

# Visitor's Guide

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# **1. Introduction to Smart Nation CityScape**

## ABOUT CITYSCAPE

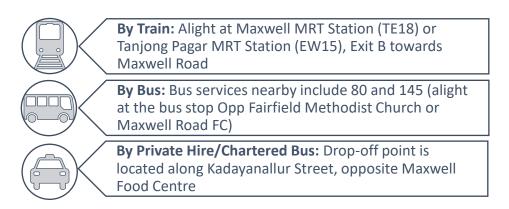
- This exhibition shows how technology is fused into the daily lives of Singaporeans, from education and healthcare to transport and housing.
- It also demonstrates how Singapore has built a tech eco-system to make life better for everyone.
- There are 7 interactive displays that showcase more than 70 tech initiatives from about 40 private and public organisations.

## WHY VISIT?

- Many of us are already using technology in one way or another. We use e-payment methods like PayNow to pay for food and services, or Singpass to access digital government services securely, and Parking.SG to reserve and pay for public parking.
- However, we might not be aware that these initiatives are part of our broader Smart Nation initiative.
- Smart Nation CityScape was designed as a showcase for people to see, touch and experience some of these technologies, and to increase awareness and understanding of the relevance and benefits of a Smart Nation. We want to show that everyone has a part to play in our journey to become a Smart Nation.

## **GETTING THERE**

- The Smart Nation CityScape showcase is located within The URA Centre's Singapore City Gallery at Level 2 and 3 (Address: 45 Maxwell Road, Singapore 069118).
- The Gallery is open from Mondays to Saturdays, 9:00am to 5:00pm. Admission is free.





## **GROUP VISITS**

- Prior booking is required for group visits of more than 20 people. You can register your group visit <u>here</u>.
- If you are preparing to host a group at the Smart Nation CityScape, we encourage you to arrange a recce trip prior to the visit, or to sign up for one of our <u>community tours</u> to be familiarised with the content and space.

## **GENERAL THINGS TO NOTE**

- The gallery is mainly **self-guided**. However, <u>guided tours</u> for the community are also available. They are conducted by volunteers and are offered on Fridays and Saturdays of the first and third week of each month, at 11:00 am and 12:30 pm, unless otherwise stated.
- Tours are conducted in English and recommended for participants aged 16 and above.
- Food and drinks are not allowed in the Gallery.

Register for a group visit	Sign up for a community tour

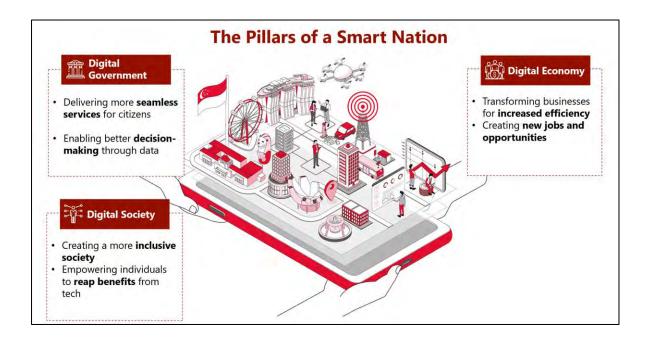


# 2. Overview of Smart Nation

Singapore is a nation "where we can create possibilities for ourselves beyond what we imagined possible."

Prime Minister Lee Hsien Loong

- The Smart Nation initiative is about **transforming Singapore through technology** be it in the areas of health, transport, housing, digital government services or businesses.
- There are three key pillars of Singapore's Smart Nation **Digital Government**, **Digital Economy**, and **Digital Society**.





