

Webinar Normal Baharu Bandar Rendah Karbon: Jadikannya Realiti!

Resilient Cities :
How are cities to cope after COVID-19?
The good news and the future



Ar. Mustapha Kamal Zulkarnain
7th December 2020 | Tuesday



THE SPEAKER:

AR. MUSTAPHA KAMAL ZULKARNAIN

A resilient community is one that recognises that sometimes it will need to adapt to new and unexpected circumstances. The key to our collective future in relation to population growth, urbanisation, unpredictable patterns and constrained resources is pragmatism.

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Ar. Mustapha Kamal Zulkarnain, an Auckland University alumnus from the New Zealand has been practicing architecture for the past 27 years. He is a fellow member of Malaysian Institute of Architects (Pertubuhan Akitek Malaysia, PAM) and had served 6 terms as PAM Council Member 1997-2000 and 2014-2017. He still sits in various PAM Committees like the Housing and Urban Wellbeing, Media and Publications as well as the Sustainability and New Urban Agenda. He was also a devoted Rotarian. He is also heading the task force in the PAM Strategic Plan 2030 on Architecture: Cities Now and Future. His area of expertise is Urban Resilience.

He first mooted the idea of resiliency into the vocabulary of the committee Urban Wellbeing, Sustainability, Housing and Environmental Resilience (USHER) in 2014 as the Co-Chair that was in charge in preparing the report for the government of Malaysia through PAM for the Kuala Krai 2014 floods entitled Strategic Initiatives in Floods Disaster Preparedness and Mitigations for Malaysia. This report is now posted on The International Union of Architects website.

He has delivered papers and attended various conferences, symposiums and seminars that touch on resiliency. Most notably was the RIBA Conference in London entitled Designing City Resilience 2015, Urban Renewal in Singapore 2015, 2016, 2017 and also as panels for Urban Thinkers Campus (UTC) under the UN Habitat for Habitat III in Hong Kong, Bangladesh and Kuching, Malaysia as well as ASLI towards the formulation of the New Urban Agenda document previously known as “The City We Need”

He spoke at the 2017 UIA World Architects Congress in Seoul as well as at the Healthy Cities Design Summit 2017 in London Royal College of Physicians both the roles of Nature and Human in physical development symbiosis.

He was the Convener of the PAM Roundtable Discussion with Archinesia and the members of the publications communities during the 2016 Kuala Lumpur Architectural Festival (KLAF) that deals with Future Communities where the Mayor of Bandung, Pak Ridwan Kamil was the guest speaker. He too sits on the committee for KL Low Carbon Society Blueprint, KL Competitive City and also KUL Design Group in Dewan Bandaraya Kuala Lumpur (DBKL).

He was the Curator for the yearly event of the Housing and Urbanity 2017 organised by PAM which entitled ‘How New Urban Agenda Will Fulfil the Sustainable Communities Goals’.

He also currently sits in the Technical working Group headed by MITI and MEA for the formulation of the programmes in architecture for the RMK 12 through MSPC. His Paper entitled “Shared Wealth Through A Resilient Malaysia using Smart Collaboration for a Progressive Malaysia 2050” was well received by both Ministries as inspiring and timely.

‘Mimpi harus melangit, namun kaki harus membumi’. - Mayor of Bandung, Pak Ridwan Kamil

In my opinion in relation to COVID-19 pandemic

*People think that the year 2020 is the year of perfection
But it's now a different route
The year 2020 is humanity reset button*

*To think for a better system to govern our lives
To work and collaborate for a better living
To rethink the way we need to work*

*To throw away unsustainable methodologies
To accept new collaborators and new game changers big time
To include the younger generation in our decision making in total not a mere rhetorical*

*To use the thinking way out of the box which is business unusual
To accept the thinking system of your subordinates more as a realistic one
To put aside wholly top down thinking*

*To respect the bottoms up thinking rationally and pragmatically
To listen to the ecosystems more than the economic systems
To allow specialists to rule*

*To put aside generalists for fear of a recurrence
To live simply simplistically
To love life as priceless*

*To transcend urban protocol systems as a living documents of life
To listen to your aspirations more than your fears
To be a human is most important*

What is Pandemic..?

Dictionary

Search for a word



pandemic

/panˈdɛmɪk/

adjective

(of a disease) prevalent over a whole country or the world.

Similar: widespread prevalent pervasive rife rampant epidemic

noun

an outbreak of a pandemic disease.
"the results may have been skewed by an influenza pandemic"



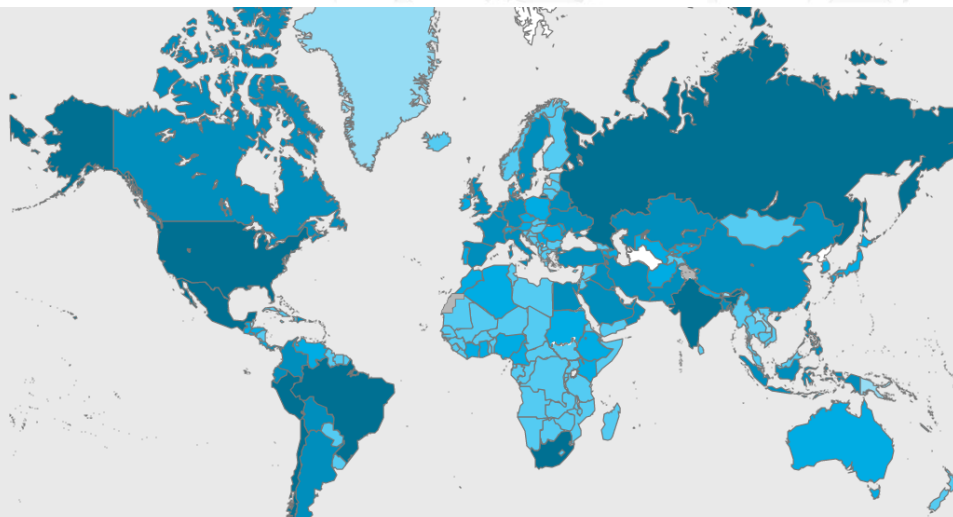
Translations, word origin, and more definitions

Definitions from Oxford Languages

Situation by Country, Territory or Area



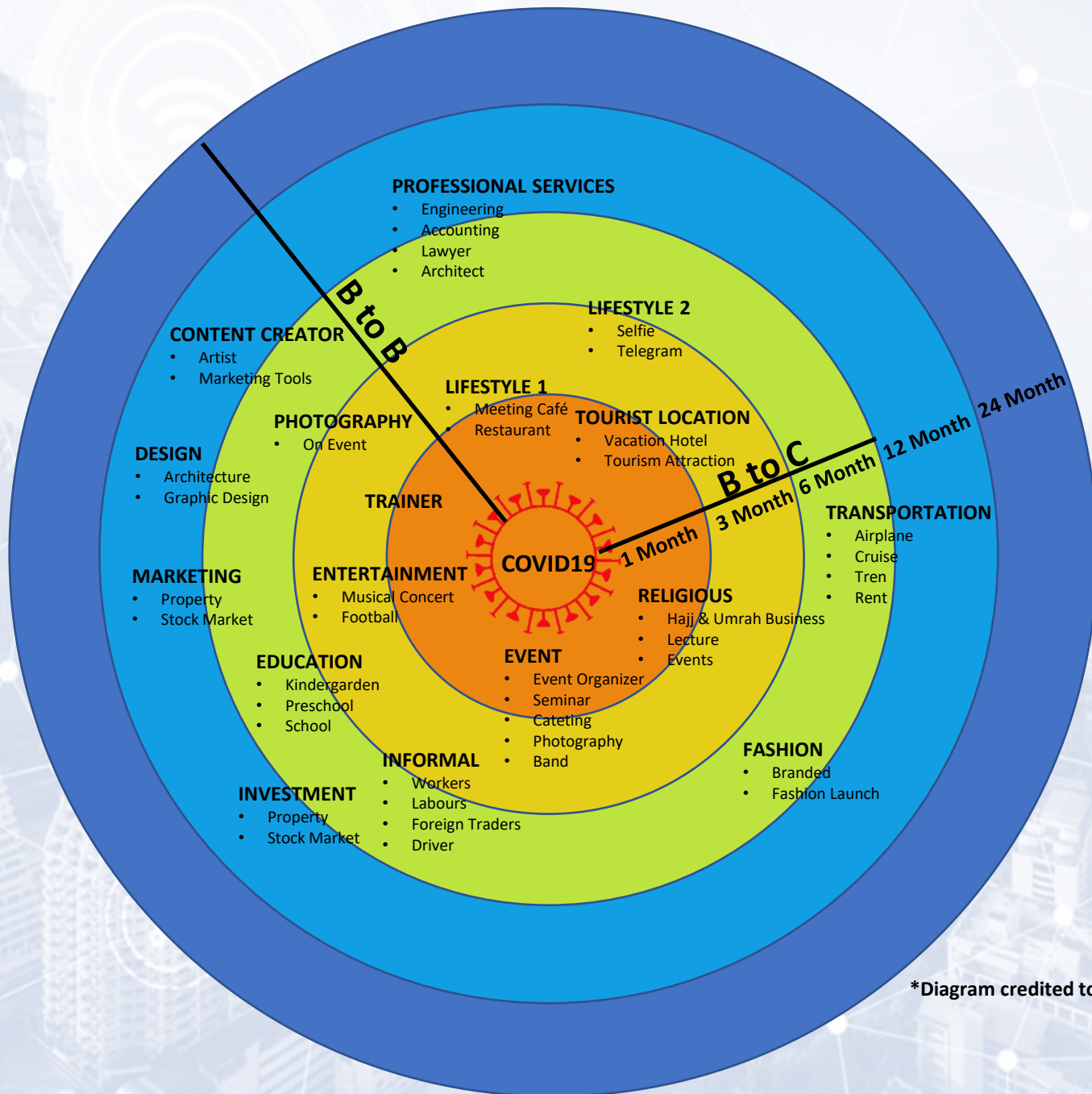
Feedback



COVID 19 is a new World Pandemic

Globally, as of 3:49pm CEST, 21 July 2020, there have been 14,562,550 confirmed cases of COVID-19, including 607,781 deaths, reported to WHO.





