

Development of the Smart City Framework: Key Challenges and Opportunities

Prof. Suhono Harso Supangkat

sccic

Smart City & Community Innovation Center
Institut Teknologi Bandung

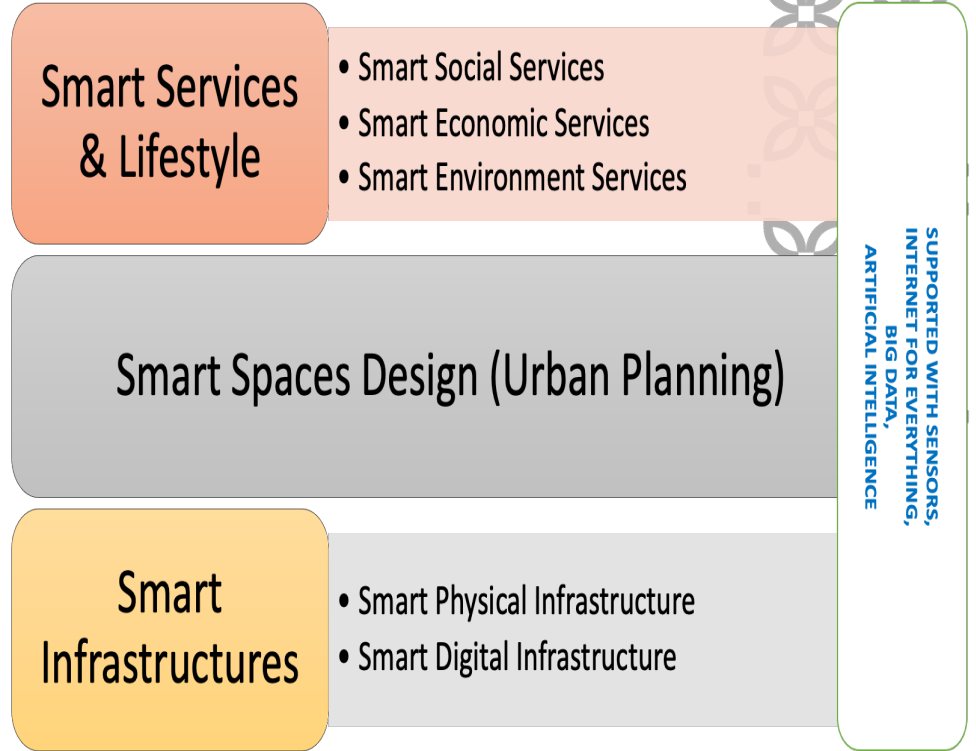
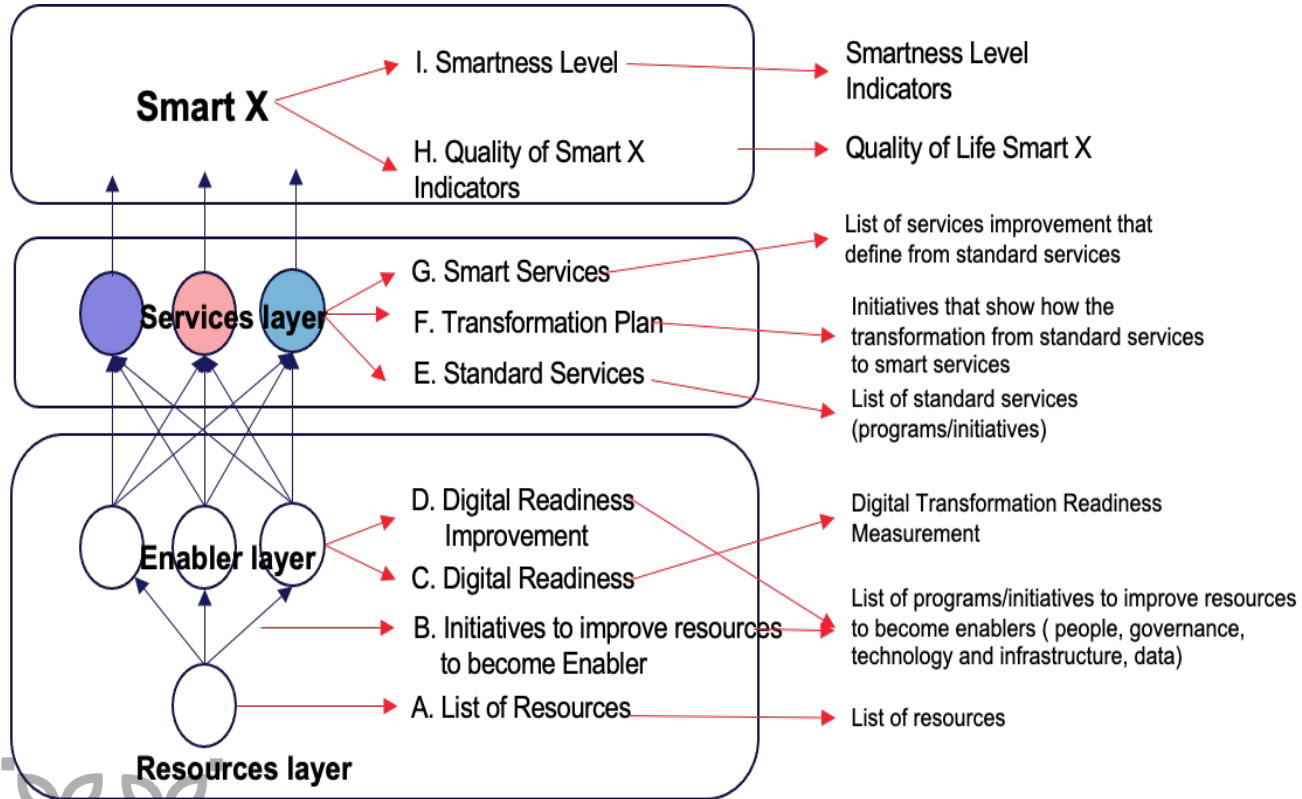
Smart City Definition

