

# DIGITAL TRANSFORMATION MASTERPLAN 1.0

(2021-2023)



PENANG  
2030



CONNECTED  
CREATIVE  
COMPETITIVE

## Small, Smart, Nimble

All too familiar. A state that has it all – let it be hills or the sea, nature or city, technology or heritage – all within easy reach. Small, smart and nimble – that is the Penang brand. Our diversity, our agility, our ingenuity and our grit as a people shows up distinctly.

More than just identity, the economy has grown in strength from its early foray into manufacturing Free Trade Zones. However, the world has changed and evolved. The devastating pandemic is speeding up this change. Where do we stand in the new normal? Where do we go from here?

2



### Fusion of Digital and Heritage

In a world fraught with change and uncertainty, we need to differentiate and adapt to be relevant. We have to **build on our heritage** and cross over into digital with the least friction from change.

The digital journey is disruptive, daunting and fearful for some who are sentimental about losing our old-world charm. Will we lose our spirit of camaraderie? Will we leave people behind? Will we grow our talent? The tide of change is inevitable, and we will bring people along on this journey of change. We have to build on our legacy, embrace the new and win the future.

**Digitalisation is an experience, a feeling. People must feel the benefit** of using technology to improve and enhance how they learn, work, live and play. We have to onboard people to adopt technology and open the doors to boundless opportunities.



## Point of Inflection

We have a vision – we aim to imagine **a bold new Penang2030**. We have the will and grit to stake out and capture opportunities in the digital future.

Our journey, from the Pearl of the Orient to the Silicon Valley of the East, is a testimony of our talent, our unity, and our diversity. A State with little natural resources, but rich in resourceful people, daring to start ventures and daring to venture abroad.

Looking forward, to stay relevant in the future, we need to stand out even more. We need to move fast and steady by staying ahead of the curve.

The future is digital. In the digital world, it is not the biggest or strongest that wins, but the small, smart and nimble that changes and wins the game. We are not limited by size or location. Going digital is the way to extend our boundaries to plug into the global value chain.

## The Digital World is an Oyster

The pandemic has changed us deeply. Going digital is timely. Working anywhere, anytime, anyhow is the new norm. Remote working, learning, and playing through technology is no longer a barrier. The world has become more borderless, smaller and flatter. In a field levelled by the Internet, only the motivated and disciplined will thrive.

Going digital is no longer an option. Safe is risky, status quo is history. This plan outlines the first steps we have to take, to embrace change and stay competitive. Our local enterprises must go digital and go international. Our people must upskill and reskill to adapt to a world of rising automation and robotics. Opportunities are plentiful and await those daring to take the leap into the digital future.

# FOREWORD



“The *Digital Transformation Masterplan* was strategically designed to be cross-domain over all sectors of the economy and all structures in the State Government. The impetus is **to have every person and entity embrace a digital transformation**, in the same way Penang2030<sup>1</sup> is meant for Penang as a whole. It is befitting that this plan is organised in four strategic pillars – **Economy, Infrastructure, Governance and Community** – reflecting the themes in Penang2030 and working towards shared goals. ”

YAB. Tuan Chow Kon Yeow  
*Penang Chief Minister  
Chairman, Digital Penang*

“While these efforts are ongoing, the *Digital Transformation Masterplan* adds value to Penang’s connectivity goals in a number of ways. Firstly on **alternative business models to ensure sustainability of investments** in Penang’s telecommunication industry. Secondly, to **build commercial demand for 5G technologies**, and finally, on digitalising processes for the **deployment of infrastructure**. ”

YB. Zairil Khir Johari  
*Penang State Executive Councillor,  
Infrastructure and Transport  
Vice Chairman, Digital Penang*





A defining approach taken in the strategy of this document is the **focus on digital journeys**. This is *transformational* because it asks what a *Smart State government* should look like given the needs of Penangites, instead of defining the needs of Penangites from pre-existing structures. The former has the public as a reference point while the latter has the government as a reference point. However, both share the idea of ICT interventions in urban contexts to **achieve a higher quality of life and better services**.

YB. Jagdeep Singh Deo  
A/L Karpal Singh  
*Executive Councillor for Local Government, Housing, Town, and Country Planning*



The key to delivering services that meet current expectations is to **utilise digital technologies in a more pervasive way**. While technology may be widely and readily available, any **experienced transformation advocate will attest that the make or break factor** lies in the reform of process, organisational structure, and culture. This 3-year plan, therefore, rightfully sets out to **establish the foundations for the use of digital technologies**, by first addressing basic organisational change across the Penang State Government.

