion Index<sup>1)</sup>, Malaysia is ranked 21st globally

and second in SEA in 2020, behind only to Singapore.

A key effort contributed to the strong ranking was the 2019 investment of RM22 billion in the National Fiberisation and Connectivity Plan (NFCP) to boost overall digital accessibility, especially to citizens in the rural area.

Quality challenges however remain as areas for improvement, specifically the country's broadband quality.

Figure 3: Digital economy GDP contribution to Malaysia, 2017-2020 [MYR billion]



Source: Department of Statistics Malaysia

<sup>1)</sup> Measures a country's digital inclusion through the assessment of its accessibility, affordability, ability and attitude;

Malaysia is also one of the top performing economies in terms of "digital evolution" (Figure 4) or progress in digitalisation. In a study carried out in 2020 to measure an economy's digital infrastructure supplies, peoples' willingness to engage in the digital ecosystem, laws and support by government on the development of digital technologies and state of key innovation ecosystem inputs, Malaysia was ranked in the highest possible category – "stand out" 1).

The positive ranking is attributed to the high level of existing digitalisation and strong momentum created by the country in advancing their digital capabilities, with key efforts include:

- Expanding the adoption of digital consumer tools
- · Developing digital talent

- Fostering digital entrepreneurial ventures
- Providing fast, universal and terrestrial and mobile internet access
- Specialising export of digital goods, services or media
- Coordinating innovation between universities businesses and digital authorities

Key initiatives that have been implemented include the regulatory reform of broadband cost, levying indirect tax to imported digital services provided by non-resident suppliers, as well as classifying communication services as a utility.

Other key countries within this category include Singapore, United States, South Korea, Taiwan (China), Germany, United Arab Emirates, Qatar, etc.

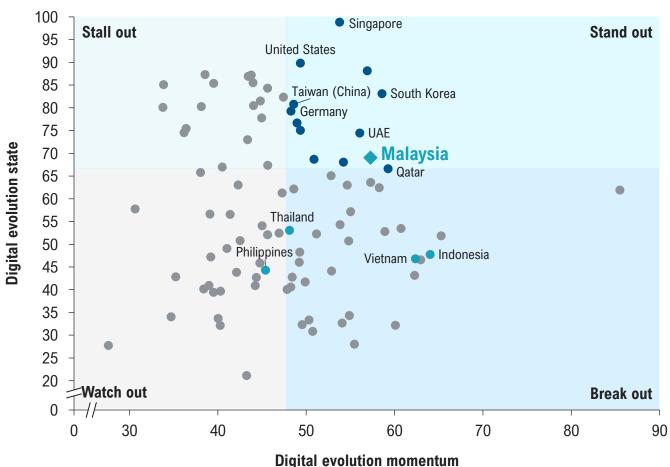


Figure 4: Digital evolution by country, 2020

Source: Digital Planet

<sup>1)</sup> **Stand out** are countries that are digitally advanced and exhibit high momentum, **Stall out** are countries that have a high state of digital advancement but exhibiting slower momentum, **Break out** are countries with low score in state of digitalisation but evolving rapidly, and **Watch out** are countries facing challenges in terms of overall digitalisation;

# 1.3 Malaysia Digital Economy Blueprint (MDEB)

Launched in early 2021, MDEB aims to transform Malaysia into a digitally-driven, high income nation and a regional leader in digital economy by 2030.

The blueprint consists of 3 objectives, 6 thrusts, 22 strategies, 48 national and 28 sectoral initiatives. Figure 5 provides an overview of MDEB.

Figure 5: Vision, objectives and thrusts of the Malaysia Digital Economy Blueprint

#### **VISION**



To be a regional leader in the digital economy and achieve inclusive, responsible and sustainable socioeconomic development

#### **OBJECTIVES**



Encourage industry players to become creators, users and adopters of innovative business models under the digital economy



Harness human capital that is able to thrive in the digital economy



Nurture an integrated ecosystem that allows society to adopt digital economy

#### **Thrusts**

Drive digital transformation in the public sector

- 5 strategies
- · 12 initiatives

Boost economic competitiveness through digitalisation

- 4 strategies
- · 8 initiatives

Build enabling digital infrastructure

- 3 strategies
- 6 initiatives

Build agile and competent digital talent

- 4 strategies
- 13 initiatives

Create an inclusive digital society

- · 2 strategies
- 4 initiatives

Build trusted, secure and ethical digital environment

- ategies 4 strategies
  - 5 initiatives

· 28 sectoral strategies

Source: Malaysia Digital Economy Blueprint

Strategies within the MDEB are to be implemented within a 10-year timeframe from 2021-2030. The blueprint is implemented in 3 distinctive phases, with the first phase focusing on accelerating digital adoption, the second on driving digital transformation and the last on becoming a regional market producer.

Through the vision, the country aims for 3 outcomes:

- Socio-environmental wellbeing for all
- Business growth in all sectors
- Fit-for-future government

Progress of the MDEB has been positive. As of December 2020, the following key achievements are noted:

- Digital consumers increased to 88% of the total population
- Estimated 216 e-payment transactions per capita
- Increase in payment facilities to 36 payment facilities per 1,000 users
- Total 725,285 businesses have embraced ecommerce, representing 83% of total Micro, Small and Medium Enterprises (MSMEs)

In alignment with the national agenda of becoming a regional leader, The Negeri Sembilan Digital Economy Blueprint will ensure that the state is able to play a meaningful role in supporting the nation's digital economy growth.



Chapter 2
Digital economy landscape in Negeri Sembilan

# 2.1 Overview of Negeri Sembilan

Situated in the western coast of Peninsular Malaysia, Negeri Sembilan has a population size of 1.1 million and covers 6,656 km<sup>2</sup> of land.

The state aspires to become a strong economic hub in Malaysia. Recent developments in key projects such as the Malaysia Vision Valley 2.0 (MVV 2.0), Agropolis development, etc., are prime examples of Negeri Sembilan's effort to realise this vision.

The key competitive strengths of the state are as follows:

- Close proximity to the nation's business centre, Kuala Lumpur and administrative centre, Putrajaya
- Strong network of road and railways, with good access to key logistics hubs such as KLIA and Port Klang
- Supportive investment ecosystem various multinational companies have established their presence in the state (e.g. Coca-Cola, Samsung, Daihatsu, Nestle, etc.)

Boasting over 20 strategically located and well-equipped industrial parks, Negeri Sembilan's strength remains in the manufacturing sector. As of 2022, the state is in the process of diversifying its income through venturing into high-tech industries, as well as the development of a logistics hub in Port Dickson to better support the growing e-commerce sector.

Under the Negeri Sembilan Structural Plan 2045, the state government aims to make Negeri Sembilan equivalent to Kuala Lumpur, in terms of land use, services, infrastructures, utilities and amenities.

Among the core drivers able to facilitate and support this growth is the digitalisation of the state's economy. This chapter looks into the current situation analysis of Negeri Sembilan's digital economy, specifically key areas it must enhance as part of its effort to create a digital-centric economy.