Smart City is a city that can **utilize its resources effectively and efficiently** to solve any city challenges **using *smart solution*** by providing infrastructures and deliver city services to improve Quality of Life.

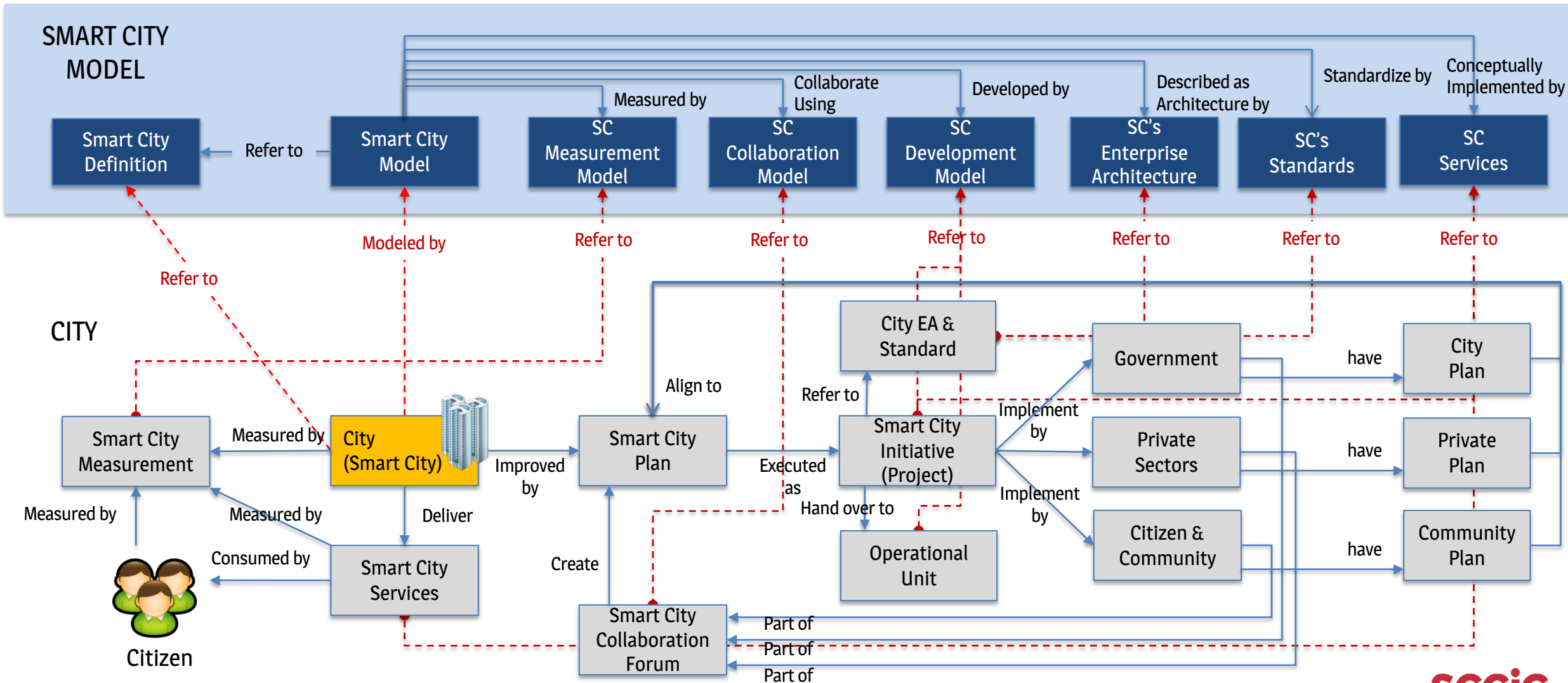