YB. Dato' Abdul Razak bin Jaafar  
*Secretary of State of Penang*

The *Digital Transformation Masterplan* seeks to complete what has been done so far. While current programs are aimed at the supply of talent, this plan, over the next 3 years will **focus on the demand of talent**. This will be done through the development of robust software and technology-based ecosystem that will **provide highly skilled job opportunities**. To accelerate this development, new adjacent sectors around Penang's current talent pool in the engineering field will be prioritised, alongside **attracting digital foreign direct investments** which will function as anchors to this new ecosystem.

YB. Prof. Dr. Ramasamy A/L Palanisamy  
*Deputy Chief Minister II, Executive Councillor for Human Resources, Education, Science and Technology*



Some highlights that businesses can expect in this 3-year transformation plan is the **focus on developing local enterprises to become MNCs** in their own right by "*Go Digital, Go International*". Additionally, the Open Innovation Fund and initiatives for technology startups will establish Penang's digital ecosystem that is founded on innovation and cutting-edge technology. If Malaysia is to be the "Heart of Digital Asean" as announced by the Malaysia Digital Economy Corporation (MDEC), **Penang will be a key ventricle**, pumping out start-ups to expand throughout the region.

YB. Dato' Abdul Halim bin Hussain  
*Executive Councillor for Trade and Industry, Entrepreneurial Development*



# PENANG DIGITAL TRANSFORMATION MASTERPLAN

**Penang2030 has 2 complementary facets of digital and physical strategic initiatives.**

Digital is an enabler that must go in tandem with the development of the physical environment and vice versa. **Digital Penang is established to enable and orchestrate our digital strategy to capture opportunities in the new economy and upgrade liveability.**

YAB. Tuan Chow Kon Yeow

Physical and Digital transformation are two sides of the same coin that must converge and be congruent. On the physical side, the environment must sustain and upgrade liveability, while the digital side is to create a vibrant future economy for rewarding livelihoods. **People want attractive jobs and a conducive environment to raise a family.** Technology is only an enabler towards creating a Smart State, where the outcomes are focused on purposeful work and a meaningful life.

**Penang Digital Transformation Masterplan (DTMP) is a meta plan that encompasses several sub-plans that outlines Digitalisation ambitions and goals towards a connected, creative and competitive society.**

MyDigital

PENANG2030

PENANG DIGITAL TRANSFORMATION MASTERPLAN (DTMP)

To achieve our aspirations, our masterplan is aligned to Federal strategies as outlined in **MyDigital**<sup>2</sup>, **JENDELA**<sup>3</sup> and **MDEC**<sup>4</sup> initiatives. At the State level, this masterplan will **align all sub-plans** such as Penang Connectivity Masterplan, SmartState Masterplan, Penang Green Agenda, Penang Tourism Masterplan to ensure the technology elements are congruent and consistent to deliver great experience and outcomes. This plan only outlines the strategic initiatives for **the first 3 years to set the foundation for transformation towards Penang2030.**

**T1**  
Drive digital transformation in the public sector

**T2**  
Boost economic competitiveness through digitalisation

**T6**  
Build trusted, secure and ethical digital environment

**T4**  
Build agile and competent digital talent

**T5**  
Create an inclusive digital society

**T3**  
Build enabling digital infrastructure

**Increase liveability to enhance quality of life**



**Upgrade economy to raise household incomes**



**Empower people to strengthen civic participation**



**Invest in built environment to improve resilience**



7

### Digital Governance

- DG-1** End-to-end rakyat centric process digitisation
- DG-2** Review governance structure and process for IT projects
- DG-3** Introduce standards and guidelines on architecture and data management
- DG-4** Develop Smart City Reference Model
- DG-5** Review and update policy and process of ICT procurement by Penang State Government
- DG-6** Upskilling and knowledge management

### Digital Economy

- DE-1** Go Digital, Go International - promote local enterprises to digitalise and internationalise
- DE-2** Promote digital innovation, research commercialisation
- DE-3** Align with MDEC initiatives and scale up micro and small enterprises
- DE-4** Nurture digital start-ups ecosystem to ideate for global markets with support of anchors, accelerators
- DE-5** Develop talent pipeline in STEM<sup>5</sup>, E&E engineering and deep software technology
- DE-6** Accelerate Digitalisation of tourism sector according to Penang Tourism Masterplan<sup>6</sup>