# 2.2 Overview of Negeri Sembilan's Digital Economy

# Economy & digital activities

Negeri Sembilan is a mid-range contributor to Malaysia's economy, with services and manufacturing sectors as key drivers. Digital-related sector in Negeri Sembilan contributed RM153 million in 2019.



**9th ranked** in contributing to national GDP (2021)



RM 47.7 bn in state GDP (2021)



of GDP contributed by 2 sectors: services and manufacturing (2021)





RM 153 m in gross output from the ICT services (2019)



RM 55 m worth in digital assets (2019)



RM 30 bn in e-commerce income (2019)

# Digitalrelated jobs

Despite being small in size, Negeri Sembilan possesses a competitive ICT services workforce. Salaries and wages in the sector are higher than average labour force in the state.



509,980 in total Negeri Sembilan workforce (2021)



4/5 individuals engaged in the ICT services sector (2019)



RM 36,854 per annum in ICT services salaries and wages per capita (2019)

#### Digitalrelated investments

Investments in technology parks (Techpark @ Enstek and Sendayan Tech Valley) constituted 32% of Negeri Sembilan's total manufacturing investments from 2019-2021.



RM 12.6 bn in total manufacturing investments recorded from 2019-2021



32% contributed by investments into existing technology hubs (2019-2021)



RM 2.9 bn invested in Techpark @ Enstek (2019-2021)





RM 1.1 bn invested in Sendayan Tech Valley (2019-2021)

# Digital connectivity

Negeri Sembilan's internet penetration is above the national average, with majority of internet activities being social / recreational-focused.



88.9%

internet penetration rate (2020)



74.7% in computer usage (2020)



95.3% in mobile phone usage (2020)

# 2.3 Guiding plans and documents

# 2.3.1 National vision and guiding documents

Figure 6: Shared Prosperity Vision 2030



Shared Prosperity Vision (SPV) 2030 is a commitment to transform Malaysia into a nation that achieves sustainable growth with fair and equitable distribution across income groups, ethnicities, regions and supply chains.

One of its 15 guiding principles (Figure 7), "future economy" refers to the need for change not only in technologies and business to keep up to economic demand trends, but also in attitudes, policies, legislation and infrastructure.

Figure 7: Guiding principle 7 of SPV 2030

# **Guiding Principle 7 – Future Economy**

"..... Under this principle, exploration in new areas e.g., digital economy, automation, platform preparation, fintech, Al and blockchain will be given priority...."

Source: EPU

Moreover, under enabler 6, SPV emphasises the importance of big data as a key enabler to a thriving digital economy.

Figure 8: Twelfth Malaysia Plan 2021-2025



The Twelfth Malaysia Plan 2021-2025 (RMK-12) is a medium-term plan with a focus of resetting the economy, strengthening security, wellbeing and inclusivity, as well as advancing sustainability. The plan paves the way forward for a comprehensive policy response to address the impact of COVID-19.

Figure 9: Key enablers of RMK-12

Enabler 1: **Enabler 2: Enabler 3:** Enabler 4: Developing Accelerating Enhancing Strengthening future talent public service connectivity technology and transport adoption and Innovation infrastructure

Source: EPU

As part of the 5-year plan, it aims to accelerate technology adoption and innovation (Figure 9) through focus on mainstreaming digitalisation for inclusive development and capitalising on advanced technology for economic development.

RMK-12 also targets to accelerate the development of strategic and high impact industries that will spur the digital economy.

# 2.3.2 National digital blueprints

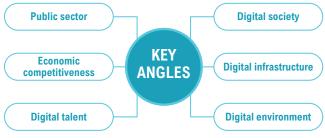
Figure 10: Malaysia Digital Economy Blueprint (MDEB)



The Malaysia Digital Economy Blueprint (MDEB) is a national initiative to transform Malaysia into a digitally-driven and high-income nation, as well as a regional leader in digital economy.

Its strategic thrusts involve enhancing capabilities and competencies from 6 angles (Figure 11).

Figure 11: Key angles of MDEB



Source: EPU

Implementation of the blueprint is divided into 3 phases:

- Phase 1 (2021-2022): Accelerate adoption
- Phase 2 (2022-2025): Drive transformation
- Phase 3 (2026-2030): Position Malaysia as a regional digital market

MDEB is a national blueprint for governments and agencies to refer when designing their digital plans.

Figure 12: National Fourth Industrial Revolution (4IR) Policy



The National Fourth Industrial Revolution (4IR) Policy is a broad and overarching national policy to transform the socioeconomic development of Malaysia through the ethical use of 4IR technologies. The plan outlines 4 policy thrusts, 16 strategies and 32 national initiatives which set the direction for all ministries and agencies.

This plan serves as a guidance document, addressing 5 foundational 4IR technologies (Figure 13) and key focus sectors such as manufacturing, healthcare, finance and insurance to deploy these technologies. The document also serves as a useful guidance for ministries and government agencies when aligning their plans in relation to emerging 4IR technologies.

Figure 13: Focus technology of National 4IR policy



Source: EPU

# 2.3.3 Local Negeri Sembilan plans

Figure 14: Structural Plan of Negeri Sembilan 2045



The Negeri Sembilan Structural Plan 2045 is a state-wide planning document to drive and control all developments within Negeri Sembilan until 2045.

Under this document, planning policy 8 addresses the necessity for digital infrastructure in line with current technological trends (Figure 15). Additionally, planning policy 9 aims to increase the people's economic wellbeing by transitioning to a service-sector-based economy. Both policies encapsulate the need for a robust digital economy within Negeri Sembilan to achieve its 2045 vision.

Figure 15: Relevant policies of the structural plan

# Planning policy 8 on infrastructure development

To improve virtual technology and broadband facilities in line with current technological developments to meet future demands -

# Planning policy 9 on GDP per capita >RM98,000 by 2045

Strengthen the service sector to become the main economic contributor to Negeri Sembilan -

Source: UPEN Negeri Sembilan

This planning document sets the directions, strategic developments, policies as well as detailed roadmaps of Negeri Sembilan's vision and therefore can be followed to ensure alignment between digital goals and Negeri Sembilan's overall ambitions.

Figure 16: Negeri Sembilan Development Plan 2021-2025



The Negeri Sembilan Development Plan (RPNS) 2021-2025 provides the foundation for reform and transformation on the economy of Negeri Sembilan that complements RMK-12.

With the objective to create a progressive, prosperous and sustainable state, the plan aims to increase the state's GDP growth rate from 2.1% from 2016-2020 to 4.5% from 2021-2025.

A total of 13 strategic thrusts will be implemented, with a key thrust being improving the infrastructure quality and expanding existing connectivity network, facilities and ICT services. Figure 17 highlights the relevant focus areas to the digital economy within the aforementioned strategic thrust:

Figure 17: Digital-related focus areas of the plan

#### Focus area B

Expand and improve citizens' access to communication equipment and services

#### Focus area D

Increase the level of infrastructure availability, public facilities and ICT services in the state

Source: UPEN Negeri Sembilan

By the end of 2025, the state aims to achieve a 4G broadband coverage in all populated areas, including both urban and rural areas.

