



Implementing SDGs in Smart Cities Beyond Digital Tools

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United Nations World
Geospatial Information Congress

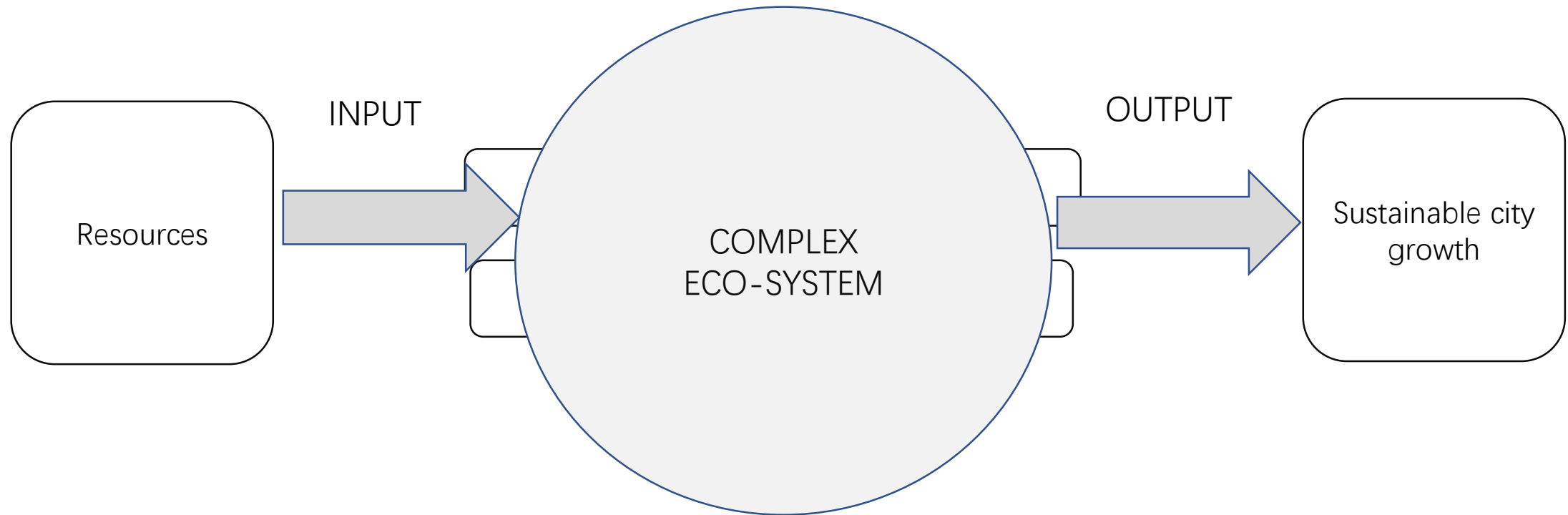
*“Today, 7.3 billion people in the world.
World population projected to reach 9.8 billion in 2050,
and 11.2 billion in 2100.*

*Today, 55% of the world’s population in urban areas,
68% of the world population projected to live in urban areas in 2050.”*