### Digital Community

- DC-1** Digital literacy classes and campaigns to encourage adoption of technology
- DC-2** Establish the Digital Outreach Network for volunteers and interest-specific communities
- DC-3** Develop online community engagement platforms
- DC-4** Foster early-stage STEM education and training

### Digital Infrastructure

- DI-1** Implement Penang Connectivity Masterplan (PCMP)
- DI-2** Better quality of service
- DI-3** Implement integrated telco application deployment system
- DI-4** Digital Twin of geospatial data
- DI-5** Allocate funds for priority areas to invest in infrastructure ahead of demand ramp-up

# DIGITAL JOURNEY OF STAKEHOLDERS



## VISITOR

Dream

Plan

Book

Experience

Share

Tourists both domestic and foreign, various touchpoints to interact digitally, from the time they dream of Penang as a destination up to when they arrive to experience and then share on social media.



## RESIDENT

Learn

Spend

Work

Play

Share

Any person, young and old, citizen or not, residing here, experiencing the physical environment to live, work and play is an opportunity to engage and deliver digital services to.



## ADMINISTRATOR

Listen

Formulate

Deliver

Support

Respond

Staff in government must be able to have accurate data and efficient process to interact and deliver public services as well as engage with their Federal counterparts.



## ENTREPRENEUR

Ideate

Validate

Survive

Grow

Exit

A start-up or SME that begins their journey from an idea to validation in the market and eventually growing into scale through a buyout or stock market IPO will need support on incentives and incubation.



## INVESTOR

Evaluate

Approval

Transition

Operate

Expand

Any investor with capital or intellectual property wanting to set up must experience a seamless easy-to-do business process with minimal red-tape and have strong confidence that it was the right investment choice.



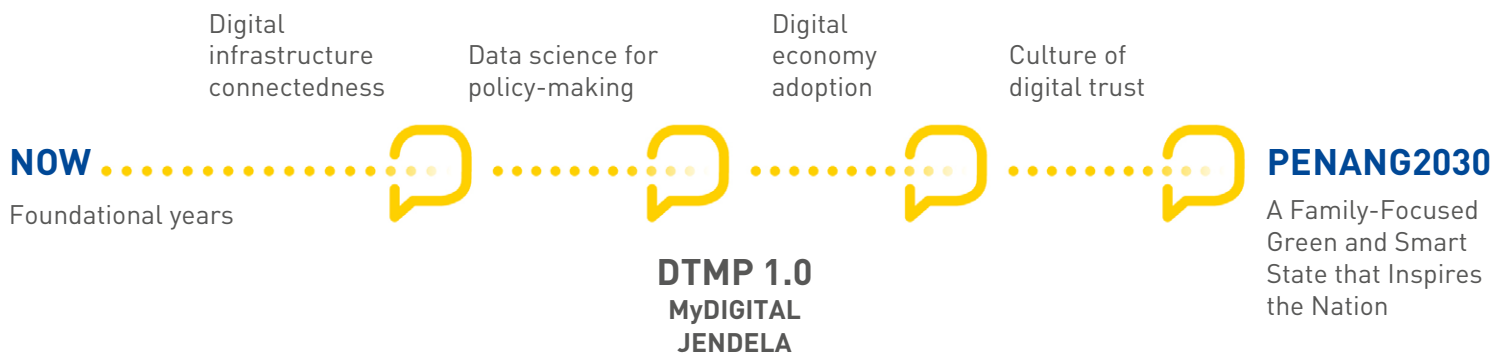
Ultimately, Digitalisation must be **viewed from the lens of each of the stakeholder**. At each touchpoint how does technology enable and enhance the journey and make the experience better. How do we use technology to build digital relationships with the various stakeholders by **delivering information and services at the right moment and at the right touchpoint to create a great experience**.

The plan will examine each pillar in 3 parts of where are we now, where do we want to be and how do we get there. What is driving the change? How to transform? What are the benefits or What does great look like? What is driving the change? In the current state, what are the key drivers, the burning platform to compel change. What are the consequences for staying status-quo? What is affecting our competitiveness? Relatively speaking, Penang is ahead and already has some of the elements to embark on this journey, but we cannot afford to be complacent lest we fall behind. We have to be pragmatic and not fall for the hype. We have to begin with the end in mind.