# 2.3.3 Local Negeri Sembilan plans (continued)

**Figure 18:** Digitalisation Strategic Plan of Negeri Sembilan 2021-2025



The Negeri Sembilan Strategic Digitalisation Plan 2021-2025 is a state-wide planning document aimed to drive integrated and inclusive digitalisation in public services. The plan outlines 4 strategic thrusts (Figure 19), 10 strategies and 30 digitalisation programmes to be implemented within the span of 5 years.

Figure 19: Strategic thrusts of the digitalisation plan

# Strategic thrust 1

Strengthening ICT Infrastructure and Cybersecurity

#### Strategic thrust 2

Strengthening integrated, inclusive and secure digital services

#### Strategic thrust 3

Empowerment of digital culture and competency in the delivery of government services

# Strategic thrust 4

Strengthening sustainable state digitalisation governance

Source: UPEN Negeri Sembilan

These digitalisation programmes encompass aspects related to infrastructure, services, culture and governance specific to the public sector.

Figure 20: Negeri Sembilan district documents



Malaysia Vision Valley 2.0 (Local plans for Seremban and Port Dickson)



Local plan of Jelebu 2035



Local plan of Kuala Pilah 2035



Local plan of Tampin 2035



Gemas special area plan



Local plan of Jempol 2030



Local plan of Rembau 2025

Source: UPEN Negeri Sembilan

The local plans of Negeri Sembilan outline the future vision, strategy and development ideas of different districts (Figure 20). For example, Malaysia Vision Valley 2.0 has a goal of transforming existing industrial zones into clean-technology hubs leveraging on the capabilities of industry 4.0.

Each district has its own comparative advantage and specialisation in certain industries. Providing insights into each districts' current economic situation, these plans serve as helpful reference documents.

# 2.8 Key challenges

8 gaps are identified based on the current situation analysis. They form the basis and rationale for the Negeri Sembilan Digital Economy Blueprint 2027:

Figure 21: List of identified gaps in Negeri Sembilan's digital economy



# Government

- Lack of advanced digitalisation in government services
- Low integration in government systems and databases
- Lack of digital infrastructure



- Lack of digital talent compatible to industry demand
- Low digitalisation across industries



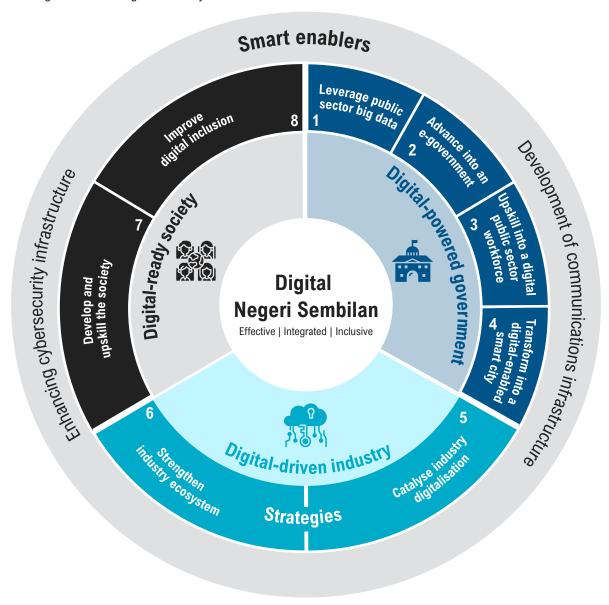
- Limited participation in internet-related income-generating activities
- Low competency in digital skills
- Low affordability and accessibility to digital devices



# Chapter 3 Vision and way forward

# 3.1 Negeri Sembilan Digital Economy Blueprint

Figure 22: Negeri Sembilan digital economy framework



# **Digital-powered** government

 Full transition to egovernment services

# 3 focus areas to achieve by 2027



#### **Digital-driven 不知** industry

- · Annual growth in gross value output of digital services
- Increase wages per capita of the digital workforce



#### Digital-ready society

- Increase internet penetration
- · Improve usage of internet for selected activities

#### **Vision**

Digital Negeri Sembilan: Advancing Negeri Sembilan into a digital-centric economy that is effective, integrated and inclusive.

#### **Objectives**

 To achieve a data-centric and technology focused government with established, accessible and user-friendly e-government services that benefit businesses and the public

- To establish a holistic ecosystem with sufficient digital tools and capabilities to encourage technology adoption within industries
- To achieve a digital-inclusive and digital-savvy society that are actively engaged in highproductivity digital-related activities

#### Focus areas

The Negeri Sembilan Digital Economy Blueprint comprises 3 focus areas: Government, Industry and Society. All focus areas are complementary to one another to achieve the vision and objectives set in the blueprint:



This focus area emphasises on leveraging public sector big data, advancing into an e-government services, upskilling public sector workforce and driving digitalisation into a smart city. 4 strategies are under this focus area.

#### Government



This focus area aims to build digital hubs, develop digital-related catalytic projects and enhance the holistic support system to industries. 2 strategies will be undertaken in this focus area.

# **Industry**



The focus area highlights the need for developing and upskilling digital skills among the people of Negeri Sembilan. It also aims to improve digital inclusion. This focus area consists of 2 strategies.

Society

#### Strategy

The Negeri Sembilan Digital Economy Blueprint focuses on 3 focus areas and 8 key strategies:



- 1 Leverage public sector data
- Advance into an e-government
- 3 Upskill into a digital public sector workforce
- 4 Transform into a digital-enabled smart city



- 5 Catalyse industry digitalisation
- 6 Strengthen industry ecosystem



Society

**7** Develop and upskill the society

8 Improve digital inclusion

#### **Smart enablers**

Smart enablers are technology tools (e.g. infrastructures, cybersecurity, etc.) that have the capacity to drive digital transformation.

As building blocks to Negeri Sembilan's digital economy, the state government will work closely

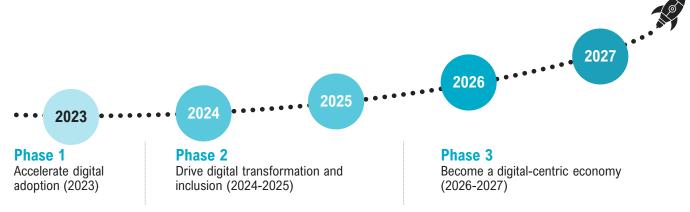
with the federal government in the areas of overall direction and resources.

Specifically, the development of communications (inclusive of the enhancement of connectivity in rural areas) and cyber-security infrastructures are priority areas being focused for the next 5 years.