*Diagram credited to Kun Kun Visual Indonesia



Jalan Tun Razak



Dataran Merdeka



Chow Kit
www.raihantalib.com

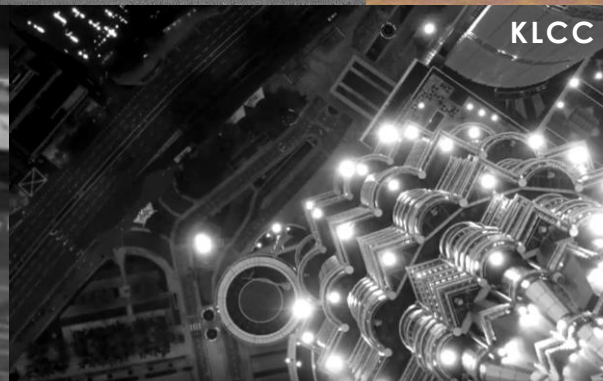


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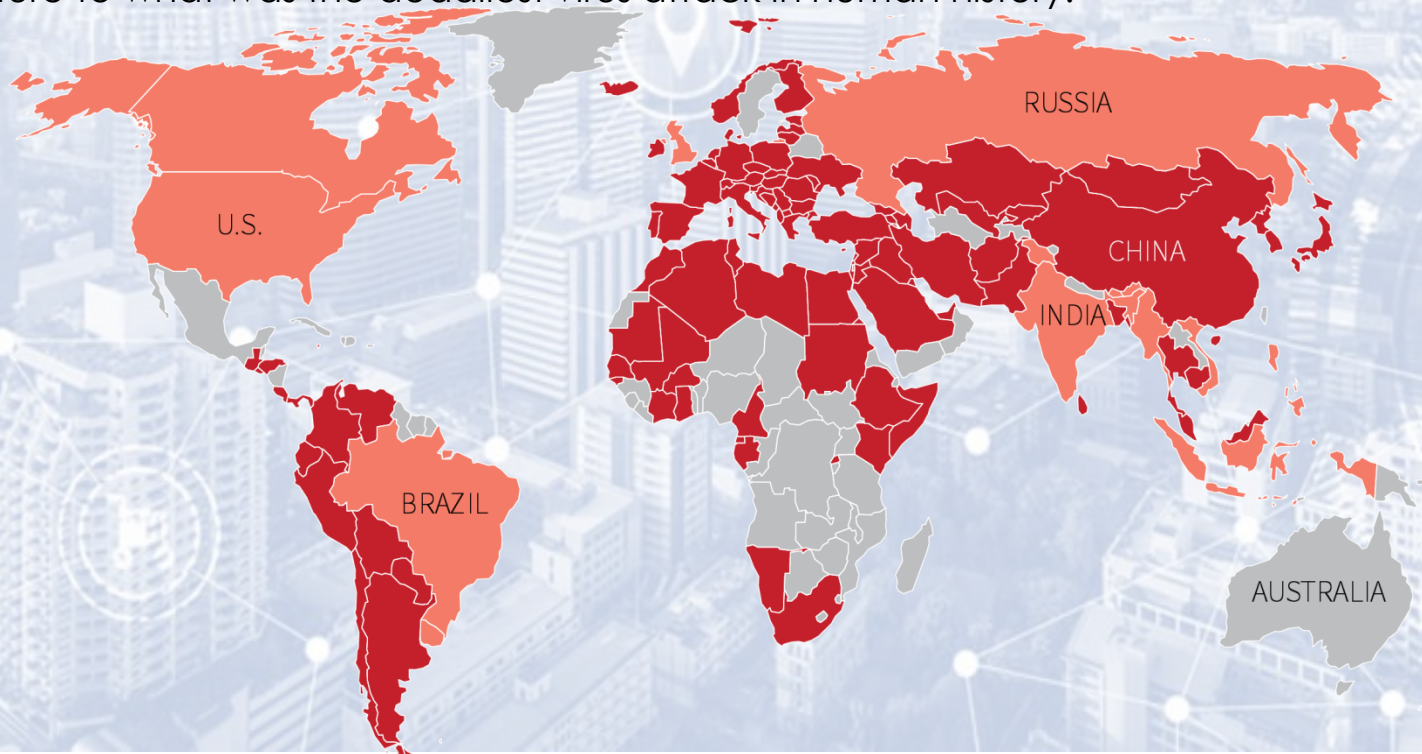


KLCC



CITIES AND COVID-19

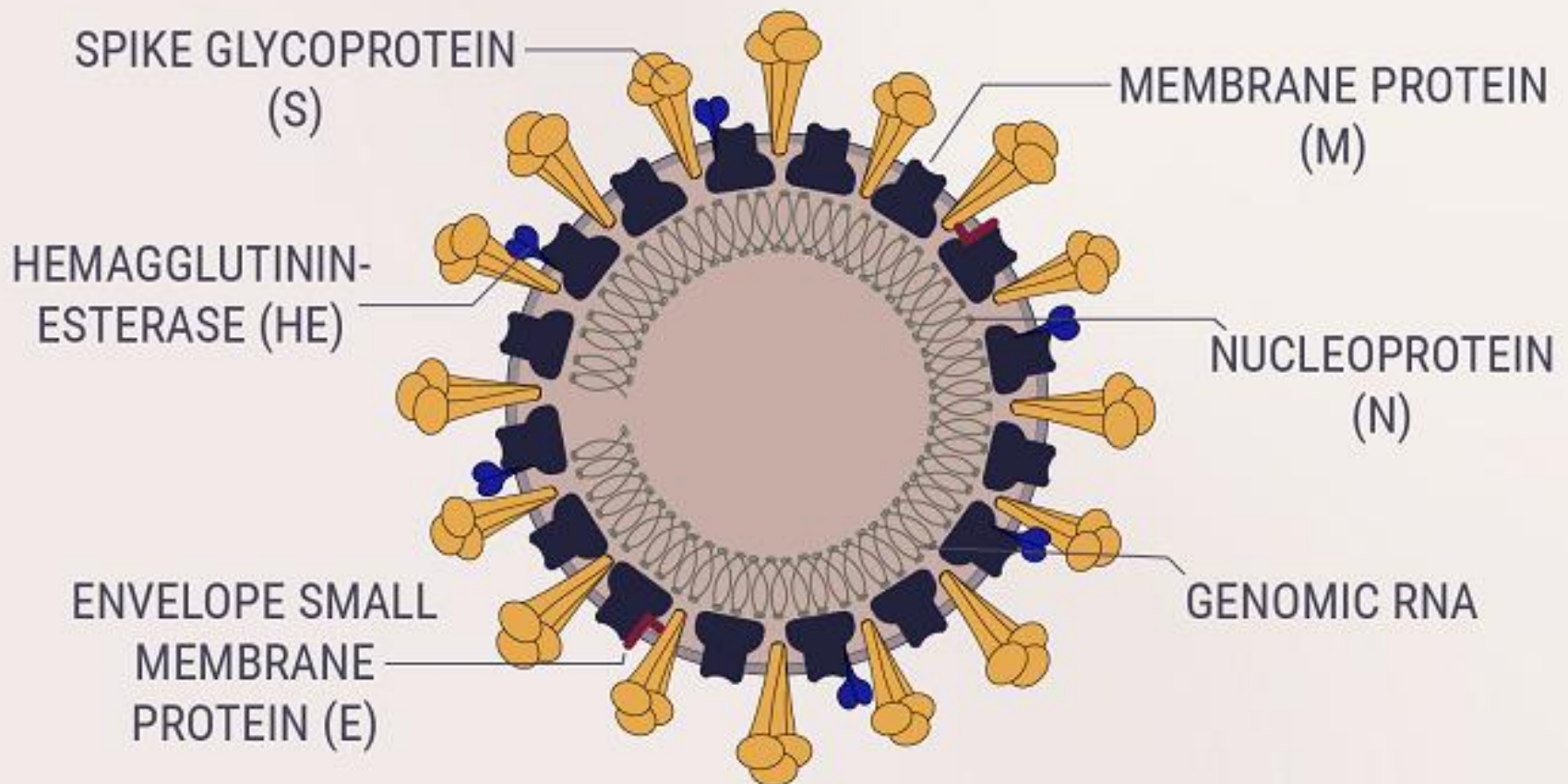
On the last day of 2019, an artificial intelligence warning system run by Toronto start-up BlueDot flagged a news report from China about a mysterious strain in the city of Wuhan. The system which sifts through 100,000 articles and online posts daily in 65 languages, alerted BlueDot's human employees, who immediately saw parallels to the deadly SARS outbreak in 2003. The company quickly sent out warnings to health authorities and other clients about what would come to be called the coronavirus outbreak, which has so far infected more than 720,000 people and killed more than 34,000 as of now. This is now labelled as COVID-19 because of the year it was first found. The latest as of 31 March 2020, Wuhan has closed all its medical facilities that manages this COVID-19 and sent home the last batch of medical staffs and care givers back to their hometown. It is really a welcoming gesture as well as a sad departure to what was the deadliest virus attack in human history.