We will focus on the key levers of change. **Focus on the critical few that will move the needle**. What are the key actions that will set the foundation and create sustainable momentum and impactful results. What do I need to learn to adapt?

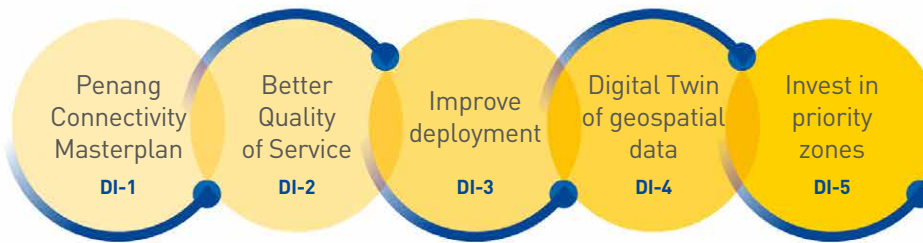


In the future state, what are the **outcomes that will benefit the stakeholders**. What will be different, what does great look like? How does the adoption of technology benefit the stakeholders?



# INFRASTRUCTURE

## 2 HOW TO GET THERE?



### DTMP 1.0

Digital infrastructure connectedness

### MyDIGITAL T3

Build enabling digital infrastructure

### JENDELA

Build the foundations by optimising existing digital infrastructure

## 1 WHERE ARE WE?

### Drivers of change

- Patchy coverage and access
- Accountability for Quality of Service
- Little visibility for delays and bottlenecks
- Outdated geospatial mapping
- Misaligned Objectives & Funding

## 3 WHERE DO WE WANT TO BE?

### Penang2030

#### Resilient built environment

- Fiberisation as in JENDELA
- Reliable Quality of Service
- Improved deployment
- Digital twin
- Infra funds for priority economic zones



## Strategic Theme

- To go digital, connectivity is paramount. We need good internet and telecommunications infrastructure to enable quality of service. With the new normal of work, learn and play from home, demand for access and speed is now even more pressing. **The focus is to align the implementation of the Penang Connectivity Masterplan with the plan JENDELA** by Malaysian Communications and Multimedia Commission (MCMC) to **maximise existing 4G infrastructure, expand fibre network and rollout 5G.**
- By creating a digital twin of the State, we will **digitalise geospatial data of all layers of utilities and infrastructure network** overlay onto the built environment to improve decision making and streamline the deployment process.

# GOVERNANCE

## 2 HOW TO GET THERE?

End-to-end  
Process  
Digitalisation

DG-1

Procurement  
enhance local  
ICT ecosystem

DG-2

Streamline  
IT  
governance

DG-3

API and  
Data First  
Architecture

DG-4

Smart City  
Reference  
Model

DG-5

Upskilling  
and Knowledge  
Management

DG-6

### DTMP 1.0

Data science for policy-making

### MyDIGITAL T1

Drive digital transformation in the public sector (Pelan Strategik Pendigitalan Sektor Awam)

### MyDIGITAL T6

Build trusted, secure and ethical digital environment (Malaysia Cyber Security Strategy)

## 1 WHERE ARE WE?

### Drivers of change

- Segmented governance of ICT projects
- Impulsive and non-strategic development of systems
- Decentralised budgeting for IT systems
- Vague technology standards
- Disjointed service architecture
- Shortage of appropriate skills in service teams

## 3 WHERE DO WE WANT TO BE?

### Penang2030

#### Increased liveability and quality of life

- Citizen centric digital services
- Data-driven policy-making
- Consistent and updated systems architecture
- Centre of Excellence for public sector digital transformation



## Strategic Theme

- We will shift towards a rakyat-centric approach in delivering government services. We plan to **digitise core rakyat-facing processes end-to-end with a data and API first architecture** to enable integration across multiple agencies to drive adoption of digital services.
- As the State grows, new cities will sprout. To prepare for this, we will **develop a Smart City Reference Model of best-in-class practice and tools** to prepare for the development of future cities within the State.