-- by the UN Department of Public Information



City as an eco-system



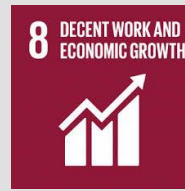
SDGs



Higher-level targets



Industrialization goals

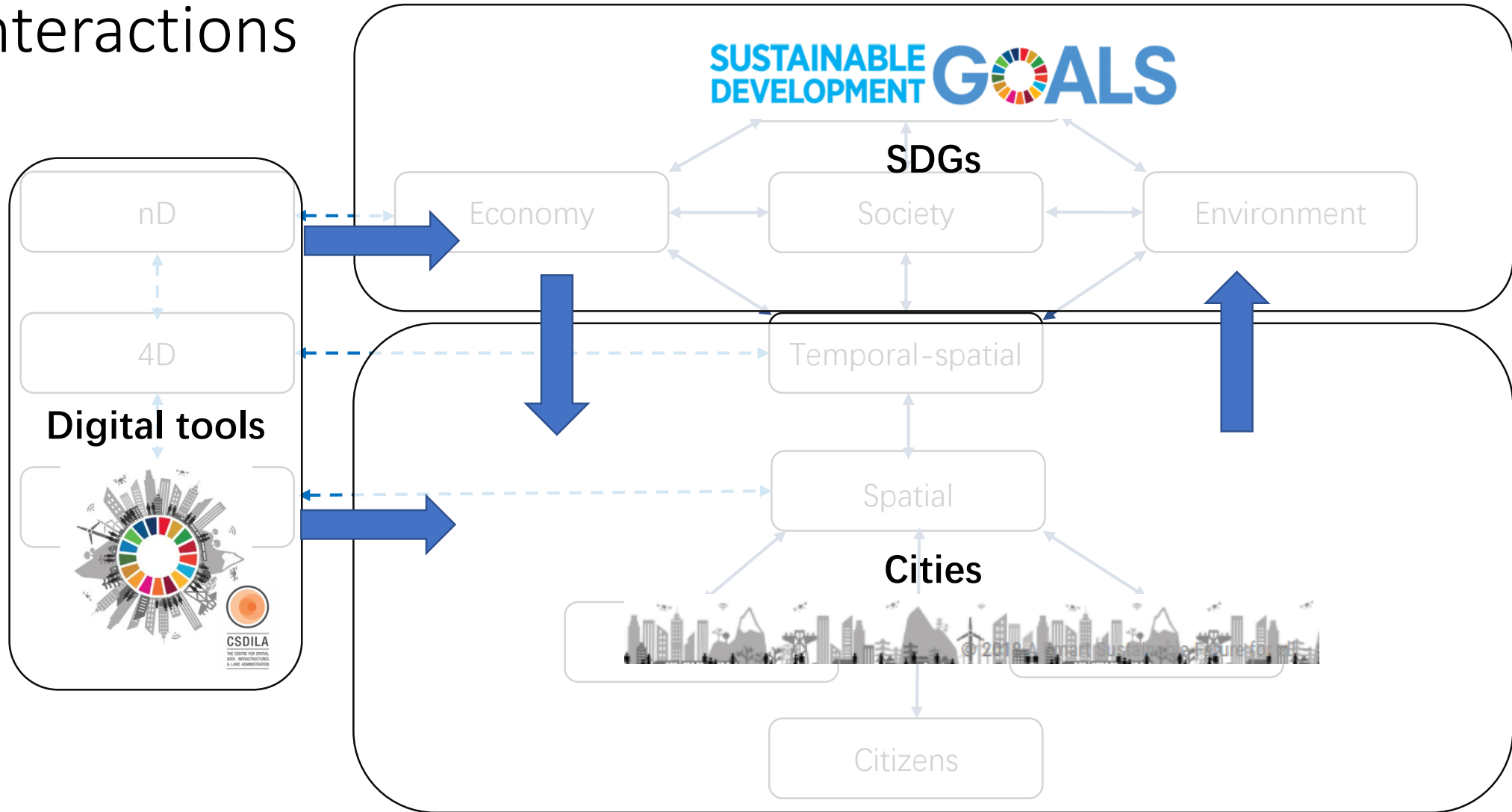


--Goals to be accomplished in cities

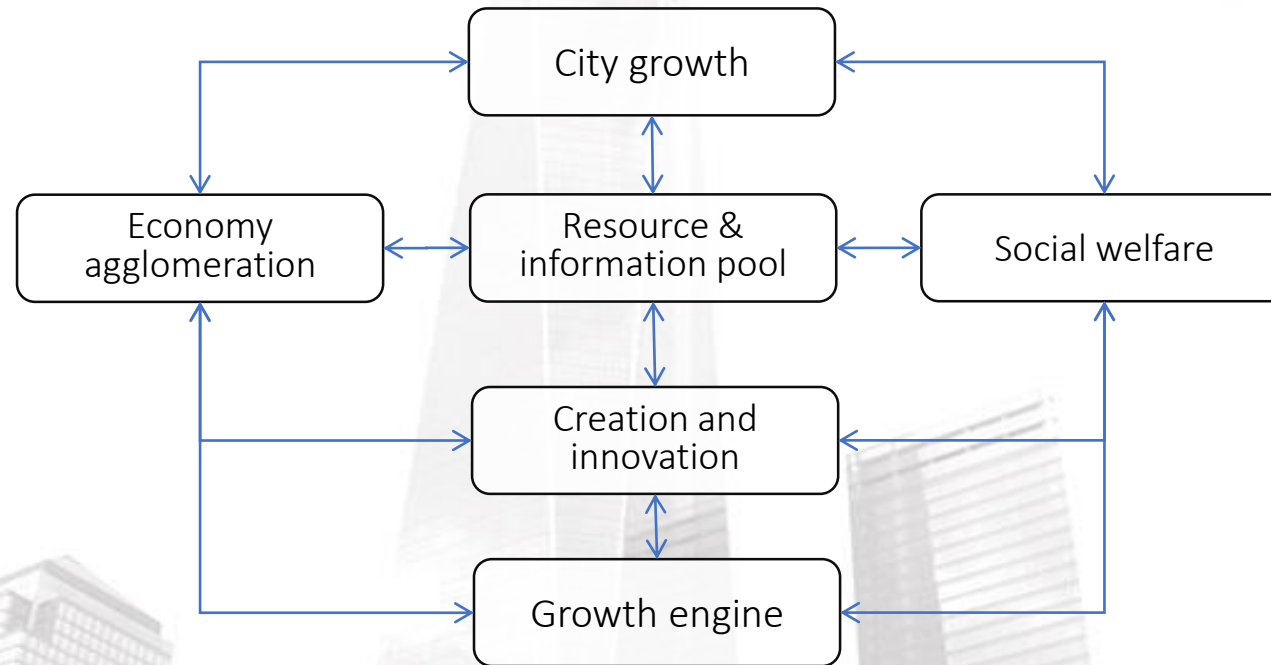