COVID-19

Medscape

The virus associated with the **outbreak originating in Wuhan, China**, has been designated **severe acute respiratory syndrome coronavirus 2 (SARS-CoV2)**. The disease caused by that virus is now officially called **COVID-19**.



It's easy to look at these major cities and global supply chains, and say of course we have an epidemic — this is how globalization plays itself out. But you're telling a different story — one about non-global cities, tertiary cities and peri-urban areas.

Yes, it's actually about a much wider set of urban areas. This is the story in Washington state [where COVID-19 first emerged in Snohomish County], or the Italian story, which is still largely suburban.



ISSUES TO MANAGE AND CONTROL COVID-19

In most cases, urban function-spatial problems in face of an epidemic include:

1 Inadequate medical facilities.

2 Excessive of urban population density.

3 Traffic congestion.

4 Weak public awareness of the epidemic.

5 Low level of public services.

6 Insufficient open space.

Problems And Challenges Of Cities

Rich & poor gap

Open space

Transnational
organized crime

Health issues

Clean water
& food

Democratisation

Transportation



Sustainable development
& climate change

Energy & environment

Gender equity

Peace & conflict

Population
& resources

Science
& technology

Global ethics

Global foresight
& decision making

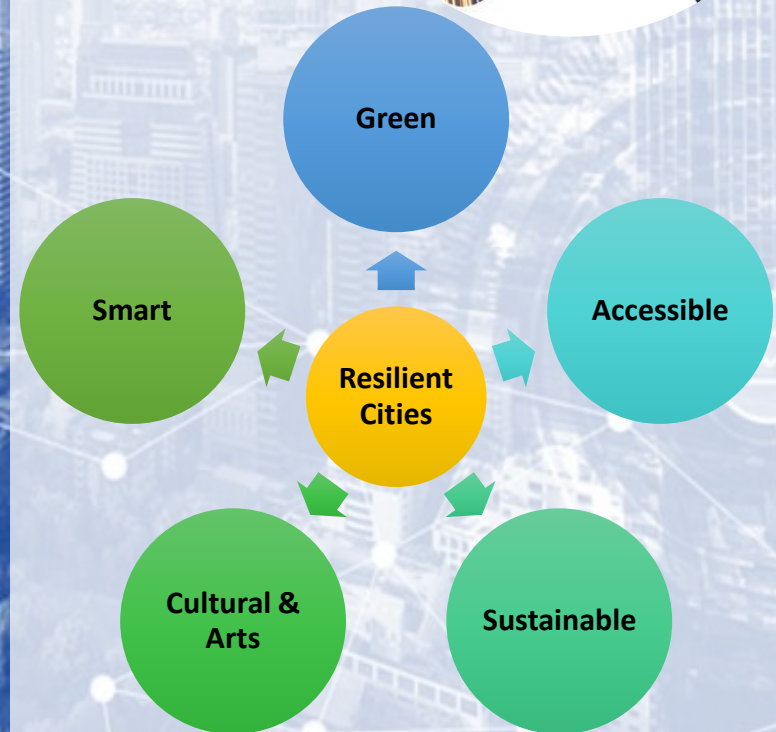
WHAT IS RESILIENT CITY

Definition Of Resilient

Able to recoil or spring back into shape after bending, stretching or being compressed

“A Resilient City is one that has developed capacities to help absorb future shocks and stresses to its social, economic, and technical systems and infrastructures so as to still be able to maintain essentially the same functions, structures, systems, and identity within short times.”

The Challenges For Cities to Be Resilient

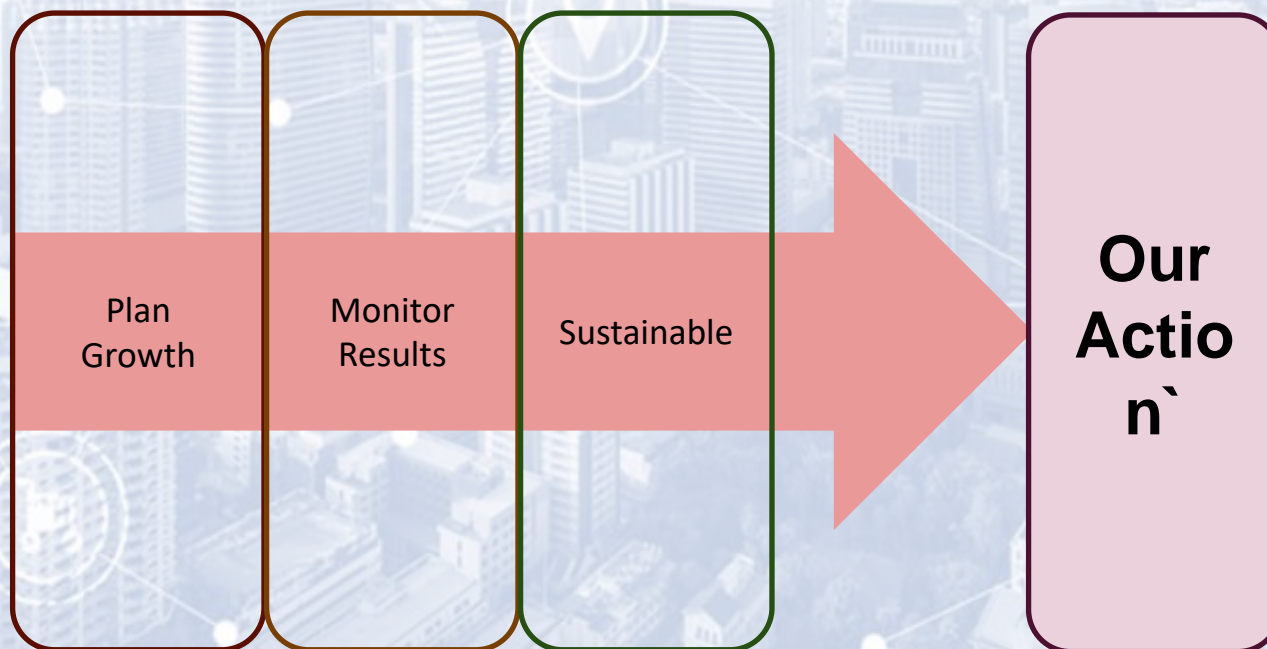
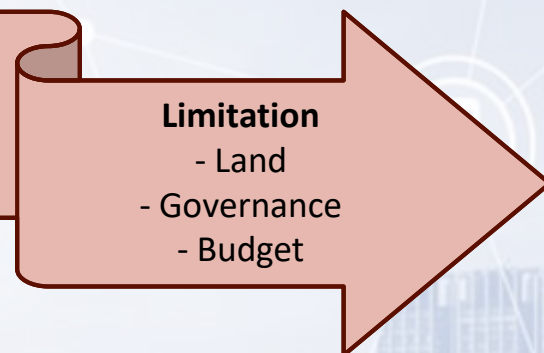
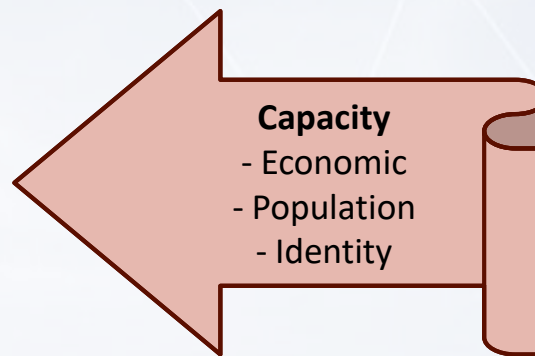




- Prioritize the activities
- Plan the best time

STRATEGIES

- Protect the assets
- Provide the growth



4 Relation Keys To The Future Resilient

1.

Population
Growth

2.

Urbanization

3.

Unpredictable
National
Patterns

4.

Control
Resources

8 Steps To Make Our Cities Resilient

1.

Know your end
result.

2.

Attract population.

3.

Improve
community.

4.

Utilize innovation
and creative
technology.

5.