# COMMUNITY

## 2 HOW TO GET THERE?

Digital literacy classes and campaigns to encourage adoption of technology

DC-1

Establish the Digital Outreach Network for volunteers and interest-specific communities

DC-2

Develop online community engagement platforms

DC-3

Foster early-stage STEM education and training

DC-4

### DTMP 1.0

Culture of digital trust

### MyDIGITAL T5

Create an inclusive digital society

## 1 WHERE ARE WE?

### Drivers of change

- Low adoption of technology
- Untapped expertise in the community
- Passive public involvement in policy-making
- Low dynamism among interest-specific communities

## 3 WHERE DO WE WANT TO BE?

### Penang2030

#### Empowered citizens with strong civic participation

- Digital adoption and trust
- Mobilisation of communities through volunteerism
- Discourse on policies digitally
- Community-led skills development





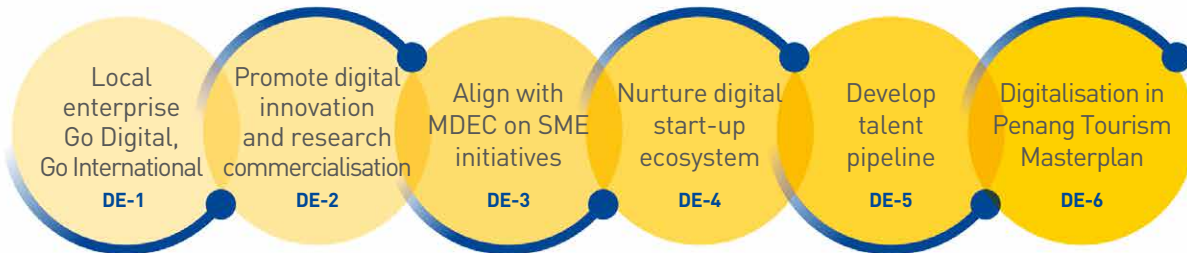
## Strategic Theme

15

- Technology is the language of the future. We will **raise digital literacy and raise technology adoption** through mentoring and coaching. We do not want people to be left out. Through lifelong learning, people will **learn new technology that will open doors to possibilities**. Learning to master personal mobility devices and not be vulnerable to misinformation.
- We will **use technology as another channel to engage the public to crowd source ideas, feedback and opinions** in the policy-making process. Digital platforms will be used to **engage the community to foster dialogue and mobilise digital volunteerism**.

# ECONOMY

## 2 HOW TO GET THERE?



**DTMP 1.0**  
Digital economy adoption

**MyDIGITAL T2**  
Boost economic competitiveness through digitalisation

**MyDIGITAL T4**  
Build agile and competent digital talent

## 1 WHERE ARE WE?

### Drivers of change

- Domestic Direct Investment lag behind FDI; Venture Capital scene docile
- Technology start-ups lack momentum, technical depth, economic moat; no ecosystem anchor
- Strong engineering entrepreneurship, however ageing owners, technology laggards
- Underdeveloped ICT sector

## 3 WHERE DO WE WANT TO BE?

### Penang2030

#### Economy upgraded with raised household incomes

- Increased productivity and competitiveness of local enterprises
- Robust digital start-up ecosystem
- Higher quality jobs
- Adjacent new economic growth sector







### Strategic Theme



- **Building on our core strengths in high-tech manufacturing**, the attraction and inbound of **foreign direct investments will continue to be a mainstay strategy**. However, we will focus on building the local enterprise ecosystem to go digital and go international. Through automation and Digitalisation, our local companies are more competitive to go outbound, especially manufacturing in the advent of Industrial Revolution IR4.0.

- Penang can boast a long history of successful entrepreneurship. Through adversity, many family businesses were started in the past. Today, that **creative tradition continues and many enterprising start-ups in technology and engineering are thriving**. We will invest efforts to strengthen the start-up ecosystem. We will **attract digital anchors in deep technology and develop an innovative problem-solving culture**.
- From our strengths in electrical and electronics (E&E) manufacturing, and having successfully extended into medicaltech, automotive electronics, avionics, we will **strategise on and develop the next adjacent sector** to build on this engineering competence.
- To complement our strengths in hardware, we will **intensify the software engineering and ICT sector**. We will seek niches in digital services and software projects to build scale and core competence. Our **emphasis in STEM education**, supported by strong academic institutions will continue **to develop the talent pipeline**.
- Although severely battered by the pandemic, we have **to raise the stakes and game in our other economic pillar of tourism and the creative economy**. We have to be ready and be different when this sector revives and **invest into digitalisation to create a new experience**.