# 3.2 Roadmap to the digital future of Negeri Sembilan

The implementation of the initiatives are envisioned to be achieved in 3 phases:

Figure 23: Negeri Sembilan Digital Economy Blueprint implementation phases



3.2.1 Targete	d outcomes	
Phase 1 Accelerate digital adoption (2023)	Government	<ul> <li>Digitalisation of manual government services</li> <li>Accessibility to information on digital-related incentives</li> <li>Digital-related catalytic projects that can enhance the usage of digital and encourage innovation</li> </ul>
	Industry	<ul> <li>Conducive support system such as accelerators and incubators that can expedite digitalisation in businesses and digital infrastructure development</li> <li>Upskilling and reskilling of professionals with digital skills in line with industry demand</li> <li>Digital experience centre to encourage the adoption of digitalisation</li> <li>Upgrading of service level and standards of MSMEs to support supply chains of MNCs</li> </ul>
	Society	Increased confidence to use technology across all levels of society
Phase 2 Drive digital transformation and inclusion (2024-2025)	Government	<ul> <li>A digital-powered government with established e-government services, where technologies and data are widely accessible to the public for the benefit of the digital economy</li> <li>Faster and increased rollout of broadband infrastructure projects</li> </ul>
	Industry	Scaling of business for MSMEs via the use of digital tools and capabilities
	Society	Equitable access to opportunities to uplift socioeconomic status
Phase 3 Become a digital-centric economy (2026-2027)	Government	A data-driven government with digital capabilities where processes are highly digitalised and can connect the society, business and government
	Industry	<ul> <li>A hi–tech digital economy that is attractive to foreign investors</li> <li>A high-quality pool of digital talent</li> <li>A highly conducive environment for business to start and operate</li> </ul>

Increased cyber security awareness among businesses and the public

Society

# 3.3 Digital-powered government

To transform Negeri Sembilan into a full-fledged digital economy, the government will need to take the lead in the enculturation of a digital-first mindset within the citizens. Efforts in developing the foundation is important to increase technological adoption within citizens and position Negeri Sembilan to be a digital leader in the near future. To achieve this, 4 strategies will be carried out:

- 1 Leverage public sector big data
- Advance into an e-government
- Upskill into a digital public sector workforce
- Transform into a digital-enabled smart city

**Strategy 1** consists of 1 initiative focusing on the organisation of all existing government data and developing a coherent database that is easily accessible. This will empower the public sector to be able to make better, faster and more informed decisions.

**Strategy 2** aims to accelerate the digitalisation of government services and processes. Doing so will expedite the inculcation of a digital-mindset among the public and increase technological adoption. This strategy consists of 2 initiatives.

**Strategy 3** includes 1 initiative that aims to upskill the digital capabilities of civil servants in order to improve productivity and to better serve the public.

**Strategy 4** has 1 initiative and focused on driving the smart city digitalisation aspect into Negeri Sembilan, with Seremban leading the charge. This includes digitalisation in areas such as utilities, mobility, security, etc.



# Strategy 1 – Leverage public sector big data

1.1

Develop big data platforms and systems

#### **Objective**

- Strengthen the role of data within decision-making in the government
- Improve efficiency, organisation and convenience in accessing data for analysis

# **Description of initiative**

- Mapping of all necessary data, type of data from all departments and agencies
- Development of data architecture, detailing confidentiality, level of accessibility for different stakeholders
- Formulation of data strategy to define processes, technology and regulation required to manage the information assets
- Improve data accessibility and coordination between government departments, agencies and the public while maintaining a level of confidentiality

#### **Outcome**

- Development of a Data Strategy Paper that outlines data mapping, architecture and strategy across different government departments in Negeri Sembilan
- Implementation of plan and development of integrated data system to encompass all government departments and agencies in Negeri Sembilan

#### **Timeline**

 Phase 1
 Phase 2
 Phase 3

 2023
 2024-2025
 2026-2027

# Implementation stakeholder(s)

- UPEN Negeri Sembilan
- UPTM

# Alignment to MyDIGITAL

• Thrust 1 Initiative 8: Establish data-driven policy development and improve the data sharing environment to ensure data quality

# Strategy 2 – Advance into an e-government

2.1

Develop and enhance e-government services

#### **Objective**

- Improve the efficiency, convenience by digitalising government services and processes from end-to-end
- Minimise the number of manual processes and reduce cost in processing and storage of physical documents

# **Description of initiative**

- Digitalisation of manual government services and processes at the state level
- Prioritisation to be given towards current government departments and agencies that do not have any digitalisation implemented, specifically:
  - Department of Social Welfare Negeri Sembilan
  - Negeri Sembilan Public Library Corporation
  - Sharia Prosecution Department

#### **Outcome**

Q

- · Increased number of e-government services
- Optimisation of government resources and automation of tasks
- Increased convenience and digital adoption within the public

#### **Timeline**

 Phase 1
 Phase 2
 Phase 3

 2023
 2024-2025
 2026-2027

# Implementation stakeholder(s)

- UPTM
- MAMPU

# Alignment to MyDIGITAL

 Thrust 1 Initiative 3: Increase adoption of digital technologies and utilise digital tools to improve efficiency and productivity 2.2

Establish a centralised payment system for government services

#### **Objective**

 Increase utilisation and application of e-payment for all government services, ensuring efficient, transparent and timely transactions



#### **Description of initiative**

- Implement a unified payment interface and digital wallet and ensure payment system is reliable, resilient and secure
- Promote the benefits of cashless transactions to gain public trust through a series of awareness campaign

#### **Outcome**

 Establishment of N9Pay, a centralised payment gateway for all state government services inclusive of payment methods such as FPX, debit, credit and e-wallet



#### **Timeline**

Phase 1
2023

Phase 2
2024-2025

Phase 3
2026-2027

# Implementation stakeholder(s)

- Pejabat Kewangan Negeri
- UPTM
- UPEN Negeri Sembilan

# Alignment to MyDIGITAL

 Thrust 1 Initiative 9: All federal and state level agencies to adopt cashless payments as the preferred method for more efficient transactions

# Strategy 3 – Upskill into a digital public sector workforce

3.1

Introduce advanced digital upskilling courses

#### **Objective**

 Upskill Negeri Sembilan public sector workforce with higher value digital skills that are related to 4IR (e.g. data analytics, Al, cyber security, etc.)



#### **Description of initiative**

- Identify gaps in digital capabilities within the Negeri Sembilan public sector through a comprehensive internal study with various departments and agencies
- Leverage existing E-Pembelajaran Sektor Awam platform to introduce and promote courses related to high value digital skills such as data analytics, AI, IoT, blockchain, cloud computing etc.