Ecological balance and well-being goals



Interactions



Growth mechanism

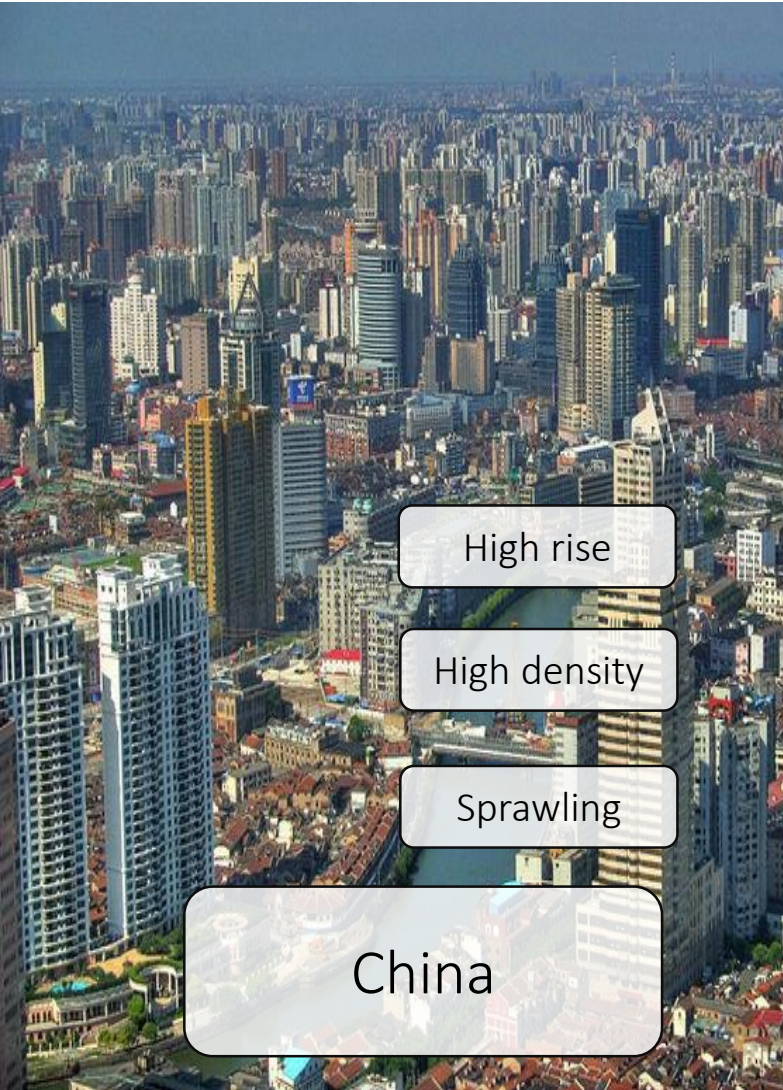


Global challenges



Pictures from newsletters in Google

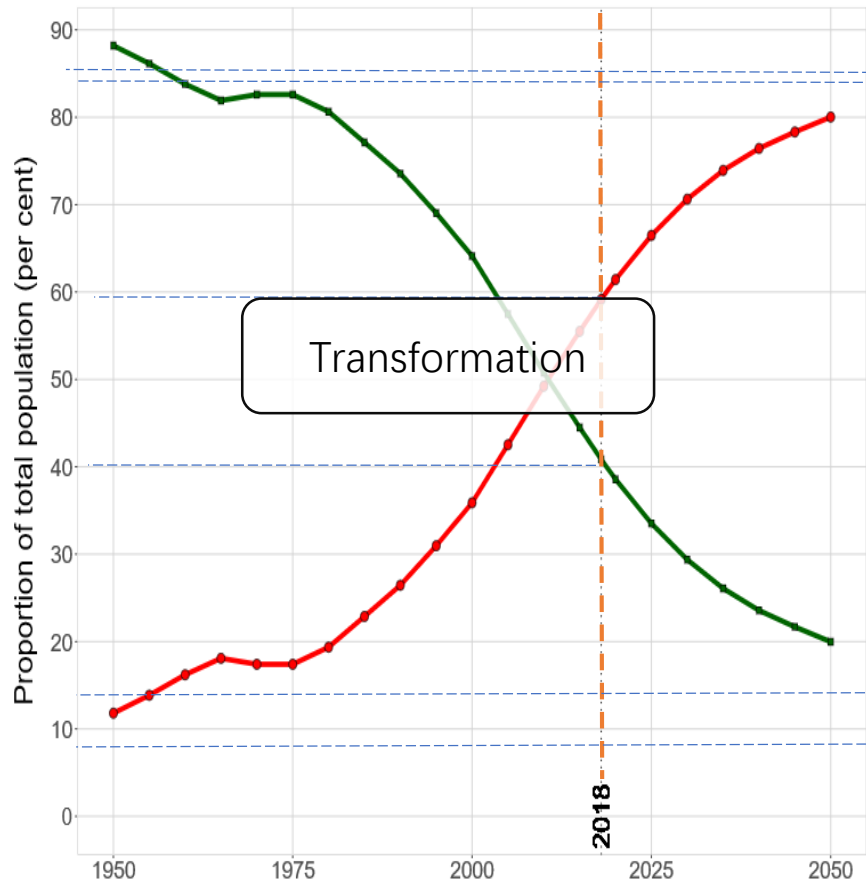
Local challenges



Percentage of population in urban and rural areas

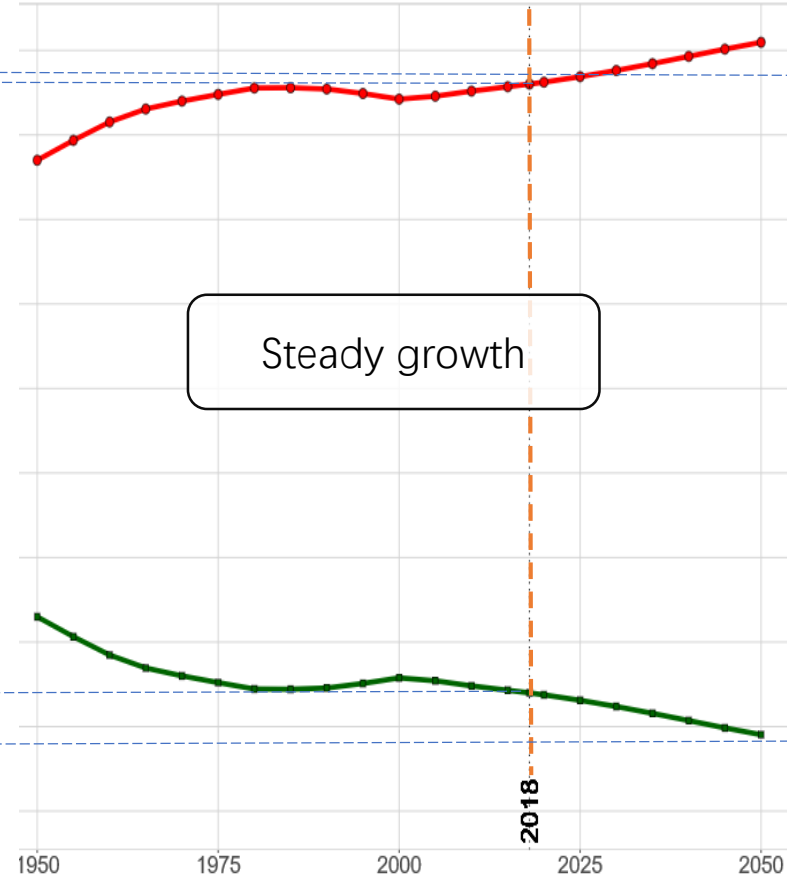