# 3. Exhibition Map

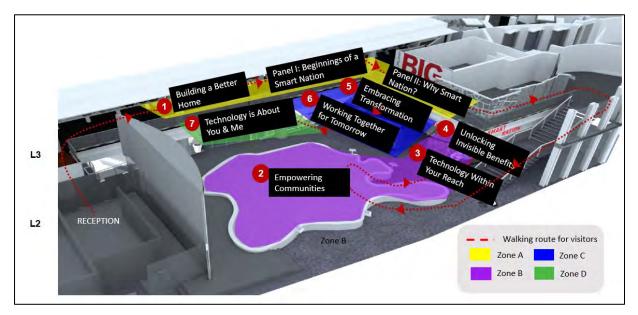
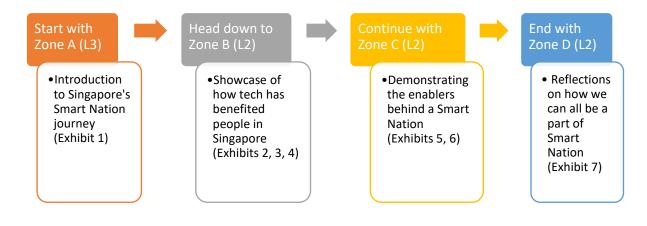


Exhibit		Level
(1) Building A Better Home	А	Level 3
(2) <u>Empowering Communities</u>	В	
(3) <u>Technology Within Your Reach</u>		
(4) Unlocking Invisible Benefits		
(5) Embracing Transformation	С	Level 2
(6) Working Together for Tomorrow		
(7) Smart Nation is About You & Me	D	

## **RECOMMENDED ROUTE FOR VISITORS**

While the CityScape exhibition is designed to be integrated with the City Gallery exhibition, we recommend the following route for visitors to experience the Smart Nation story from start to finish:





## 4. Overview of Exhibits

- (i) ZONE A TRANSFORMING SINGAPORE THROUGH TECHNOLOGY
  - Location: Level 3
  - Focus: Digital Government
  - Covers: Exhibit 1, Panel I & Panel II

#### LEARN

This zone demonstrates how Singapore is leveraging technology to deliver better services for our people. It gives visitors an understanding of:

- Singapore's journey as a Smart Nation, and how it fits into the overall urban transformation of Singapore.
- The benefits of **geospatial (location-based)** information and technology.

#### EXPLORE

Exhibit 1 – Building a Better Home



Exhibit 1 is the first of two exhibits digitally overlaid (using Augmented Reality<sup>1</sup> or AR technology) onto the Central Area Model on Level 2. Tap on the purple menu on the left to discover:

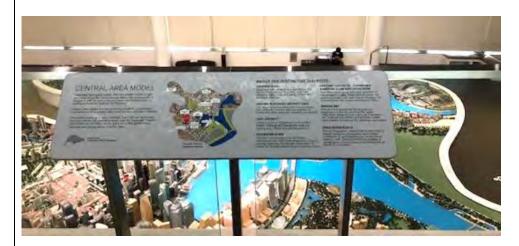
- What geospatial technology<sup>2</sup> is about, and how it uses locational information to provide insights for better communication, convenience, as well as accurate and timely delivery of services.
- Case studies of how geospatial tech has been used in Singapore. Tap on the first example (TreesSG) to read about how our trees have been geo-tagged with a specific ID, making them easier to identify and locate for park maintenance.
- Tap on the icons (trees for TreesSG) to discover additional information (age, scientific names of trees) captured by geospatial technology.

<sup>&</sup>lt;sup>1</sup> Augmented Reality: The integration of digital information with the user's environment in real time.

<sup>&</sup>lt;sup>2</sup> Geospatial Technology: Technology relating to the collection or processing of data that is associated with location.



PRO-TIPS



**Look down**: Stand in front of the information board on the Central Area Model to get a birds-eye view of the model. Try to identify some of our key landmarks.

**Look up:** Can you spot the camera on the ceiling to your left? It provides a live feed of the Central Area Model in real time, providing the 'base' for the interactive overlays on-screen.