#### **Outcome**

 A digitally-capable public sector workforce equipped with specific high value digital skills that enables them to grow in parallel with the development of digital capabilities in the public sector

#### **Timeline**

 Phase 1
 Phase 2
 Phase 3

 2023
 2024-2025
 2026-2027

# Implementation stakeholder(s)

- Unit Latihan, Bahagian Pengurusan Sumber Manusia
- INTAN

# Alignment to MyDIGITAL

- Thrust 1 Initiative 6: Develop "Digital Transformers" to groom highly skilled civil servants comprising technical experts and professional ICT-related talent
- Thrust 1 Initiative 7: Develop and upskill civil servants with digital skills, across all grades and schemes

# Strategy 4 – Transform into a digital-enabled smart city

4.1

Develop a Smart City Masterplan

#### **Objective**

- To digitalise Seremban and other cities within Negeri Sembilan into a smart city
- Improve the connectedness, efficiency and security of public services in Negeri Sembilan



# **Description of initiative**

- This initiative encompasses all public services aspects of a smart city which includes utilities, lighting, mobility, security and waste management:
  - Smart electric / water metering: electronic devices that record consumption of electric energy or water consumption
  - Smart lighting: streetlights inclusive of ambient light sensors that respond dynamically to surrounding environment
  - Smart parking: optimised parking space usage and platform providing real time information on parking availabilities
  - Smart public transport: provision of real time schedule of public transport units through tracking systems to enable journey planning
  - Integrated CCTV system and centralised command centre to prevent crime and provide real time responses for public protection
  - Smart waste management: integration of sensors to detect trash bin levels and waste collection route optimisation
- Enhancement of IoT capabilities to support and manage smart city development (e.g., sensors, platforms, AI capabilities)
- Initiative to be aligned and leverage existing smart city framework in RPNS
- · Seremban to take the lead and set an example for digitalising into a smart city

#### **Outcome**

 Development of "Negeri Sembilan Smart City Masterplan" that outlines an implementation plan to transform cities in Negeri Sembilan into a smart city, starting with Seremban

#### **Timeline**

Phase 1 Phase 2 Phase 3 2024-2025 2026-2027

# Implementation stakeholder(s)

- Bahagian Kerajaan Tempatan
- City councils

# Alignment to MyDIGITAL

 Construction sector initiative 4: Introduce an enhanced mechanism to accelerate the roll out of smart cities

# 3.4 Digital-driven industry

Digital adoption is still in its infancy in Negeri Sembilan, with digitalisation in industrial development showing slow progression and being less aggressive compared to states like Kuala Lumpur and Selangor. To ensure a thriving digital economy, it is important that the right initiatives are implemented to create a conducive ecosystem for all businesses to succeed. 2 strategies pave the way forward to a digital-driven industry:

- 5 Catalyse industry digitalisation
- 6 Strengthen industry ecosystem

Strategy 5 refers to catalysing digital projects in key Negeri Sembilan industries that are significant and crucial to the state's economy. The strategy aims to facilitate the adoption of advanced digitalisation, as well as introduce and develop digital hubs that considers Negeri Sembilan's current socioeconomic situation. 2 initiatives will be undertaken under this strategy.

Consisting of another 2 initiatives, strategy 6 aims to develop a sound and robust business ecosystem focused on helping businesses in Negeri Sembilan. The objective is to enable them to thrive and bring their businesses to the next level, by being able to leverage on the readily available digital tools, capabilities and infrastructure.



#### Strategy 5 – Catalyse industry digitalisation

5.1

Advance digitalisation in key industries

#### **Objective**

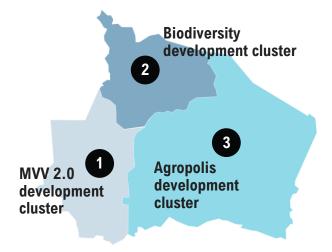
 Ensure key Negeri Sembilan industries are future-proof and able to continuously compete in the local, regional and international markets



#### **Description of initiative**

- Key and promising Negeri Sembilan industries such as services, manufacturing and agriculture will be given prioritisation in the adoption of advanced digitalisation, e.g.:
  - Smart tourism: Advanced analytics to track tourism spent, technology-embedded environments, information sharing platforms, etc.
  - Smart manufacturing: Advanced manufacturing, IoT, Al and machine learning, collaborative robots, etc.
  - Smart farming: Advanced climate-forecasting, crops monitoring, soil investigation, sensing technologies, etc.
- Additionally, focus to be placed on key industries under existing industrial development/policies such as RPNS, MVV 2.0, etc.
- These policies have placed focus on areas such as hi-tech industrial parks, biodiversity hub, agropolis, aerospace valley, semiconductor valley and among others
- The Negeri Sembilan government, through investment agencies, to play an active role in pushing the introduction of digital and smart concepts within these industries
- This involves pushing a digital-first policy in the industries, which includes facilitation at a policy (e.g. promotion and potential development of tax allowances, grants and subsidies) and implementation (target and bring in relevant regional/global players) levels

Figure 24: Key development clusters in Negeri Sembilan



Source: UPEN Negeri Sembilan

5.1

Advance digitalisation in key industries

#### **Outcome**

· An enhanced overall digitalisation of key industries in Negeri Sembilan

#### **Timeline**

Phase 1 Phase 2 Phase 3 2023 2024-2025 2026-2027

#### Implementation stakeholder(s)

- UPEN Negeri Sembilan
- Invest NS
- MIDA
- NS Corp
- Relevant agencies (depending on targeted industries)

#### Alignment to MyDIGITAL

• Thrust 2 Initiative 6: Empowering local champions and stimulating investment through digital industry clusters

**5.2** 

## Establish a digital hub

#### **Objective**

- Create an ecosystem where different types of digital business can all congregate in one development and thrive together
- Increase connectivity between different types of digital businesses



#### **Description of initiative**

- A digital ecosystem under one roof bringing together various types of digital activities such as:
  - Digital-related businesses: Activities that rely/dependent on technology, including but not limited to e-sports arena and practice centres, cloud kitchens, operation centres for e-commerce brands, etc.
  - Infrastructure and support system: Activities that support the operations and growth of
    digital businesses. This covers shared logistics services for e-commerce businesses,
    incubators to test out innovative digital solutions, SOHO<sup>1)</sup> service apartments, pilottesting of smart-homes and smart-living concepts for the apartments, smart-offices for
    start-ups, digital companies and government agencies, data centres, etc.
  - Academy: Learning institutions focusing on digital-related education, including digital academies (e.g. Google Academy), technology learning centre<sup>2),</sup> etc.
  - Creative centre: Space for digital marketers and social media influencers to create digital
    content. Centre to provide facilities such as video-editing software, camera tools,
    photography and videography studios that customers can leverage on to create their
    content
- The development can be done through 2 paths:
  - Path 1: Develop a new hub at one of the technology valleys in Negeri Sembilan or hubs that Negeri Sembilan has planned for
  - Path 2: To develop a digital experience centre by refurbishing Terminal 1 Shopping Centre in Negeri Sembilan
- MIDA, PKNNS, SME Corp to collaborate on either the development of a new digital hub or the repackaging and refurbishment of Terminal 1 Shopping Center to Negeri Sembilan Digital Exchange as well as to promote the development to attract key digital businesses

<sup>1)</sup> Small office, home office; 2) A public space where anyone can have access to digital communities, co-working spaces and digital-related events;

**5.2** 

# Establish a digital hub

#### **Outcome**

- A digital experience centre that can spur the digitalisation movement in Negeri Sembilan
- Replicable model for other locations to be set up as digital centres



#### **Timeline**

 Phase 1
 Phase 2
 Phase 3

 2023
 2024-2025
 2026-2027

#### Implementation stakeholder(s)

- Invest NS
- MIDA
- PKNNS
- SME Corp

#### Alignment to MyDIGITAL

 Thrust 2 Initiative 6: Empowering local champions and stimulating investment through digital industry clusters

#### Strategy 6 – Strengthen industry ecosystem

6.1

Support businesses' digitalisation journey

#### **Overview**

The digitalisation journey of a business can be broken down into 3 stages: (a) awareness, (b) adoption, and (c) advancement & advocacy (Figure 25).