China

Urban Rural



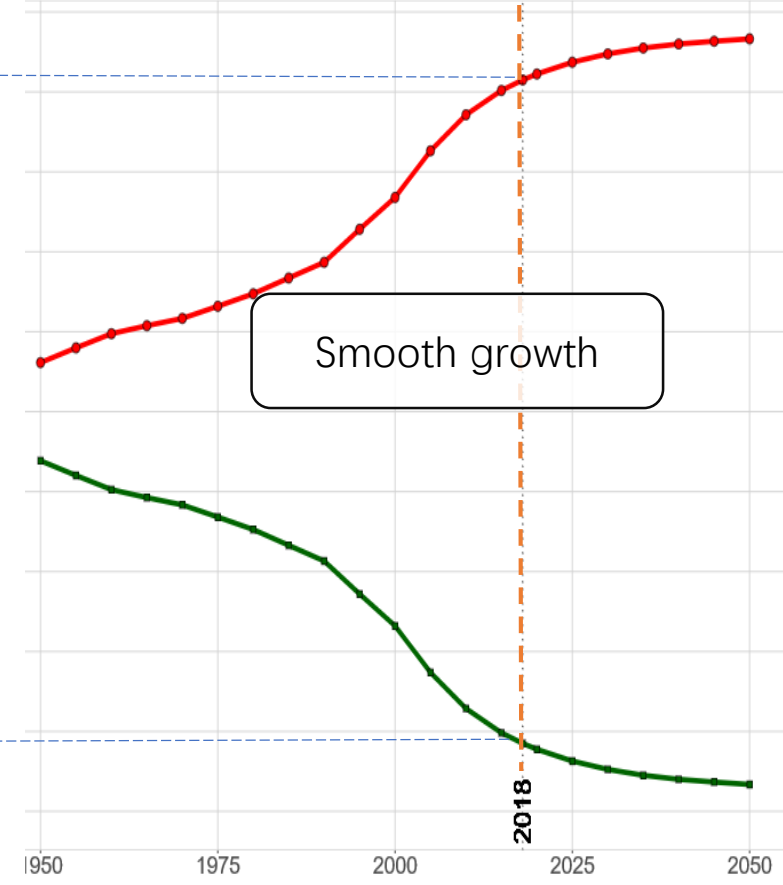
Australia

Urban Rural



Netherlands

Urban Rural

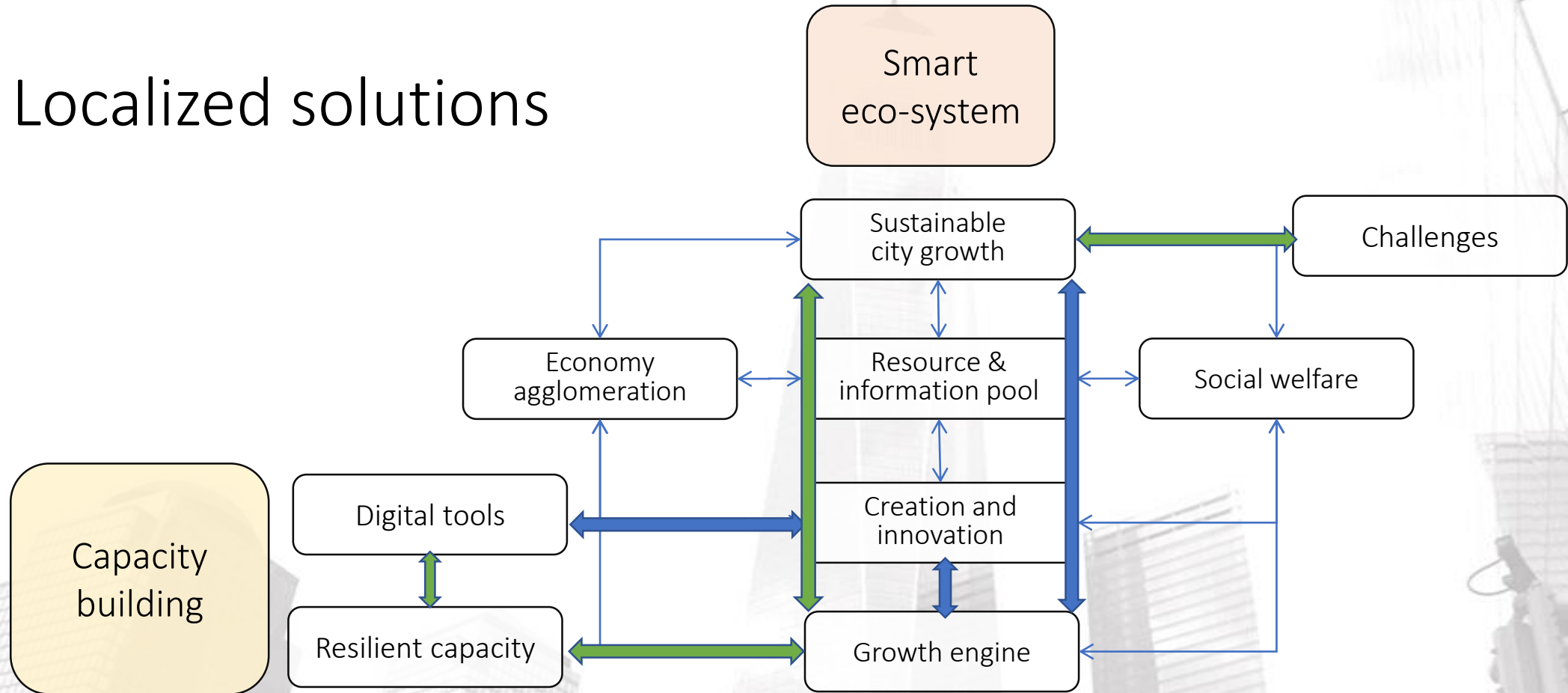


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Note: Urban and rural population in the current country or area as a