## DID YOU KNOW?

The Central Area Model was first assembled from four smaller models in 1998. It shows the Central Area located in the southern part of Singapore. Beyond public display, it is also a working model for our architects and planners, and periodically updated when there are new plans and buildings. Some of our most recognisable buildings incorporate technological features that improve their design and functionality:

- The retractable roof of the **Singapore Sports Hub** is designed to keep out the rain.
- The Flower Dome at **Gardens by the Bay** is equipped with a world-class cooling and misting system.
- The infinity pool at **Marina Bay Sands** comes with a special hydraulic system to keep the water level.
- The distinctive 'spikes' at the **Esplanade** are aluminium sunshades that help to regulate light and heat.

After you are done checking out the first exhibit, look to your left and you will see **Panel I: Beginnings of a Smart Nation**. This panel gives you an overview of Smart Nation and fun snippets in the history of its evolvement.

Description	What It Covers			
Panel I: Beginnings of a Smart Nation	Historical milestones of Singapore's			
	Smart Nation journey			
Panel II: Why Smart Nation	Drivers of a Smart Nation			
From there, you can make your way along the corridor and down the stairs from Level 3				
to Level 2.				



#### REFLECT

Think about some examples of geospatial technology you have encountered in your daily life. E.g.

- How did you come to the Singapore City Gallery today? Geospatial information would likely have played a part in making your commute faster/more pleasant, such as using Google Maps to plan the best route and avoid areas with heavy traffic.
- Ever thought about how GrabFood, FoodPanda or Deliveroo delivers your food in the fastest way? These food delivery apps also use geospatial technology to assign the nearest driver to the indicated pick-up point and to guide them to deliver the food to the right address.

#### ACT

Now that you've learnt more about geospatial technology, and how it's being used to deliver better services, can you think of anyone around you who might benefit from it?

• For parents: Did you know that <u>OneMap</u>, a platform for citizens to explore, create and share data by the Singapore Land Authority (SLA), has a 'SchoolQuery' function, where parents can search for schools within a 1- to 2- meter radius of their homes?



• For seniors: Planning for a trip around town with your *kakis*? Did you know that the MyTransport.SG app by the Land Transport Authority (LTA) offers useful geospatial-based travel information and features that help you get around Singapore? Download the app on <u>Google Play</u> or the <u>App Store</u>.

Google Play	App Store



## (ii) **ZONE B – YOUR EXPERIENCE OF TECHNOLOGIES IN SINGAPORE**

- Location: Level 2
- Focus: Digital Society
- **Covers**: Exhibit 4 & 5

#### LEARN

This zone focuses on an individual's experience of the various technologies in the city, and how it unlocks benefits for different segments of society. You will learn about:

- How technology empowers different communities.
- Examples of digital services that are within easy reach for Singaporeans.
- 'Invisible' technologies that are working behind-the-scenes to make life better and easier for us.

#### EXPLORE





Exhibit 2 on Level 2 is the second of two exhibits featuring a digital AR overlay onto the Central Area Model. There are eight iPads surrounding the model, each tied to specific 'hotspots' (or geographical regions).

The exhibit features:

- More than 70 tech initiatives from about 40 private and public organisations.
- Specific examples of digital services that benefit different communities, from seniors to parents with young children and people with disabilities.



- **Pick an iPad**: Point it towards a nearby area of the Central Area Model. You should slowly see pop-ups indicating different locations e.g. Rochor, Chinatown, Kampong Glam.
- **Tap on the location pop-ups:** This will bring you to an animated scene of that specific location. Within each location, you will spot icons that represent different digital services.
- **Tap on the icons:** You will see an expanded window featuring videos and detailed explanations of each digital service.



## Exhibit 3 - Technology Within Your Reach



Exhibit 3 demonstrates how people need not search far for technology to help them, with some of the most important digital services already found in our phones.

This exhibit covers:

- Nine key archetypes (or 'avatars<sup>3</sup>') that represent the different age profiles and segments of society (E.g. Active student, super parent or busy professional).
- Examples of digital government services tailored to their needs.