This initiative aims to develop and strengthen businesses' digital capabilities so that they can better compete in their respective supply chains. 3 sub-initiatives exist, and mapped against the business digitalisation journey:

Figure 25: Businesses' digitalisation journey and key sub-initiatives



#### **Awareness**

 Businesses'
 understanding of digital technologies, relevant solutions and use cases to business and benefits



#### **Adoption**

 Implementation of relevant digital tools and solutions in any aspect of the business



## Advancement and advocacy

- Continuous and increasing adoption of new and advanced digital applications and technologies
- Achieve state of being able to influence the digitalisation direction of other businesses

Sub-initiative (i): Increase digital awareness and interest

Sub-initiative (ii):
Accelerate adoption of digital technologies

**Sub-initiative (iii):** Enhance connectivity and nurture relationships

#### **Objective**

- Increase the digital awareness among the digital community, especially MSMEs
- Instil interest towards digitalisation & hi-tech technologies
- Encourage adoption of technology & digitalisation by businesses
- Enhance connectivity between businesses by bringing together all stakeholders (e.g., digital-related entrepreneurs, investors, professionals, and government officials) via networking
- Increase businesses' accessibility to talent, funding and projects among different stakeholders



#### **Sub-initiative (i):** Increase awareness and interests

### 6.1

Support businesses' digitalisation journey

#### **Description of initiative**

- PKNNS, UPEN Negeri Sembilan and SME Corp to work together to share aspirations of Negeri Sembilan digital economy and awareness about digitalisation to the general business community
- On-ground awareness campaigns to be carried out at key MSME locations such as shopping malls or markets to enhance the interest among MSMEs, this includes but not limited to:
  - Awareness and registration booths: E.g. partner with financial institutions to establish booths at the locations to assist MSMEs to sign up for e-payment systems
  - Roadshows: E.g. Sharing at key MSME locations information about state-wide digital ambitions, available incentives, etc.
- Consistent and periodic updates to also be made on all state websites regarding the latest available federal and state digital-related incentives

#### **Target stakeholders**



**MSMEs** 



Large businesses



**MNCs** 

#### Sub-initiative (ii) Accelerate adoption of digital technologies

#### **Description of initiative**

- PKNNS, UPEN Negeri Sembilan and SME Corp to work together to ensure the adoption of digital technologies by businesses are done on a periodical basis
- Collaborate with training providers to introduce free digital training programmes for businesses, focusing on updates of latest technologies and innovative solutions that can be applied in operations
- Training programmes to be done through partnership with digital tools solution providers or industry experts
- Furthermore, MIDA, PKNNS and SME Corp to work together with venture capital funds or private-sector accelerators to design accelerator programmes for technology start-ups or digital companies with focus areas that prioritises Negeri Sembilan's major sectors i.e., manufacturing, services, etc., logistics. utilities, etc.

#### **Target stakeholders**



**MSMEs** 



Large businesses



MNCs

6.1

Support businesses' digitalisation journey

## **Sub-initiative (iii)** Enhance connectivity and nurture relationships

#### **Description of initiative**

- PKNNS, SME Corp and UPEN Negeri Sembilan to take the lead in:
  - Bringing together businesses of all kinds in Negeri Sembilan and connect them to bigger local and international companies to encourage networking and spur collaboration
  - Event to include activities such as industry-sharing talks, seminars on digital-related topics, as well as digital-related pitches for collaboration

#### **Target stakeholders**



**MSMEs** 



Large businesses



MNCs

#### **Outcome**

- Strong awareness and interest in digitalisation by businesses in Negeri Sembilan, as well as continuous adoption of new technologies
- Strong knowledge and inclination towards adopting new technologies
- Extensive network where people can connect to share experiences and talk about potential ideas

#### **Timeline**

**Phase 1** 2023

Phase 2 2024-2025

Phase 3 2026-2027

## 6.1

#### Support businesses' digitalisation journey

#### Implementation stakeholder(s)

- Initiative (i):
  - PKNNS
  - UPEN Negeri Sembilan
  - SME Corp
- Initiative (ii):
  - PKNNS
  - UPEN Negeri Sembilan
  - SME Corp
  - MIDA
- Initiative (iii):
  - PKNNS
  - UPEN Negeri Sembilan
  - SME Corp

#### Alignment to MyDIGITAL

• Thrust 2 Initiative 1: Provide a tailored "Digital Compass" for businesses to foster digital usage

6.2

Develop and upskill digital talents

#### **Objective**

- Address shortage of digital-related workforce in Negeri Sembilan, especially in the manufacturing sector)
- Meet the demand and standards of labour skills required by MNCs that have invested into Negeri Sembilan



#### **Description of initiative**

- Establish mechanism to continuously and periodically identify the extent of digital skilled labour shortage, the type of jobs demanded, key skills required by industry, etc. Reports to be published periodically and shared with key stakeholders (industry players and training providers)
- To be done through periodic interviews and engagements with industry players to understand their current situation with regards to skilled labour
- To also bring together educational institutions and training providers to better create/design digital training programmes suited for the industries
- Drive efforts in encouraging professionals to reskill and upskill with relevant digital skills (e.g., advanced manufacturing, IoT, automation, industry 4.0, etc.) via consistent awareness campaign, sharing sessions and promotion

#### **Outcome**

 A highly-skilled workforce equipped with the latest digital skillsets that not only meet industry demands and standards, but also drive greater value to the industry through better innovation

#### **Timeline**

 Phase 1
 Phase 2
 Phase 3

 2023
 2024-2025
 2026-2027

#### Implementation stakeholder(s)

UPEN Negeri Sembilan

#### Alignment to MyDIGITAL

 Thrust 4 Initiative 11: Introduce professional upskilling programmes related to the digital economy

#### 3.5 Digital-ready society

The society component ensures all citizens in the state will be equipped with the necessary skills and knowledge to participate and contribute to the digital economy.

Under the Negeri Sembilan Digital Economy Blueprint, the state will embark on 2 broad strategies to achieve the above-mentioned strategy:



**Develop and upskill the society** 



#### Improve digital inclusion

Strategy 7 will target key groups of citizens that are deemed crucial to the growth of the economy, and most in need of support. In this strategy, youth, rural population and educators will be targeted, with digital-related classes and subsidies offered as part of the approach to improve their knowledge and skills. A total of 3 initiatives will be undertaken under this strategy.