Capitalize on green
sustainable
initiative.

6.

More across
agencies and
boundaries for
both administrative
and physical.

7.

Action.

8.

Fast completion.

What To Do Next?

Prioritize

Plan

Protect

Provide

City

Vibrant

Vitality

Value

Variety

The City Resilience Framework



7 Qualities of City Resilience

1. Reflectiveness	ability to learn from the past and act in times of crisis
2. Resourcefulness	able to recognise alternative ways to use resources at times of crisis in order to meet their needs or achieve their goals
3. Robustness	qualities that help to conceive systems and assets that can withstand shocks and stresses
4. Redundancy	spare capacity purposively created to accommodate disruption due to extreme pressures
5. Flexibility	willingness and ability to adopt alternative strategies in response to changing circumstances or sudden crises
6. Inclusiveness	need for broad consultation and 'many seats at the table' to create a sense of shared ownership or a joint vision to build city resilience
7. Integration	processes bring together systems and institutions and can also catalyze additional benefits as resources



Source: UNDESA



WHAT IS SMART CITIES

SMART CITY FRAMEWORK

S
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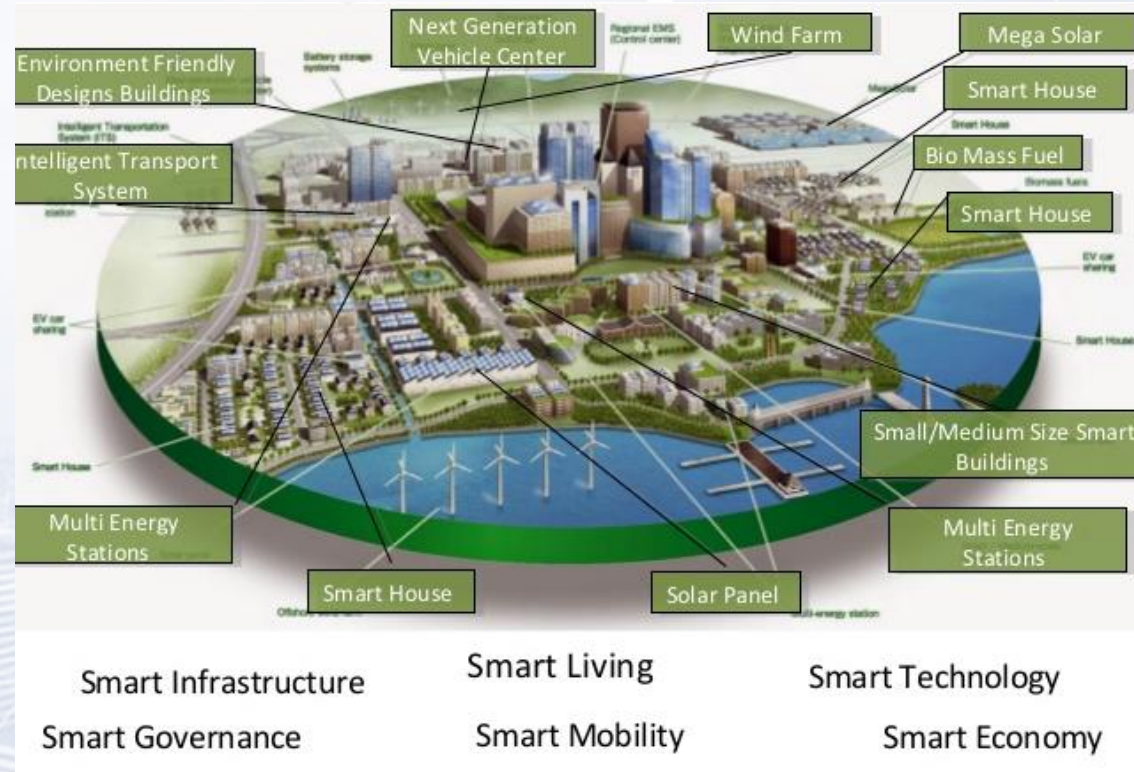
SYSTEM (SENSOR)

MONITOR

ANALYSIS

RECONFIGURE

THINKING (RE-THINK)



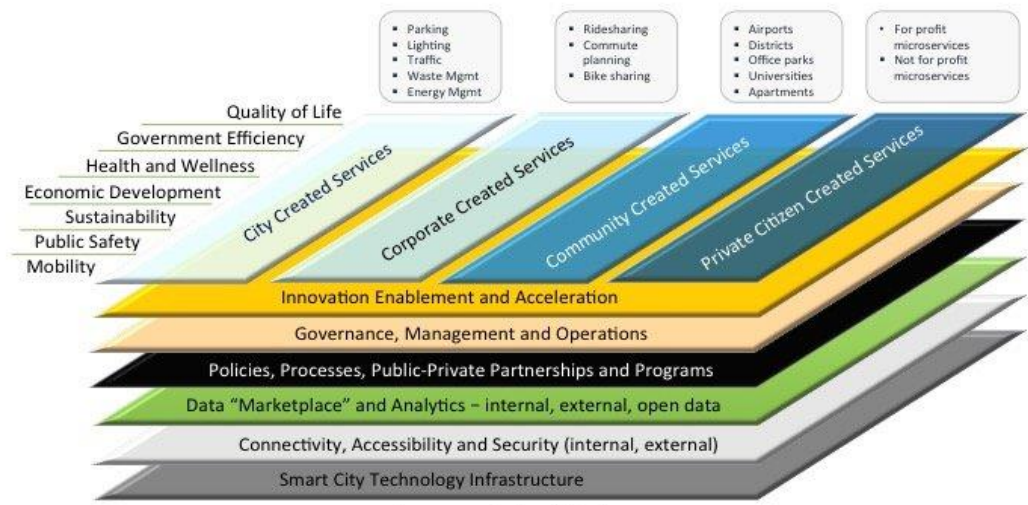
“

A **smart city** is a designation given to a **city** that incorporates information and communication technologies (ICT) to enhance the quality and performance of urban services such as energy, transportation and utilities in order to reduce resource consumption, wastage and overall costs.

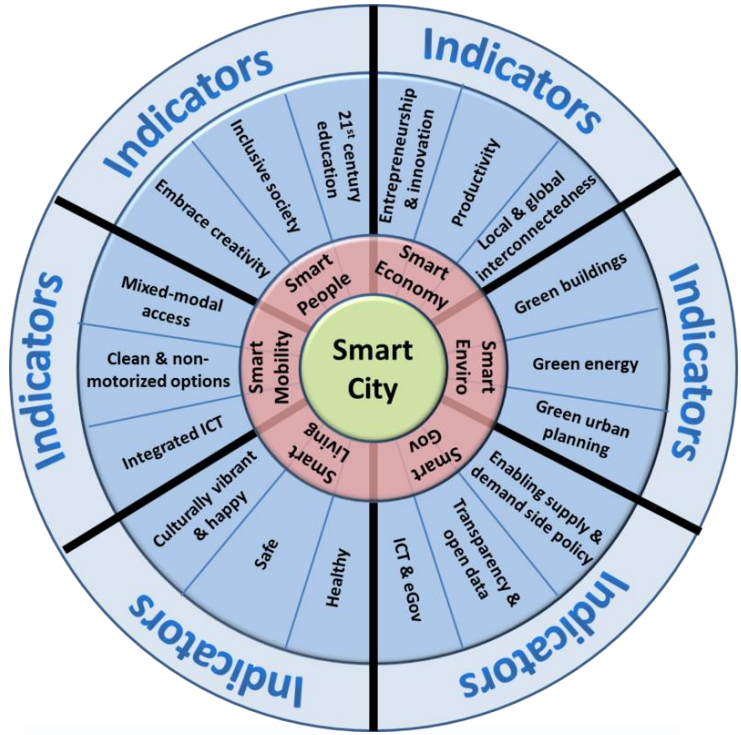
Smart cities are responsive, intelligent, connected and sustainable. They're made up of four main **components**, and without all four, you can't have a **smart city**.