- **Pick an avatar**: You can swipe the arrows to select an 'archetype'. You can even customise their outfits and hairstyles!
- **Spot digital services:** After you have personalised your avatar, you will see icons surrounding your avatar that represent the digital services that are relevant to that archetype. Can you recognise any of them? Click on the icons, and learn about the services in detail.
- **Teleport yourself:** Click 'ok' once done. Next, turn around to the huge interactive screen behind, and see your avatar being transported. Try to spot your avatar in the digital city!

<sup>&</sup>lt;sup>3</sup> Avatars: An image that represents you on a computer screen such as in online games and chat rooms, which can move around the screen.



Exhibit 4 – Unlocking Invisible Benefits

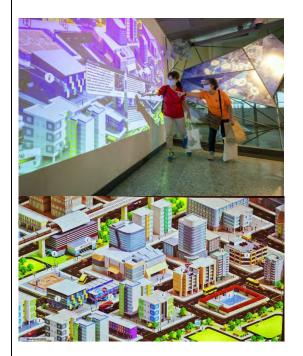


Exhibit 4 demonstrates how technology is already embedded within our Smart City, in ways we might not realise.

This exhibit covers the 'invisible' technologies that make life seamless and more convenient for us in various domains, such as:

- Mobility • \_ The Housing & Development Board (HDB)'s Smart Parking system, which enables automatic sensing and deduction of fees recognition using image technology.
- Housing Surbana Jurong's Lift Monitoring System, which leverages preventive analytics and machine learning to deliver insights on lift performance, thus reducing incidence of lift breakdowns.
- Sports SportSG's Computer Vision Drowning Detection System at public swimming pools, which uses overhead infrared cameras to detect early signs of drowning.

# PRO-TIPS

- Spot your avatar: Spot your 'avatar' walking along the streets of the 'Smart City'.
- **Tap on the 'info' buttons**: Read more about the invisible technologies embedded in our city.

## REFLECT

Identify one mobile app that you or your family and friends use. How does it make life more convenient? E.g.

- Buying groceries using Redmart and FairPrice apps
- Booking a taxi using Comfort, Grab or Gojek apps
- Borrowing e-books from the National Library using the NLB Mobile app
- Counting daily steps to encourage physical activity using Healthy365 app

What do you like/not like about it? Consider the following factors:

- Relevance does it meet your needs?
- Usability is it simple to understand and easy to use?
- Accessibility and inclusivity does it benefit different users, including the elderly and persons with special needs?



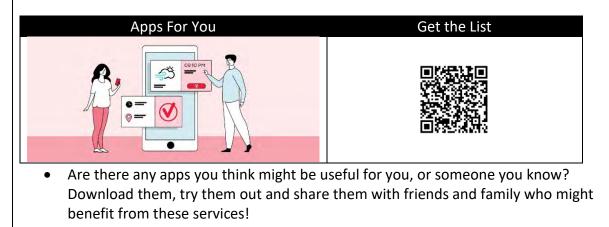
## DID YOU KNOW?

• Government agencies are guided by the <u>Digital Service Standards (DSS)</u> when developing digital services. This is a set of standards to ensure that these services are easy to use, seamless and relevant for users. Scan the QR code below to find out more!



## ACT

Did you know about the 'app-solutely' essential digital government services and apps that allow you to register for your child's birth, check on the weather, or report municipal issues in your neighbourhood? Check out the full list <u>here</u> or scan the QR code below.





## (iii) ZONE C – ENABLERS OF A SMART NATION

- Location: Level 2
- Focus: Digital Economy
- **Covers**: Exhibits 5 & 6

### LEARN

This zone aims to educate visitors about the enablers that make a Smart Nation possible – be it transforming mindsets, processes or our economy. It covers:

- Why it is important for Singaporeans to embrace change
- How Singapore is building a thriving tech-ecosystem for both individuals and businesses

## EXPLORE

#### Exhibit 5 – Embracing Transformation



Exhibit 5 juxtaposes the past with the present, to show how much life has changed with the advent of technology.