percentage of the total population, 1950 to 2050.

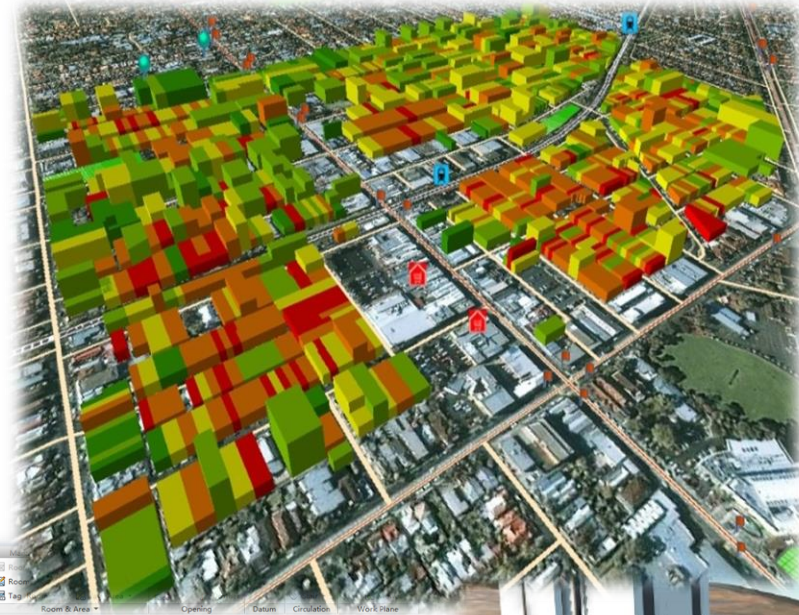


Localized solutions

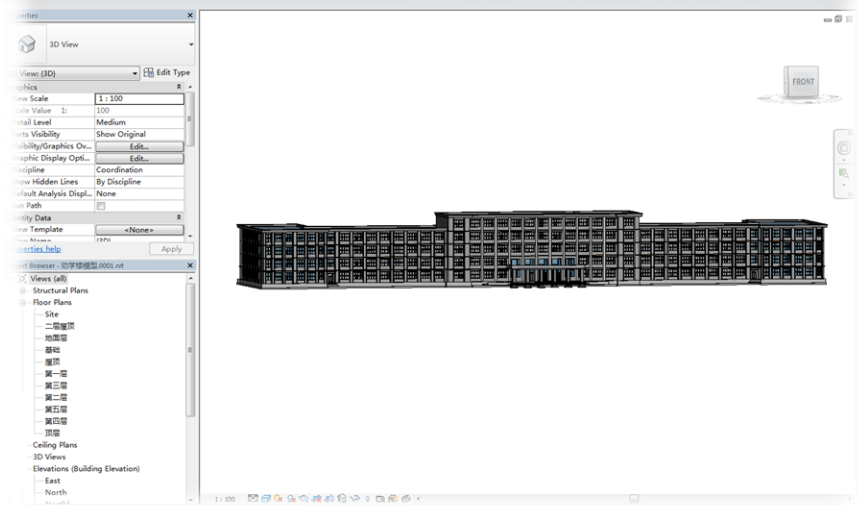


Cities have to become smarter to form the technological edge so that they build the resilient capacity to maintain the sustainability of eco-system.