18

## FROM THE LENS OF...

Here we **illustrate from the lens of key stakeholders**, what the digital journey means for each of them. What are the benefits and how will each be positively impacted? How do I get involved and contribute? Who do I engage with?

**Possible is everything, and change must be bold and out of the comfort zone.** The programs and initiatives will only lay the foundation and will be fine-tuned as we mature in Digitalisation. Details of each program will be launched and announced on our website in due course. We seek public-private partnerships, to ensure parties have mutual stakes in the outcomes. Our philosophy towards intervention and incentives is on an outcome basis. In sum, the implementation will be within the **3M framework of Methods, Measurements and Maintenance** to ensure results are effective, tangible and sustainable.

# ARE YOU AN INVESTOR?

## Complementing Manufacturing with Digital

Building on our strengths and expertise in manufacturing and software engineering, our push is to attract Digital technology anchors especially in software use cases using deep technology such as AI, Robotics, Blockchain, data analytics etc. This is not a strategy of **either** attracting FDI in manufacturing **or** in digital. **This is a strategy of attracting FDI in manufacturing and digital.**

Depending on the nature of investments, manufacturing FDI will still be capital expenditures on land and labour as handled by various agencies InvestPenang, NCIA and MIDA. Typically, **FDI for digital are more services and software**, driven more by talent availability and operating expenditure. Hence, our programs will be **more oriented towards skills-based projects**, which then scales up into a stronger commitment to invest in near-shore centres, and eventually **use Penang as the launchpad into the region.**

19

### INVESTOR'S DIGITAL JOURNEY



#### MANUFACTURING FDI CAPEX

EVALUATE >> APPROVAL >> TRANSITION >> OPERATE >> EXPAND



#### DIGITAL SERVICES FDI OPEX

LEAN START >> SCALE UP >> LAUNCH PAD

# ARE YOU A START-UP ENTREPRENEUR?

Our hypothesis is that good entrepreneurial ideas come from solving real-world problems where there is a market need. Our strategy is not about giving out grants but about **supporting the entrepreneur in mitigating risks**. Good ideas and projects will sell themselves and will attract capital into the venture. We also welcome partners that will build and fill the gaps in the ecosystem from **seed investors, venture capitalists, to universities and large enterprises**. Our key focus is on building a thriving ecosystem that supports ventures to have access to markets and access to experts. This is a call to action for engineers and software technologists who are inspired to start-up a venture.

20





## Catalyst Programs

These programs and initiatives are intended **to develop an ecosystem beyond** just grants but a network of key players that can **contribute to the access to markets and talents**. Below are some of the programs that have been launched while others are still work in progress.



### EDUCATION, NETWORKING, SUPPORT

We host a bi-weekly webinar or meetup, called “Coffee & Currypuff” to bring together fellow entrepreneurs, to hear, ask and discuss the learnings, challenges and opportunities. It is a networking session for sharing key topics from experts as well as entrepreneurs that have been on the journey.



### MVP-AS-A-SERVICE

Together with the ICT community, we provide consulting and software development support to help a would-be entrepreneur interested to build a storyboard, a UI UX wireframe, an idea pitch but have difficulty finding a team of affordable technologists and experts.



### PITCH OR DITCH

This program is a sounding board for the Founder to make his elevator pitch and get feedback from a panel of mentors, seed investors, incubators, and experts on the merits of the (minimum viable product) MVP or value proposition.



### OPEN INNOVATION MARKETPLACE

The “Rekanomi” is a platform where real world problems that are faced by companies and communities are put forward as challenges seeking a technology solution. The intent is to raise the quality of start-up ideas and shift towards solving real world problems that have a market demand and seek the unicorn rather than another “me too”.



### DIGITAL SALESFORCE

Freelance workers join this program to sell on a commission basis, digital products from start-ups such as electronic business cards, fintech products, etc. We provide the digital sales and marketing training to this flexible salesforce. This platform connects the start-ups to use a freelance salesforce that can help market and sell their digital products and help increase their access to markets.

# ARE YOU A LOCAL ENTERPRISE?

## From micro, small, medium enterprise to large, listed companies

To stay relevant, keeping the growth story alive is key to being competitive. Each enterprise from micro to large, has to continually innovate through technology to sustain the distinctive value proposition. Our key aim is to **push local enterprises to go digital, go international**. The competition to grab a share in the global supply chain is increasingly competitive and it is no longer enough to rely on the traditional factors of production of land and labour.