The exhibit features artefacts from the past, and examples of how tech has transformed key areas of our lives, such as:

- **Mobility** e.g. how we have transited from paper coupons to using the Parking.sg app, a mobile app that lets you pay for parking fees easily.
- Finance e.g. how we have moved from payment by cash, to doing epayments. For instance, the PayNow feature is a digital payment solution that allows funds transfer via mobile number, NRIC or UEN (Unique Entity Number).
- Environment e.g. how our workers have evolved from using physical harnesses to inspect trees, to using drones.

# PRO-TIPS

- **Take a walk down memory lane**: See if you can recognise any of the artefacts displayed in the glass panel. Reflect on your personal experiences with some of these artefacts (e.g. how bus conductors had to be on standby to punch holes in the coupons).
- Swipe the interactive touch wall: Discover the technologies that have transformed the way we do things in many sectors, from education and transport to payment.



## Exhibit 6 – Working Together for Tomorrow



Exhibit 6 highlights the importance of creating a thriving tech ecosystem and cultivating the right tech talent where innovators, start-ups and individuals can grow and prosper.

The exhibit covers the following categories:

- Research and Development encouraging innovation by providing the right expertise, funding, equipment and solutions.
- Business Opportunities accelerating growth by unlocking new markets and opportunities.
- Digitalisation helping businesses to increase efficiency through tech adoption.
- Talent & Upskilling cultivating tech talents and building our capabilities as a Smart Nation.

## PRO-TIPS

• Swipe the interactive touch screen: Tap on any one of the four categories to find out more about the initiatives.

## REFLECT

Reflect on why building a stronger tech ecosystem matters to you and your family, and to Singapore in general:

- For instance, do you have any friends or family members who had to switch careers due to various circumstances? E.g. loss of jobs due to COVID-19 pandemic, job roles changed due to technology.
- How might having a strong tech infrastructure and pro-business environment help attract foreign tech companies to our shores, which in turn creates new jobs and opportunities for those in Singapore?

Think about who needs to be involved in this journey of building a digital economy. Who are the people or groups of people needed to support this transformation effort, e.g.

- **Employees** taking charge of upskilling themselves and moving out of their comfort zones in an ever-changing world.
- **Employers** being open to exploring digital solutions that can help make their business processes more efficient, while providing training opportunities and time to help their people upskill.
- **Government** developing schemes and initiatives that will help both employers and employees.
- Academic institutions ensuring that the curriculum is constantly updated and our future workforce (our students) are equipped with the necessary skills to survive in the digital economy.



#### ACT

Are you looking to upskill in the area of tech, but unsure how to get started? Here are some resources to check out:

- <u>#SmartNationTogether Online Channel</u>: Free webinars that introduce you to techrelated topics and skills, as a starting point to deeper tech upskilling and learning.
- <u>SkillsFuture Series</u>: A curated set of short, industry-relevant training programmes that equip individuals with skills such as data analytics, cybersecurity and digital media.
- <u>TechSkills Accelerator (TeSA)</u>: A tripartite initiative by the government, industry and the National Trades Union Congress (NTUC), comprising various programmes to support ICT and non-ICT professionals in upgrading and acquiring new skills, as well as enhance employability outcomes for individuals.

#SmartNationTogether	SkillsFuture Series	TeSA



### (iv) ZONE D - BEING PART OF A SMART NATION

- Location: Level 2
- Focus: Reflections
- **Covers**: Exhibit 7

## LEARN

This zone aims to inspire reflection about Smart Nation and get individuals to think about how they can play a role in shaping this future. It covers:

- How a Smart Nation is ultimately about people
- How we can all contribute to building our Smart Nation

#### EXPLORE

Exhibit 7 – Smart Nation is About You & Me



Exhibit 7 features what opinion leaders in the government, tech and entertainment sectors think about Smart Nation. It also invites visitors to share their thoughts.