smartness X



Smart City Framework 4.0

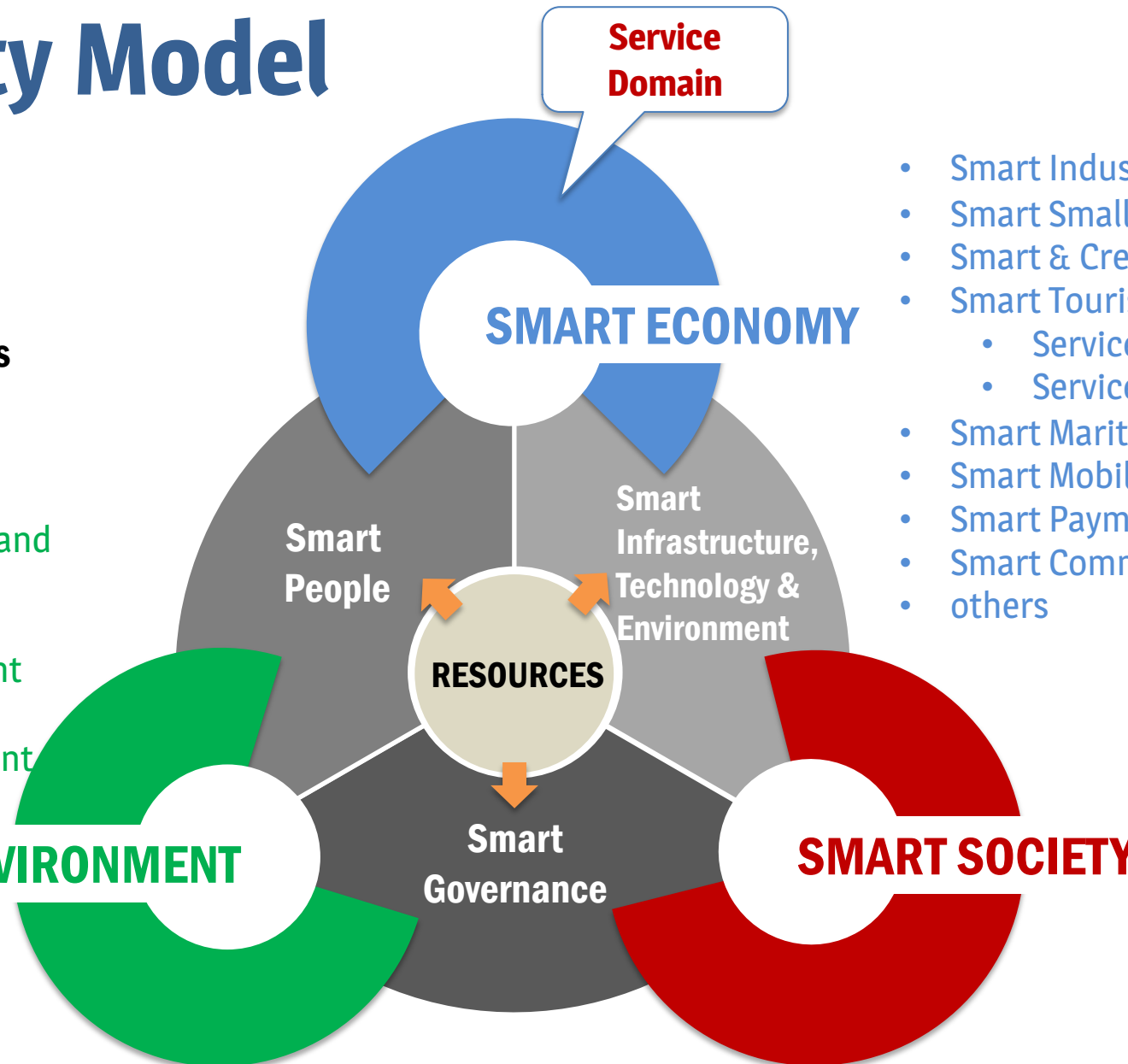


Smart City Model



- Smart Energy
- Smart Water/Air/Land Management
- Smart Waste Management
- Smart Region Management
- others

SMART ENVIRONMENT



Service Domain