”

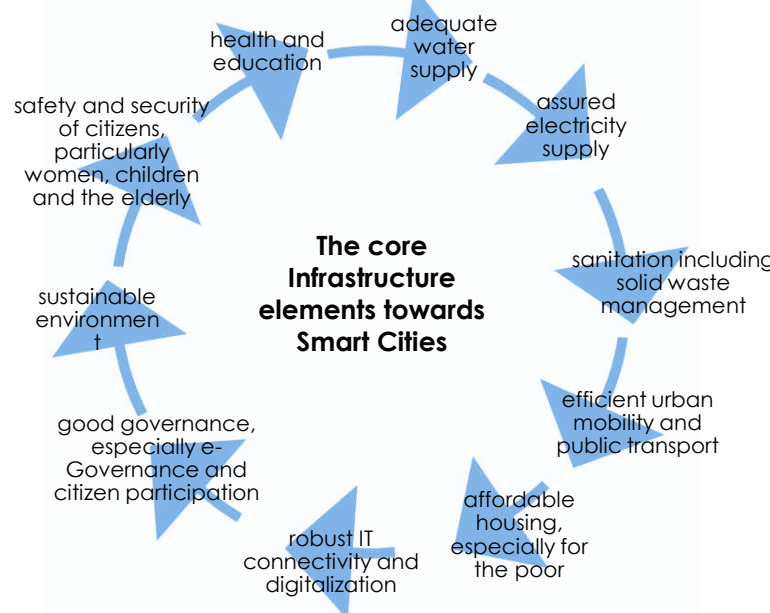
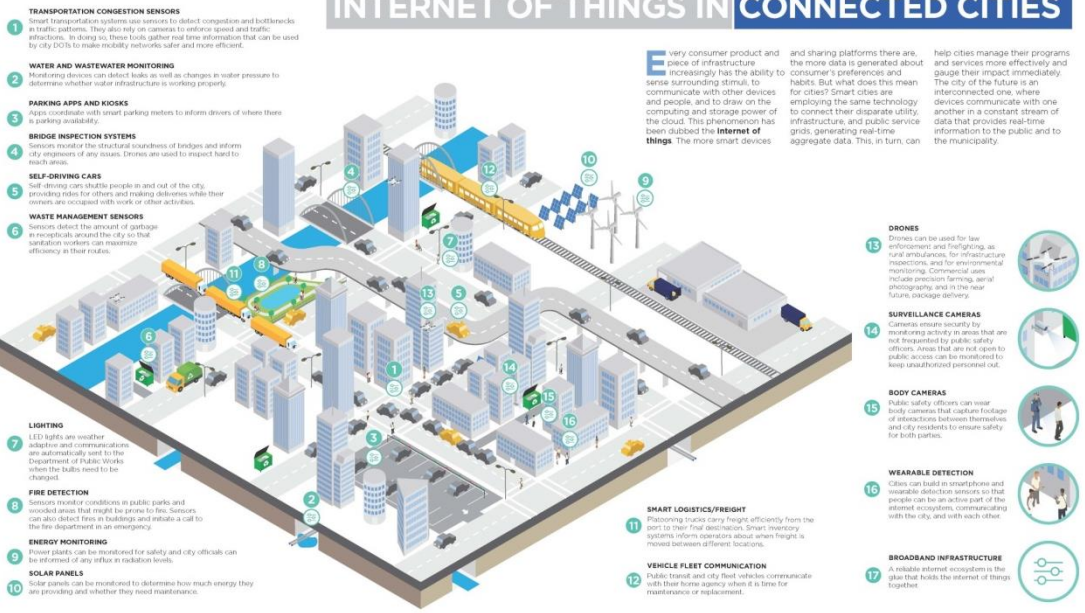
ELEMENTS OF SMART CITY



Source: www.StrategyofThings.io



INTERNET OF THINGS IN CONNECTED CITIES



THE COMMUNITY-BASED URBAN SPATIAL STRATEGY FOR EPIDEMIC PREVENTION

1. Taking Epidemic Prevention Area (EPA) as the basic function-spatial unit for treatment, meeting the needs of different stages of epidemic
 - Initial Outbreak
 - Outbreak Stage
 - Spread of the Epidemic Stage
2. EPA Cluster
3. Urban Management and Control
4. Support system—transportation, public facilities, logistics supply and other infrastructure

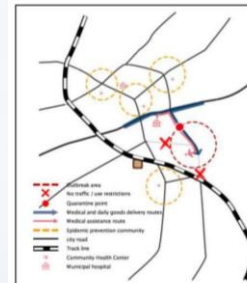


Fig.14:epidemic Prevention Area (EPA) - Management and control diagram
Source: Self-made

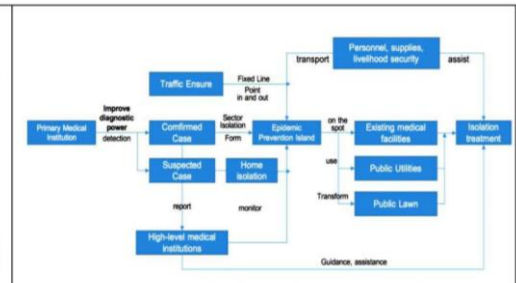


Fig.15: Flow chart of basic epidemic prevention unit measures
Source: Self-made

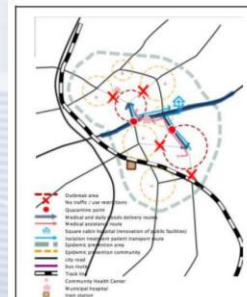


Fig.16:epidemic Prevention Area (EPA) Group - Management and control diagram
Source: Self-made

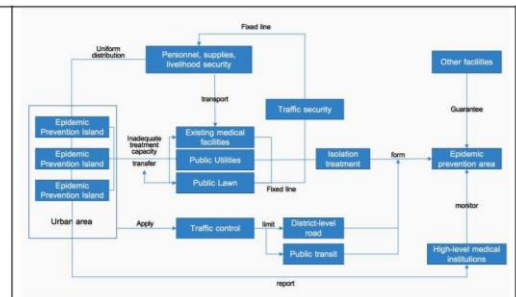


Fig.17: Flow chart of basic epidemic Prevention Area (EPA) Group measures
Source: Self-made



Fig.18:Urban management and control diagram
Source: Self-made

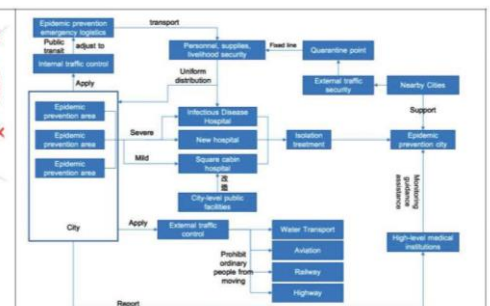


Fig.19: Flowchart of urban control measures
Source: Self-made

RECONSTRUCTION OF URBAN PUBLIC SERVICE SYSTEM

The urban public service is used as a back up and support system for medical facilities in epidemics. Some large public facilities should be capable of quickly transformed in to temporary medical treatment points that meet the admission and treatment criteria. Various markets should keep open for the daily lives of residents in each EPA area under the condition of eliminating the virus influence and control customer scale; hostels, hotels, etc. can be used as floating population or medical staff temporary residence.