## PRO-TIPS

- **Reflect:** Think about what a Smart Nation means to you personally
- Take a Selfie: This is a great opportunity to take a picture!
- **Decode The Message:** Can you spot the string of numerals appearing on the adjacent screen? There is actually a hidden secret message! You can decode it by scanning the QR code on the exhibition panel, giving you access to a 'cheat sheet'. A surprise is in-instore for those who can crack the code
- Watch the Big Screen: Upon clicking 'publish', your reflections (and picture, if you've opted for that) will appear on the adjacent screen. It will only be there for a day, so take a picture as a keepsake!
- Fill in a Short Poll: Think about what a Smart Nation should prioritise in the next 5 years

## REFLECT

What is the one thing you have learnt from your visit to the exhibition?

Consider the technology initiatives you have just learnt about and/or observed in Singapore. What areas do you think Singapore is doing well in?



For example:

- **Housing**: Affordable public housing and the ability to apply for it online
- Education: The ability for students to continue schooling during the COVID-19 lockdown

What are some areas we can improve on/learn from what has been done in other countries?, E.g.

- Environment: Smart litter bins that use solar power to compact waste and prevent waste from overflowing
- Mobility: Self-driving taxis where passengers can book rides via a smartphone app

In developing a Smart Nation, which are the groups of people that might face the greatest challenges, and why? E.g.

- Persons with disability (PWD) who might have trouble navigating digital services
- Seniors who might be worried about performing online transactions safely

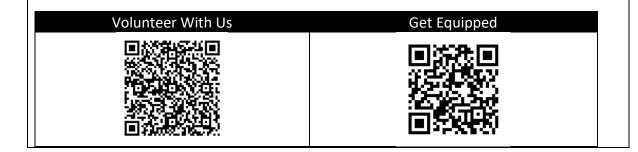
Consider how you, as an individual, could mitigate some of these challenges and contribute to Singapore's Smart Nation journey. For example:

- Share feedback on how digital services could be made more accessible
- Alert the seniors around you of the latest scams, and common tell-tale signs to look out for

#### ACT

Get involved in Smart Nation in one of the following ways:

- Volunteer as a Smart Nation Ambassador (SNA), where you can help others understand and use tech to make life better and more convenient. You can check out a range of volunteering opportunities <u>here</u>
- Equip yourself with skills that can help you engage the community. Sign up for courses through the <u>SNA Learning Portal</u>



# 5. Additional Resources



#### **Smart Nation Showcases**

Smart Nation CityScape is one of three showcases by the Smart Nation and Digital Government Group (SNDGG) to help our people experience and understand the benefits of technology. Check out our other two showcases, which offer different takeaways customised for different audiences.

## Smart Nation PlayScape

This is an interactive showcase designed for school-going children (aged 10 and above) and families. It aims to inspire the next generation on new and emerging tech through fun, interactive experiences.

Look forward to learning about the many exciting technologies fuelling our Smart Nation, such as AI, blockchain, and biometrics, through gamified experiences.

Location: 15 Science Centre Road (Singapore 609081)

**Opening Hours:** Tuesdays – Sundays, 10am – 5pm (Last Entry: 4.15pm). Closed on Mondays, except for Public Holidays and gazetted school holidays.











#### Smart Nation Builder

Have an idea to share on Smart Nation? Look out for our Smart Nation Builder, a 12m-long truck fitted with interactive game stations, where you can learn more about Singapore's tech initiatives and digital government services. You can even provide inputs and feedback on how to improve our products and services – while earning points that can be redeemed for prizes at our claw machine!

**Location**: Visit <u>go.gov.sg/snbuilder</u> to find out where the Smart Nation Builder is heading to next!