Consists of 2 initiatives, strategy 8 aims to ease overall access of Negeri Sembilan citizens to digital tools such as computers or laptops and internet.



#### Strategy 7 – Develop and upskill the society

7.1
Introduce state-wide digital-related classes

#### **Objective**

 Equip the younger generation and rural population with the knowledge and skills in utilising digital technology in a competent and responsible manner



#### **Description of initiative**

- Free and periodic education programmes organised by the state in collaboration with private sector players / NGOs (though classes already exist, it is typically not done periodically)
- Areas of focus include digital economy 101 and other-related classes (e.g., cybersecurity, cyberbullying, digital responsibility, etc.)
  - Younger generation: Led by individual schools, with the state government as facilitator –
    to facilitate connection between various related public sector players & schools
  - Rural population: Led by state government and to utilise existing public facilities (e.g. public libraries, community halls, etc.)
- Initiative to be complemented with joint awareness programme between state government/school and education provider to increase participation

#### **Outcome**

Increased in economic activities that are digital-related



#### **Timeline**

Phase 1 Phase 2 Phase 3 2023 2024-2025

#### Implementation stakeholder(s)

• UPEN Negeri Sembilan

#### Alignment to MyDIGITAL

- Thrust 4 Initiative 3: Adopt digital technology through collaboration with the private sector to enhance overall learning environment
- Thrust 5 Initiative 1: Introduce My Ikrar programme to encourage volunteerism in conducting digital training

7.2
Support educators in the development of digital skills

#### **Objective**

 Create a pool of digitally-skilled educators that are able to steer the education sector forward



#### **Description of initiative**

- State subsidy for selected educators (in primary, secondary and tertiary) who are willing take up / upskill themselves in digital skills
- Digital courses include but not limited to coding, digital marketing, data analytics, etc.

#### **Outcome**

• Educators with a holistic set of digital skills that are able to enhance education delivery



#### **Timeline**

 Phase 1
 Phase 2
 Phase 3

 2023
 2024-2025
 2026-2027

#### Implementation stakeholder(s)

Jabatan Pendidikan Negeri Sembilan

#### Alignment to MyDIGITAL

• Thrust 4 Initiative 5: Introduce "My Digital Teacher" programme

7.3
Increase digital awareness through emphasis on literacy and

knowledge

#### **Objective**

 Continuously showcase and raise awareness of latest digital and technology to Negeri Sembilan citizens, cultivating a digitallyaware mindset

#### **Description of initiative**

- State-level digital fair to raise awareness and to promote a digitally literate community
- Fair to be organised every 2-3 years
- Fair involves the partnership with various private sector players to offer activities that are both experiential and experimental, e.g.:
  - E-sports competitions
  - Conferences featuring experts in the digital field
  - Digital concept pitches

#### **Outcome**

 Enhance citizens' awareness of various digital products and services, and the knowledge to generate economic activities through digital means

#### **Timeline**

 Phase 1
 Phase 2
 Phase 3

 2023
 2024-2025
 2026-2027

#### Implementation stakeholder(s)

UPEN Negeri Sembilan

#### Alignment to MyDIGITAL

-



#### Strategy 8 – Improve digital inclusion

8.1

Improve selected groups' access to broadband and digital devices

#### **Objective**

 Enhance overall digital inclusion through easing citizens' access to digital tools

#### **Description of initiative**

- Private sector players encouraged to donate used computers / laptops
- Collaboration with ICT partners for the refurbishment and repair of the collected laptops / computers and subsequently provided to the targeted groups
- Refurbished laptops/computers will be made available in various existing community-related centres / facilities (e.g. Pusat Ekonomi Digital Keluarga Malaysia, public libraries) for public to rent / borrow for a period of time

#### **Outcome**

Improved overall computer penetration rate



#### **Timeline**

 Phase 1
 Phase 2
 Phase 3

 2023
 2024-2025
 2026-2027

#### Implementation stakeholder(s)

UPEN Negeri Sembilan

#### Alignment to MyDIGITAL

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8.2
Introduce internet subsidy

scheme

#### **Objective**

 Widen access of citizens, specifically those in the B40 category to internet access



#### **Description of initiative**

- Partnership with internet service providers to develop new and discounted internet plans (subsidised by the government)
- Plans to be offered by the internet providers to users in the B40 category who are both citizens and residing in Negeri Sembilan
- Users' discounted internet plans will only be made available for a set period of time (e.g. 1 or 2 years). Continuation of the plan will be dependent on evaluation of its overall impact and effectiveness (in raising the internet penetration rate)

#### **Outcome**

· Increased internet penetration rate in Negeri Sembilan



#### **Timeline**

 Phase 1
 Phase 2
 Phase 3

 2023
 2024-2025
 2026-2027

#### Implementation stakeholder(s)

- UPEN Negeri Sembilan
- · Pejabat Kewangan Negeri
- · Internet providers

#### **Alignment to MyDIGITAL**

\_

#### **Smart Enablers**

1

# Development of communications infrastructure

#### **Objective**

 Provide an enabling environment for the federal government in the development of digital infrastructures



#### **Description of initiative**

- Close coordination and cooperation with the federal government in the identification and development of the necessary digital infrastructures
- Involves periodic engagement with relevant ministries and agencies (e.g. MCMC for the installation of communications infrastructures under JENDELA, SCMO for the development of other related digital infrastructure under MyDIGITAL, etc.)

2

# Enhancing cybersecurity infrastructure

#### **Outcome**

- Increase coverage network rate
- · Review of cost and fees



#### **Timeline**

 Phase 1
 Phase 2
 Phase 3

 2023
 2024-2025
 2026-2027

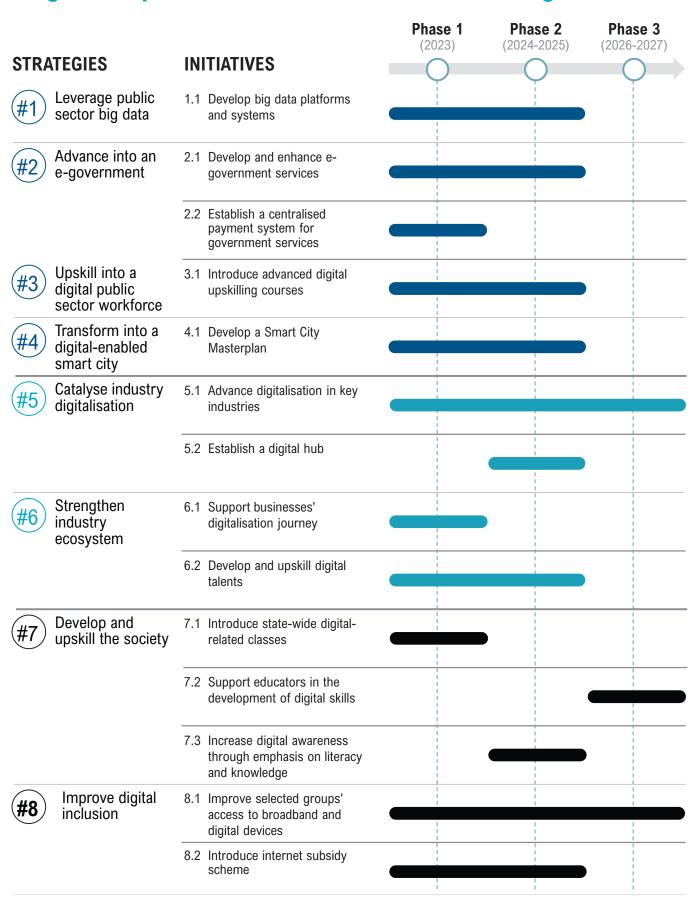
#### Implementation stakeholder(s)