1 Building cabin hospitals.

2 Using of public space and facilities.

3 Keep children and young people safe.

4 Improving urban rescue capabilities.

5 Strengthen urban ware housing and logistics facilities.

6 Strengthen the observation and protection of community care institutions.

AN URBAN PUBLIC SECURITY SYSTEM SERVING FOR PEOPLE

1

SYSTEMATIC

- Smart City
- Governance

2

RELIABILITY

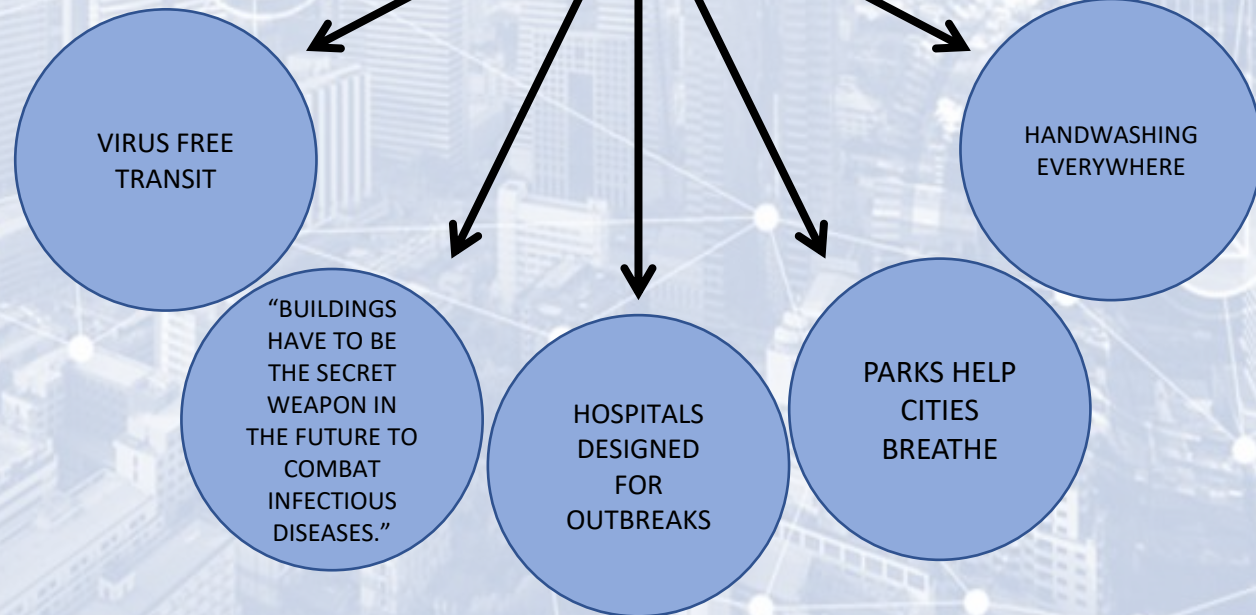
- Resilience
- Urban Design

3

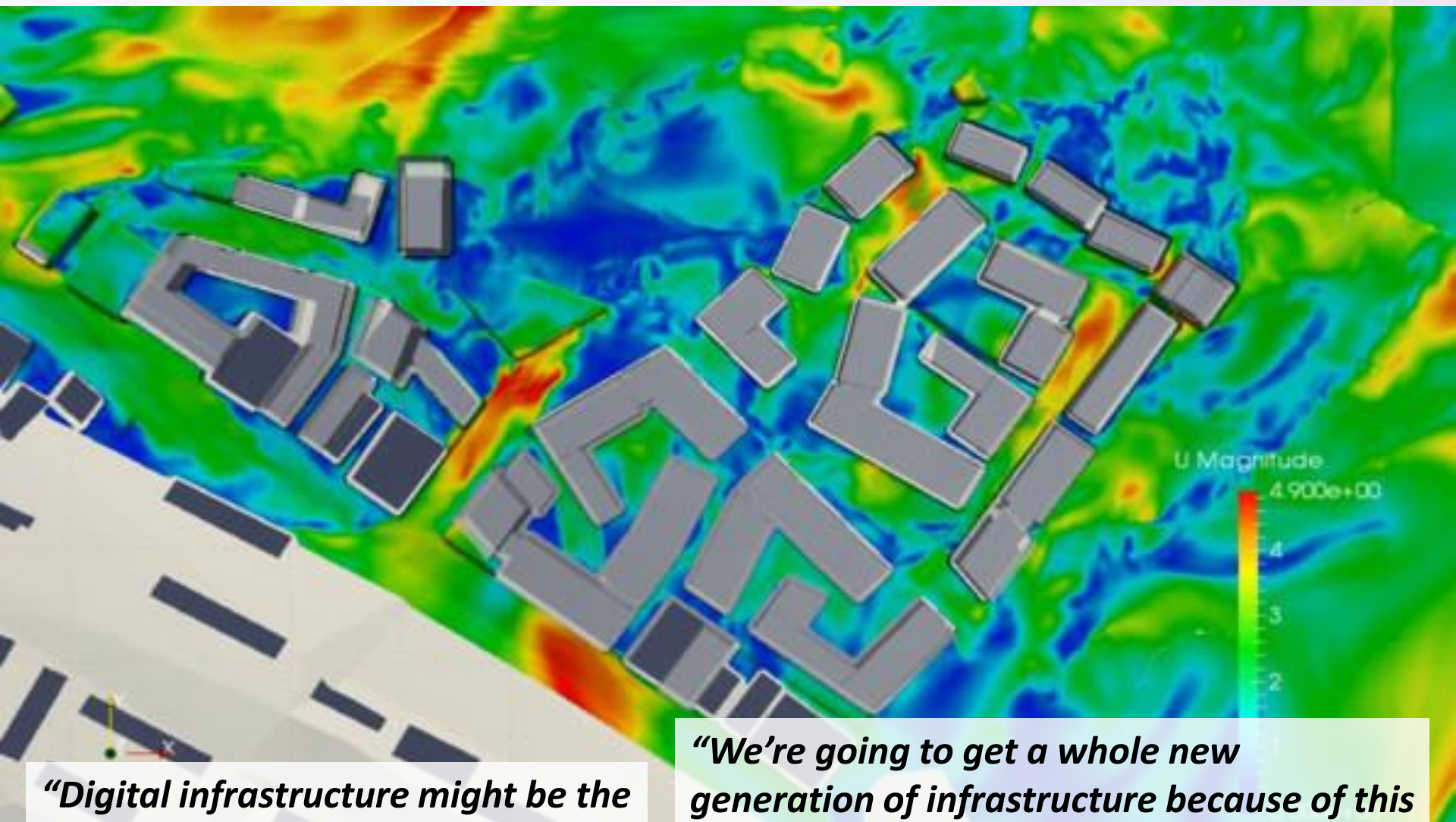
DURABILITY

- Healthy City
- Sustainable

HOW WE CAN REDESIGN CITIES TO FIGHT FUTURE PANDEMICS

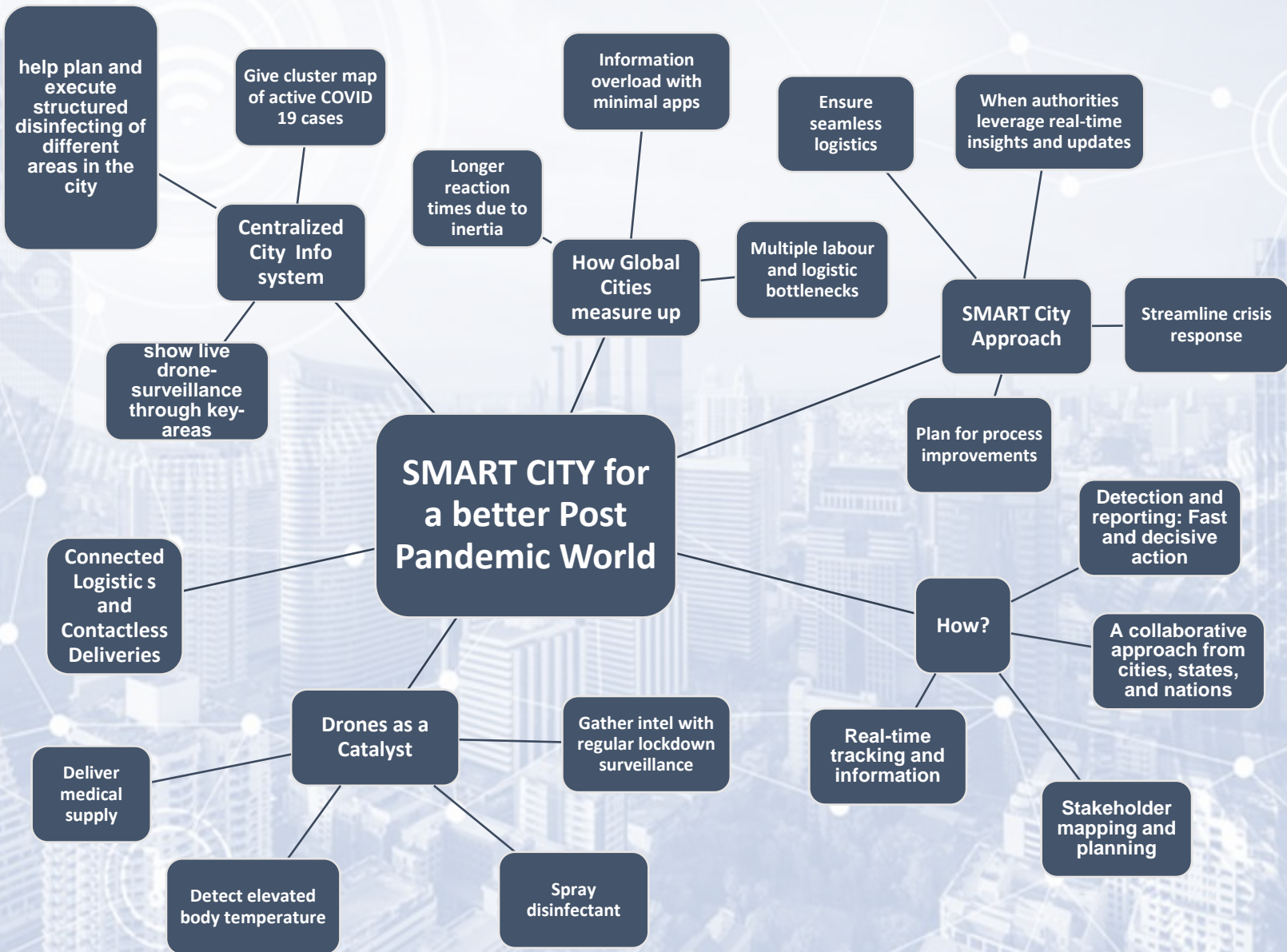


A heat map analyzing the ventilation between urban buildings.