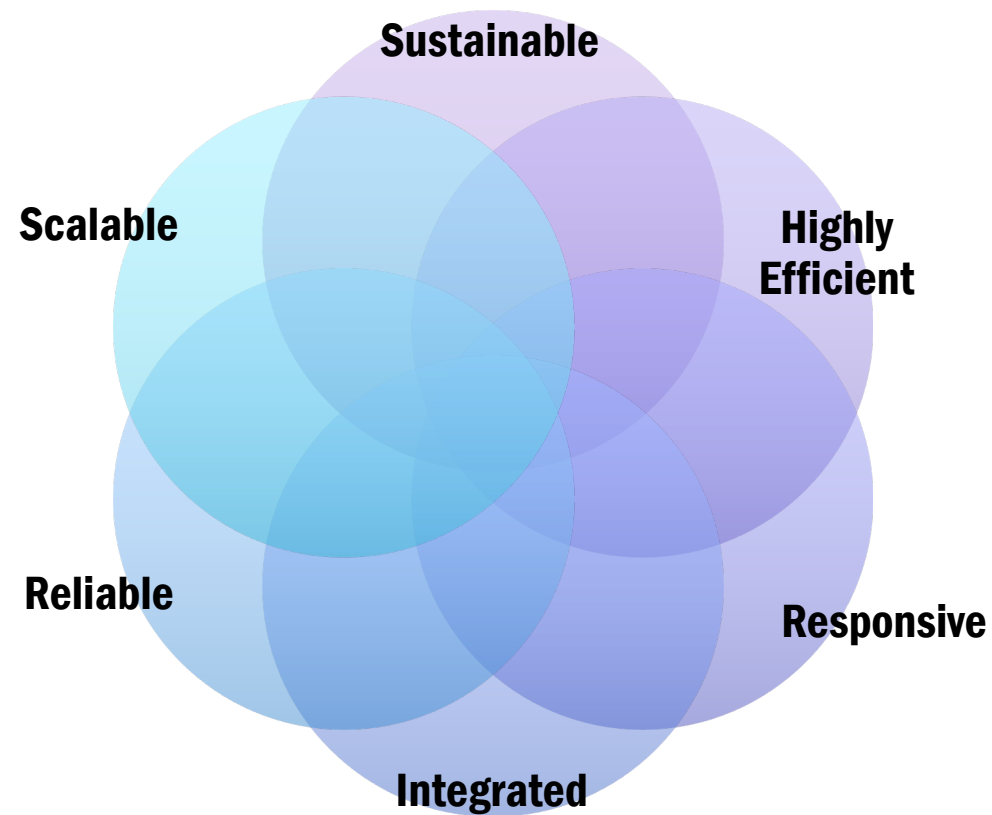
Service Cluster

- Smart Industry
- Smart Small Business
- Smart & Creative Startup
- Smart Tourism
 - Service 1
 - Service 2
- Smart Maritime
- Smart Mobility
- Smart Payment & Banking
- Smart Commerce
- others