UPEN Negeri Sembilan

#### **Alignment to MyDIGITAL**

-

#### Targeted implementation timeframe for all strategies

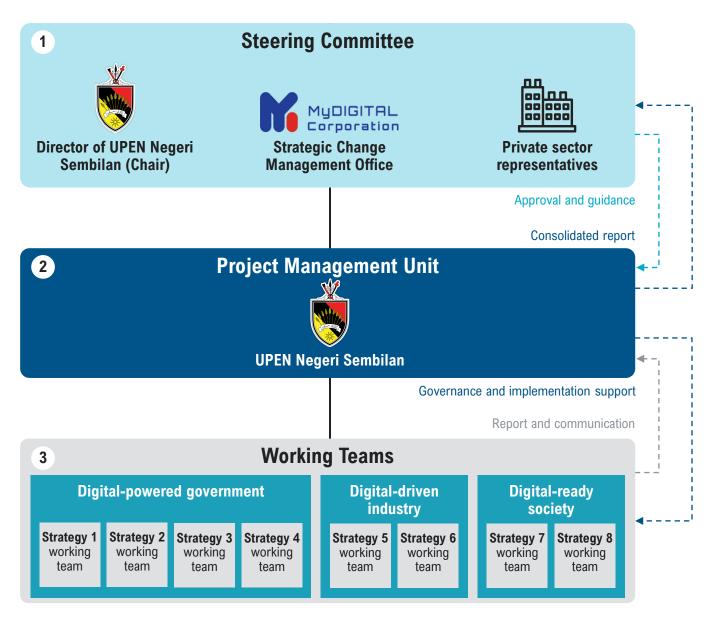




# Chapter 4 Governance structure

#### 4.1 Negeri Sembilan Digital Economy Blueprint Governance

Figure 26: Overview of governance structure



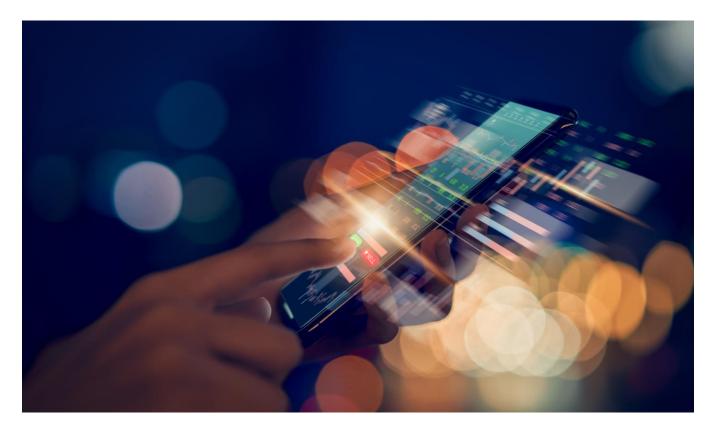
The implementation of Negeri Sembilan Digital Economy Blueprint will be led by a Project Management Unit (PMU) and supervised by a Steering Committee. PMU will be supported by several working teams that are responsible for on-ground implementation and performance reporting. Each strategy working team is grouped together based on their focus area: government,

industry or society. PMU, together with respective working teams, will prepare an action plan outlining the programmes, activities, targets, and timeline required to deliver all initiatives under each focus area.



# Chapter 5 Conclusion

#### Creating a digital-centric Negeri Sembilan by 2027



The blueprint represents Negeri Sembilan's direction and strategy to move towards a digital-centric economy by 2027. The holistic plan will address 8 key gaps:

- Lack of advanced digitalisation in government services
- Low integration in government systems and databases
- 3. Lack of digital infrastructure
- Lack of digital talent compatible to industry demand
- 5. Low digitalisation across industries
- 6. Limited participation in internet-related income-generating activities
- 7. Low competency in digital skills
- 8. Low affordability and accessibility to digital devices

The blueprint encompasses 3 broad focus areas, focusing on creating a (a) digital-powered government, (b) digital-driven industry and a (c) digital-ready society. A total of 8 strategies and 14 initiatives will be carried out in the next 5 years to improve the digital state in Negeri Sembilan, and more importantly, build a strong digital foundation.

The implementation of the blueprint will be complemented with a robust governance structure. Comprehensive oversight and monitoring will be done to ensure the realisation of the blueprint's goals.

As Negeri Sembilan continues its path towards greater growth and development, the aspect of digital will become increasingly crucial. It is therefore important for the blueprint to be carried out with utmost urgency and priority.



# Glossary

#### Glosari

4IR	Fourth industrial revolution
Al	Artificial Intelligence
B40	Bottom 40
CCTV	Closed-circuit television
COVID-19	Coronavirus disease 2019
EPU	Economic Planning Unit
GDP	Gross domestic product
ICT	Information and communications technology
INTAN	Institut Tadbiran Awam Negara
IoT	Internet of things
JENDELA	Jalinan Digital Negara
KLIA	Kuala Lumpur International Airport
MAMPU	Malaysian Administrative Modernisation and Management Planning Unit
МСМС	Malaysian Communications and Multimedia Commission
MDEB/MyDIGITAL	Malaysia Digital Economy Blueprint
MIDA	Malaysia Investment Development Authority
MNCs	Multinational corporations
MSME	Micro, Small and Medium Enterprises
MVV 2.0	Malaysia Vision Valley 2.0
NFCP	National Fiberisation and Connectivity Plan
NGO	Non-governmental organisations
NS	Negeri Sembilan
OECD	Organisation for Economic Co-operation and Development
PKNNS	Perbadanan Kemajuan Negeri, Negeri Sembilan
PMU	Project Management Unit
RMK-12	Rancangan Malaysia Kedua Belas
RPNS	Rancangan Pembangunan Negeri Sembilan
SCMO	Strategic change management office
SME Corp	SME Corporation
SOHO	Small office, home office
SPV	Shared Prosperity Vision
UPEN Negeri Sembilan	Unit Perancang Ekonomi Negeri, Negeri Sembilan
UPTM	Unit Pengurusan Teknologi Maklumat



#### **Unit Perancang Ekonomi Negeri**

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