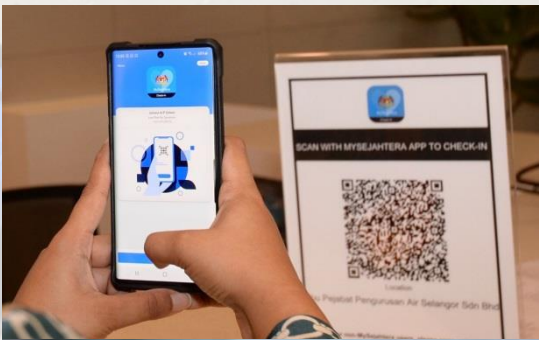


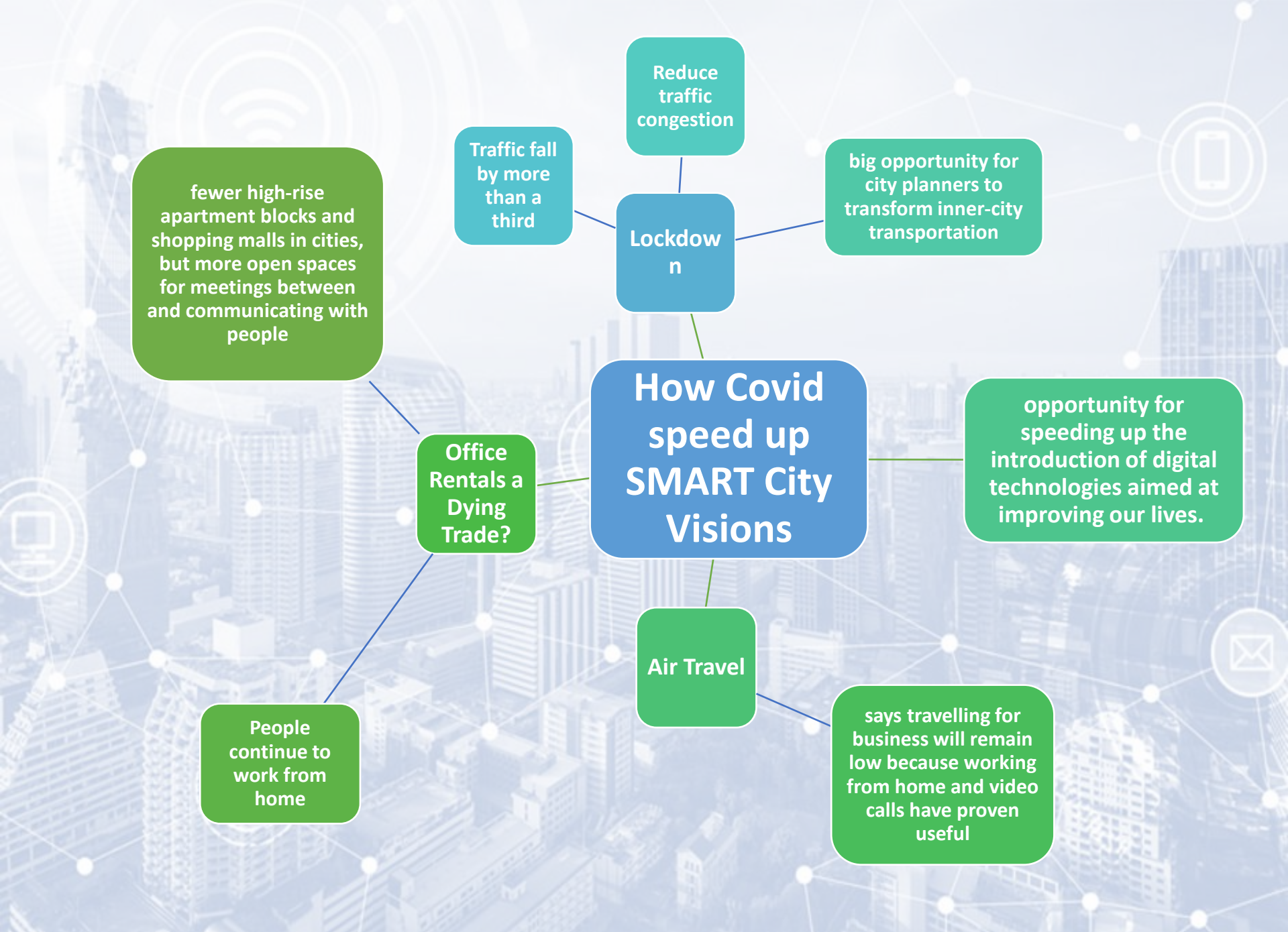
“Digital infrastructure might be the sanitation of our time.”

“We’re going to get a whole new generation of infrastructure because of this pandemic, and we have to do it better than last generation.”



My Sejahtera





fewer high-rise apartment blocks and shopping malls in cities, but more open spaces for meetings between and communicating with people

Traffic fall by more than a third

Reduce traffic congestion

big opportunity for city planners to transform inner-city transportation

Lockdown n

How Covid speed up SMART City Visions

opportunity for speeding up the introduction of digital technologies aimed at improving our lives.

Office Rentals a Dying Trade?

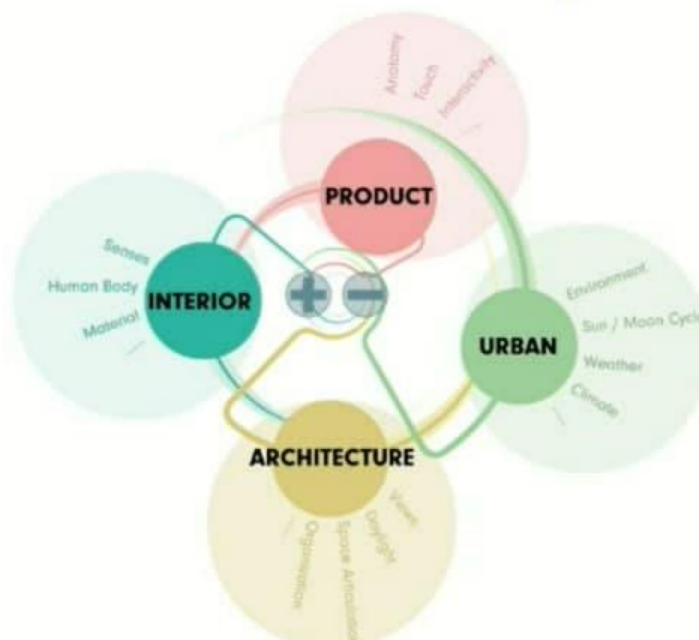
People continue to work from home

Air Travel

says travelling for business will remain low because working from home and video calls have proven useful

LIVE

WAFVirtual
30 Nov - 4 Dec 2020



Integral approach to healthy design

Linking scales and parameters

Founder Partner



Headline Partners



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LIVE

WAFVirtual
30 Nov-4 Dec 2020



Open and Welcoming
Connecting
Organizational overview
Sharing knowledge
Serendipitous encounters

Community



Performance

Choice
Diversity
Performance
Focus spaces
Activity spaces

Sustainability

Improve the Destination
Public interface
Smart Building
PV on roof
Compact Volume
Flexibility
Energy saving

Health

Biophilic design
Natural Daylight
Thermal Comfort
Physical Movement
Outdoor spaces

Founder Partner



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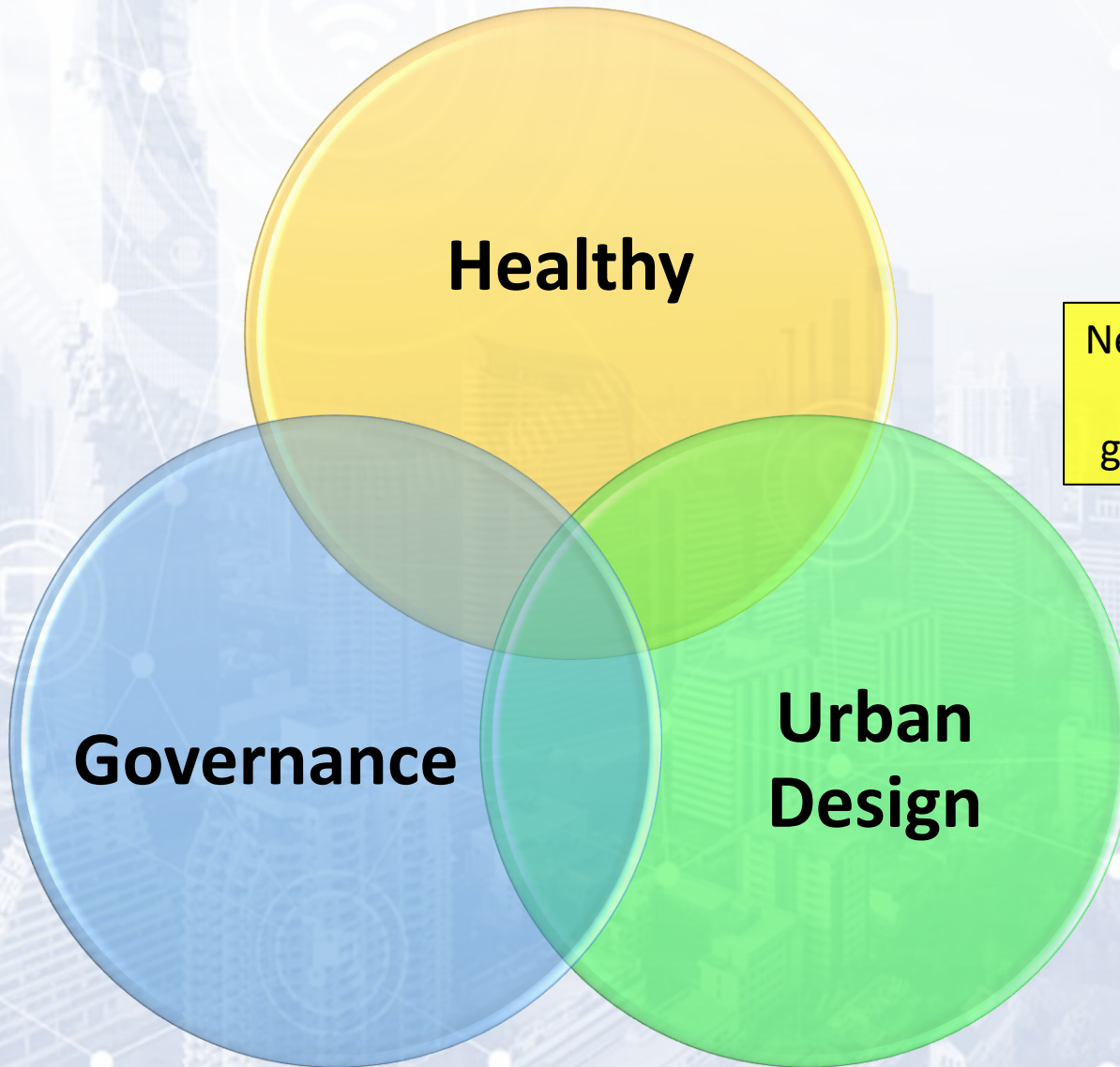