Our approach is to motivate firms to invest in their own people through digital upskilling. Through internal champions working on catalyst projects that will **modernise towards the ideal Smart Factory**. We will focus on programs such as shared platforms, reusable open-source solutions, and tapping on incentives on machine automation and integration. The end outcome is machine augmentation to **raise productivity and product quality**.



### EDUCATE

Evangelise & Consult

Internal Champions & Upskilling

Catalyst Projects



### DIGITALISE

Shared Platforms

Data Collection & Analytics

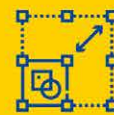
Integration & Automation



### INNOVATE

Innovation Platform

Research Commercialisation



### SCALEUP

Expand & Diversify

Collaboration



### PIVOT

M&A Exit

Differentiate

## Catalyst Programs

The intent of these programs is **targeted in particular towards export-oriented manufacturing SMEs and also deepening the ICT industry**. To move towards IR4.0, it is not just about technology and automation, our aim is to develop internal champions within the organisation to sustain the change. Other programs will be focused on **solving the challenge of supply and demand for talents**. Below are some of the programs that have been launched while others are still work in progress.



23



### SMART FACTORY DIGITALISATION

This program is to groom internal champions within the organisation through consulting and training, to spearhead programs by gaining senior sponsorship for transformation. The focus is on the development of people within the organisation rather than merely investments in technology or external consulting. Support will be given to apply for currently available grant schemes.



### DIGITAL OPEN INNOVATION FUND

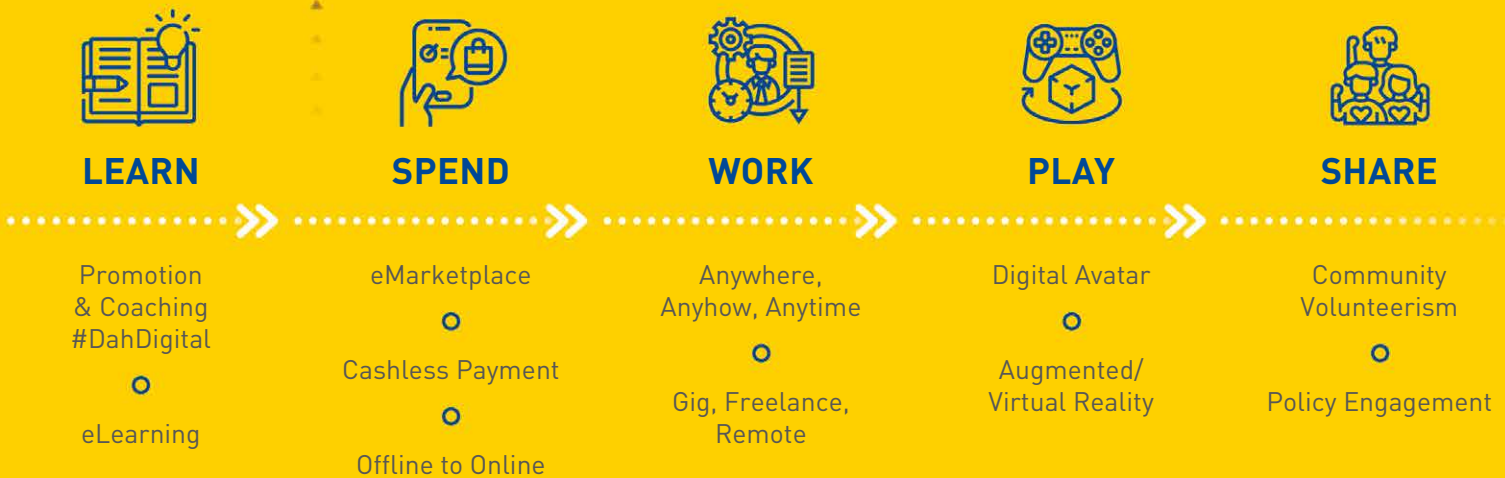
This is a public-private fund that will co-invest into "Rekanomi" projects that have an innovative nature as well as repeatable solutions that can be adopted across the industry.

# ARE YOU A RAKYAT OR RESIDENT?

The growth towards a digital economy is in fact largely driven by talent attracted to the liveability of the environment. Hence, technology must be an enabler that **enhances and complements how a rakyat or resident living here** can do meaningful work and raise a family comfortably.