Research facilitated by digital tools



CSDILA
THE CENTRE FOR SPATIAL
DATA INFRASTRUCTURES
& LAND ADMINISTRATION



Zhixuan (Jenny) Yang with the team
(2014-2016)

Back to smart cities

*“A smart city is a **multi-agent ecosystem** comprised of kinds of **societal actors** like public sectors, private companies, non-profit organizations, and citizens; it also represents a **multidisciplinary field** constantly shaped by **advancements in technology and urban development** “(Angelidou, 2015).*

Integration

Inclusiveness

Retrofitting

Cloud

Participation

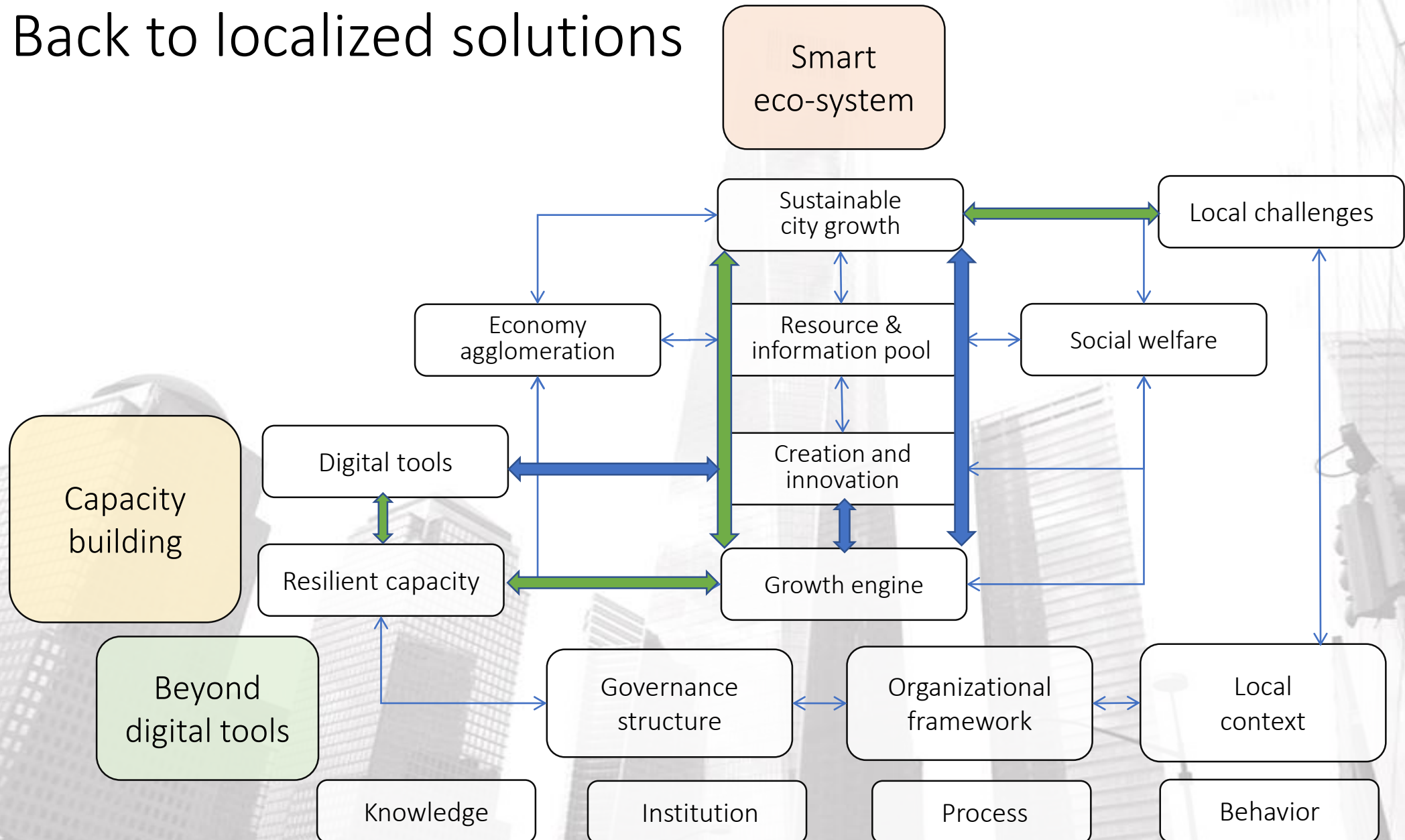
Flexibility

Resilience

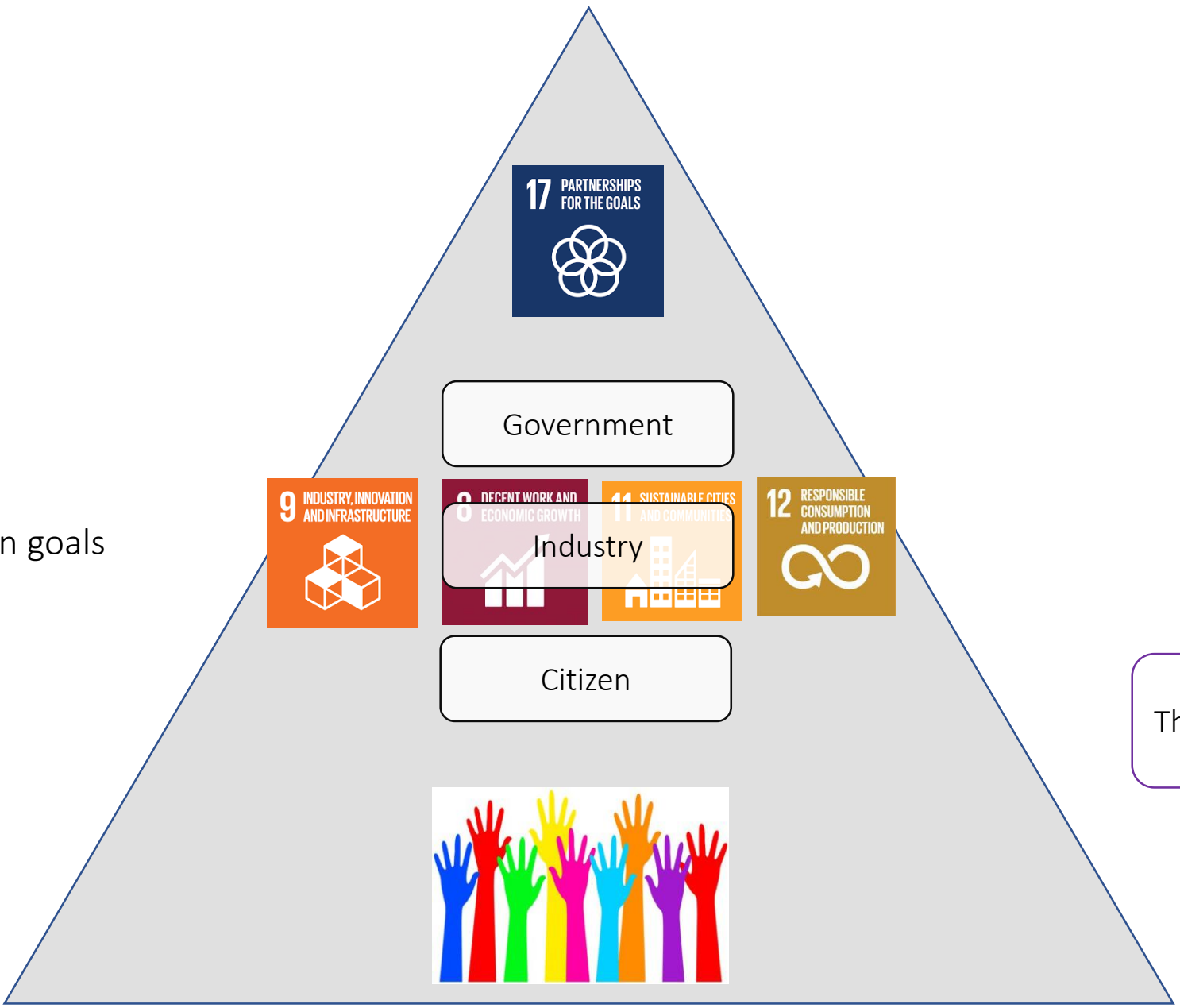
ICT

*“The smart city is so different in essence to the twentieth century city that the **governance models and organizational frameworks** themselves must evolve” (Arup, 2010).*