Urban Design Protocol

To create productive, sustainable and liveable places for people through leadership and the integration of design excellence

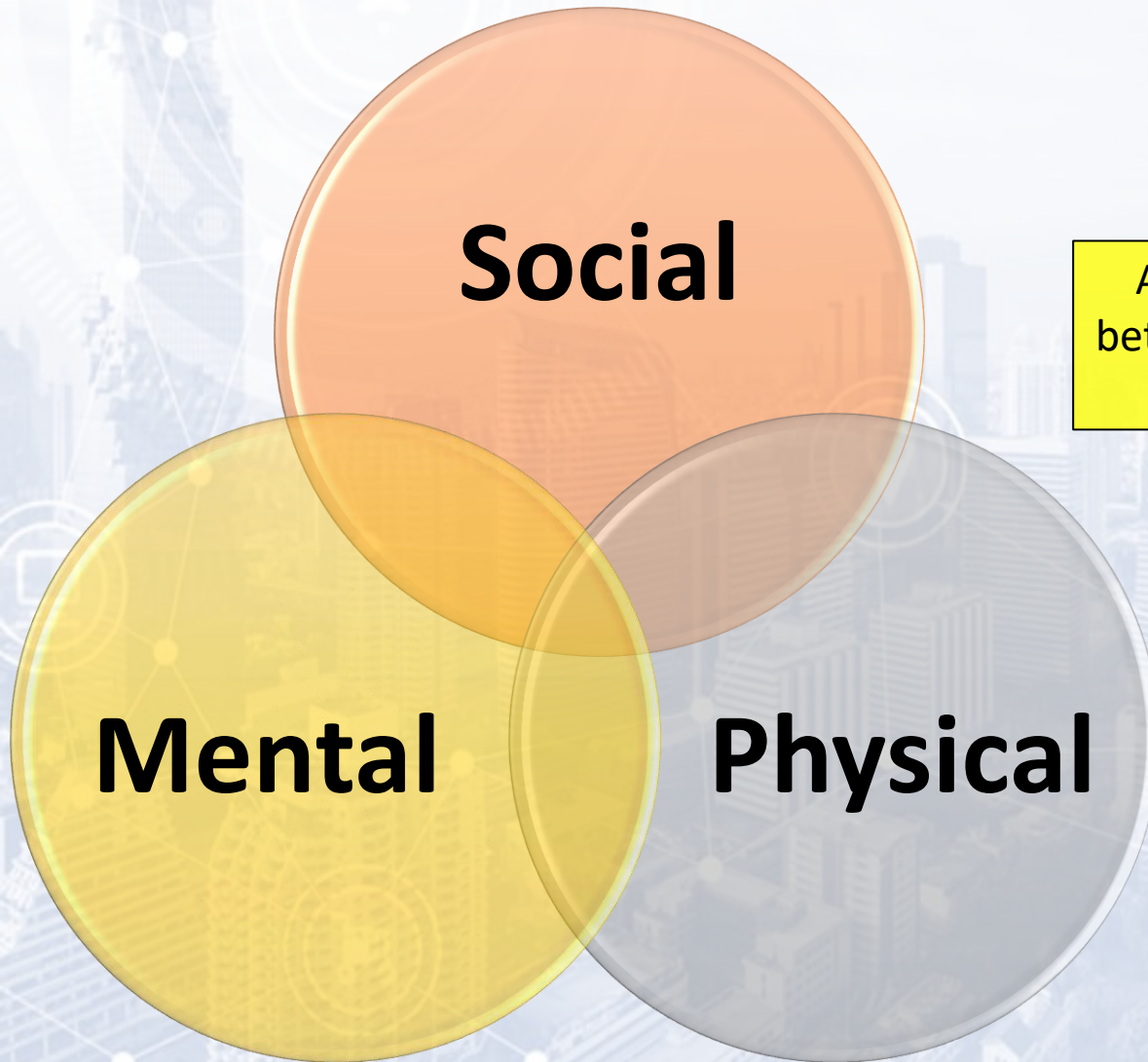


Enhance a Tripartite Balance



Need a bold set of interrelated moves that transcend from governance and urban design

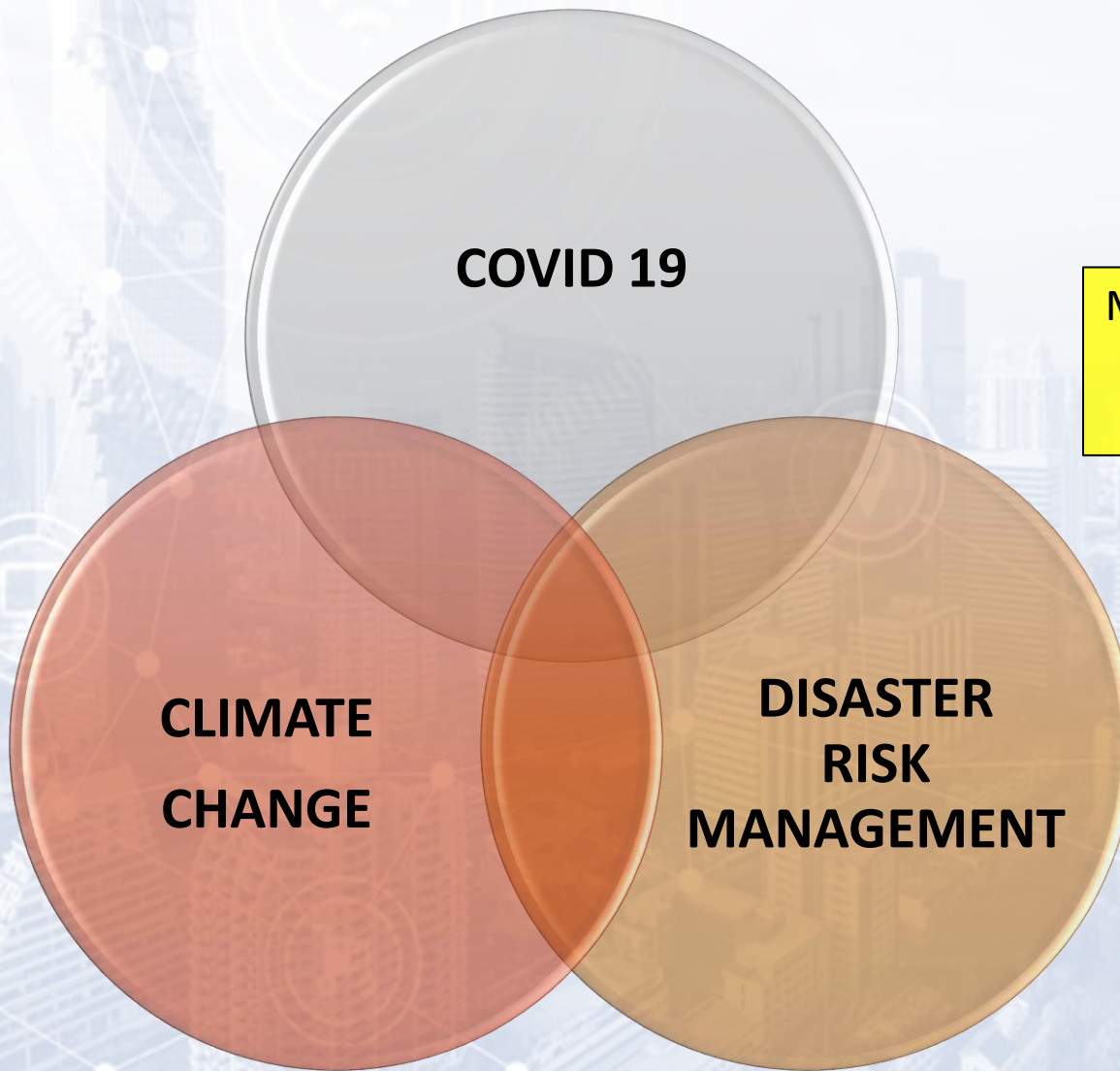
Enhance a Tripartite Balance



Another balance is the tripartite between Social, Mental and Physical Surroundings

Seamless separation between Rural and Urban that will result with **Rurban**

New Consideration



Matters that need to be consider
In cities,
as new normal



Q&A Sessions



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Thank You