Digital is the language of the future. Not knowing how to navigate and use technology is like being unable to communicate with the virtual world. Being digital-savvy, **opens doors to many opportunities for convenience and enjoyment of rich content. #DahDigital is the first program to coach and mentor** the more technology-challenged community to learn hands-on how to use the various apps to get by in daily living, ranging from car parking, eWallets, emails to online banking.

24





## Catalyst Programs

The intent of these programs are **focused on civic engagement**.



### PROMOTION AND COACHING TO DRIVE DIGITAL ADOPTION

#### #DahDigital

Providing income supplement to gig workers during the pandemic, while at the same time promote the adoption of digital technology amongst the community. Digital Promoters promote the use of eWallets and ePayments for government services. Digital Coaches conduct weekly classes or webinars to the less tech-savvy community to teach them on how to use apps such as SmartParking, ride-hailing, basic online privacy and security, email, and various other apps.



### WORK ANYHOW, ANYWHERE, ANYTIME

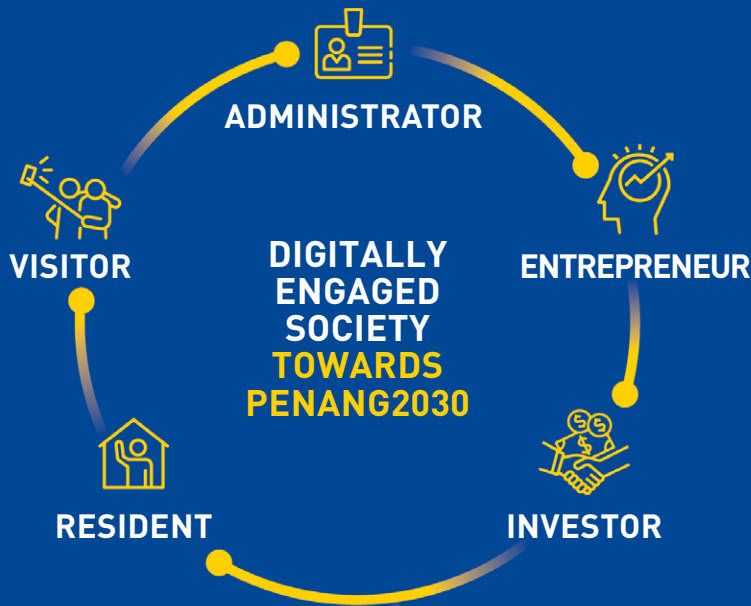
#### Digital Salesforce

Freelance workers join this program to sell on a commission basis, digital products from start-ups such as electronic business cards, fintech products, etc. We provide the digital sales and marketing training to this flexible salesforce. This platform connects the start-ups to use a freelance salesforce that can help market and sell their digital products and help increase their access to markets.



### COMMUNITY VOLUNTEERISM

The Digital Outreach Network is to recruit professionals that want to give back to the community. Their skillsets in mentoring, training, project management, consulting and other technology and engineering skills will help alleviate some of the talent shortage challenges.



## TAKEAWAY

The implementation of DTMP is as stated in Digital Penang’s mission – **to leverage technology to extend comparative advantages** in a digital economy and deliver agile solutions and infrastructure for pervasive adoption **to promote an engaged community and data-driven governance**.

**DTMP focuses on the best interests of the community** in all aspects of their lives. Community-initiated value creation guides the formation of the approach in this masterplan. By **emphasising the participation of citizens**, the society can function in a more liveable and sustainable way. After all, digital technology and policies are just tools to serve the community better.

**In light of this, we invite you to engage with us**, with the future, and create a thriving digital economy. Your support and feedback in the next three years can **help shape the future phases of this masterplan**. This digital evolution will be a significant phase for Penang as we learn together, adapt together, and win the future,

Appendix:

1. Penang2030
2. MyDigital
3. JENDELA
4. MDEC
5. STEM - Science, Mathematics, Engineering, and Technology
6. Penang Tourism Masterplan



Penang2030



MyDigital



JENDELA

The Jalanan Digital Negara



MDEC

Malaysia Digital Economy Corporation (MDEC) Sdn Bhd



No. 15-B & 16-B, Bangunan Wisma Yeap Chor Ee,  
Pengkalan Weld, 10300 George Town, Pulau Pinang.

**email** • [contact@digitalpenang.my](mailto:contact@digitalpenang.my)

**contact** • +604-835 0307