Back to localized solutions

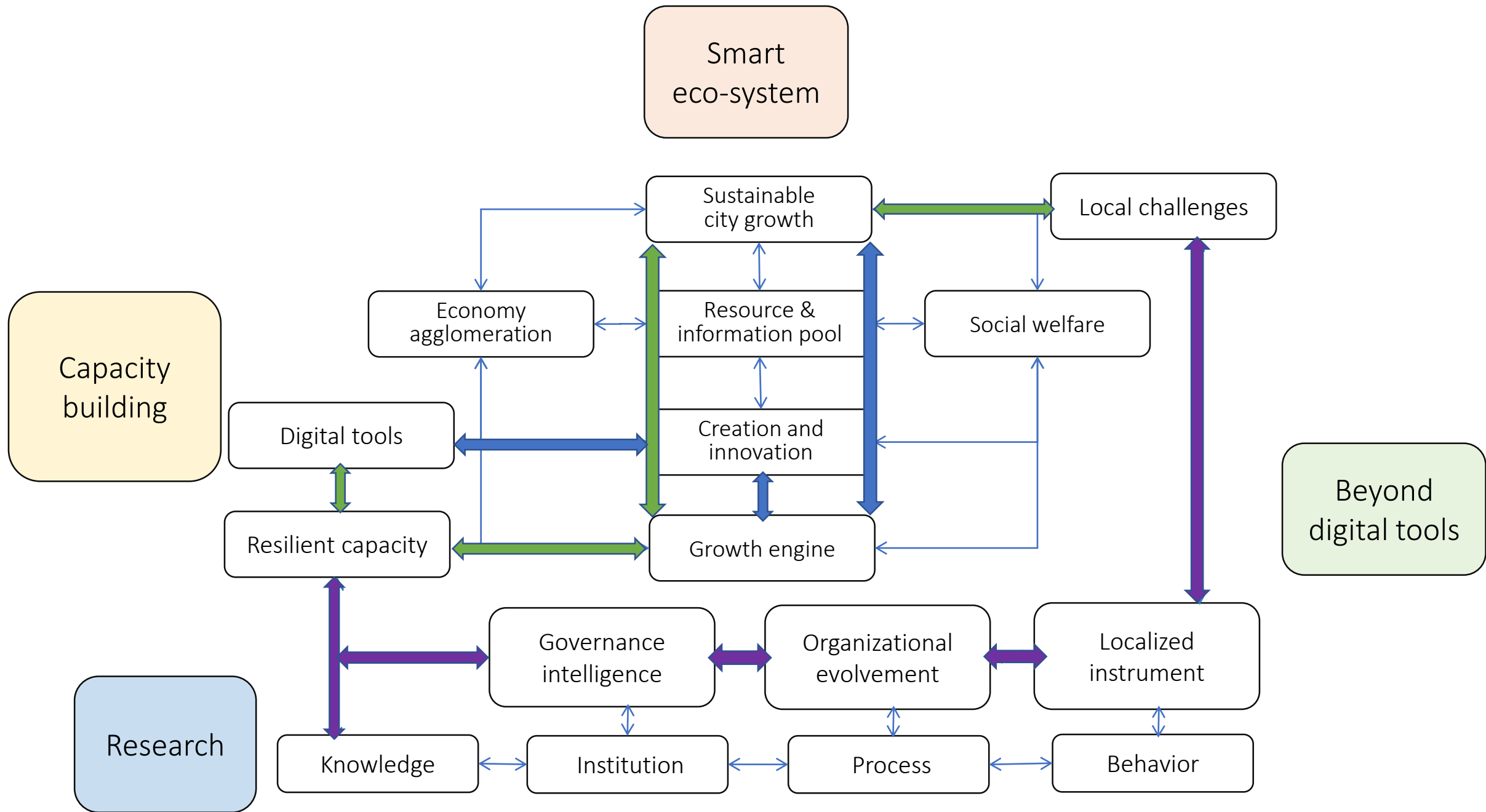


Industrialization goals

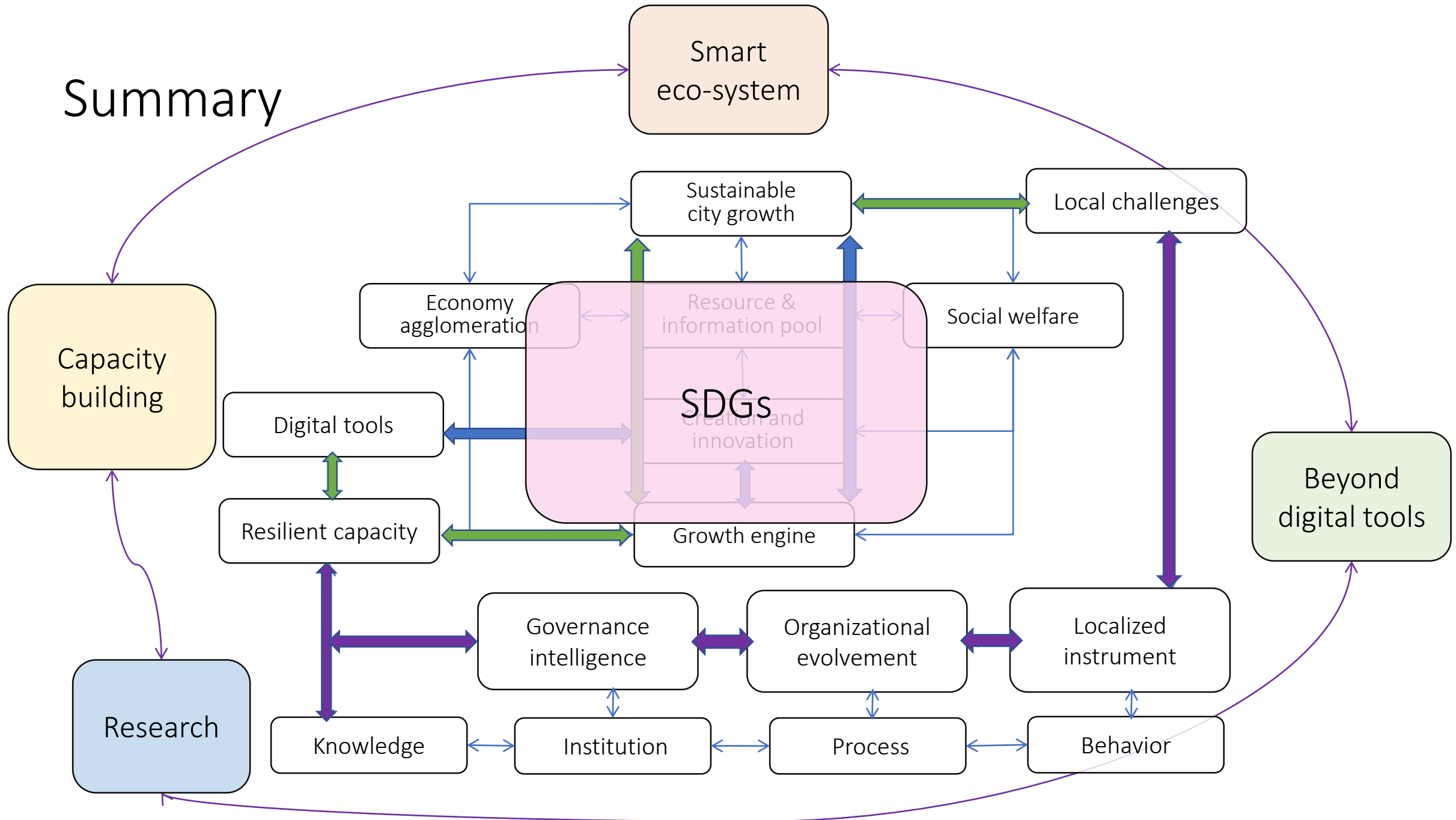


The puzzle of local solutions





Summary



Take away message

*“The capacity building of implementing SDGs
in smart cities should be addressed
emphasizing the importance of governance
intelligence, organizational evolution and
localized instrument on the basis of digital
advancements.”*

Thank you.

--Zhixuan (Jenny) Yang
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