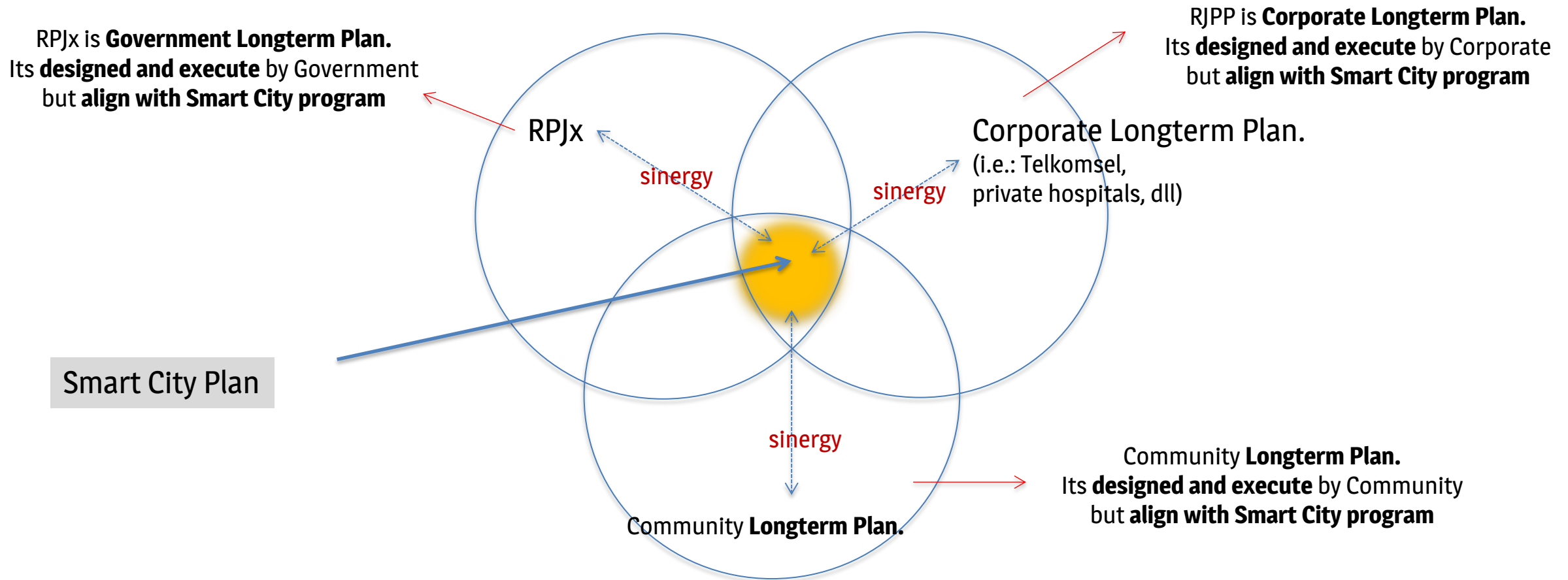
Service Item

- Smart Health
- Smart Education
- Smart Government (Public Services)
- Safe & Secure
- Smart Generation
- others

More Smart Solution Characteristics



Connection between City related Plans



SMART CITY SERVICE CANVAS (SCSC)

SERVICES:			CLUSTER:	
Integrated Key Players <ul style="list-style-type: none"> List of players that needed to support service. All players should be kept integrated. 	Integrated Key Activities <ul style="list-style-type: none"> List of integrated activities that conducted by many parties to support service. Its better to represent by model, for example by Porter Value Chain. 	Innovative Value Propositions <ul style="list-style-type: none"> List of Innovative Values Proposition that delivered by Integrated City Service 	Citizen Segments <ul style="list-style-type: none"> Which segment of Citizen as target of the service 	Service Measurement <ul style="list-style-type: none"> How to measure the quality of service (service oriented)
Integrated Key Resources <ul style="list-style-type: none"> List of all resources that needed to support service. Resources can be provided by different parties. 	Government Roles <ul style="list-style-type: none"> List of role, because Government as one of many players have dedicated and unique position. 		Citizen Relationships <ul style="list-style-type: none"> How to interact with the citizen segment? 	Quality of Life Indicators <ul style="list-style-type: none"> How to measure impact to Citizen Quality of Life?
Cost & Structures <ul style="list-style-type: none"> All cost component for (1) planning, (2) development, (3) operational, and (4) improvement 	Investors <ul style="list-style-type: none"> List of investor. Government? Private? of PPP? 		Channels <ul style="list-style-type: none"> What channels needed to do relationship? 	Governance <ul style="list-style-type: none"> Governance/legal aspect that should be complied to. Additional legal product that should be available
		Revenue Streams <ul style="list-style-type: none"> If the service generate revenue, how it will be divided between contributors? 	Sustainability Strategy <ul style="list-style-type: none"> Sustainable strategy for service initiative. 	

Two Main Category of Indicators

Two main indicators to measure Smart City

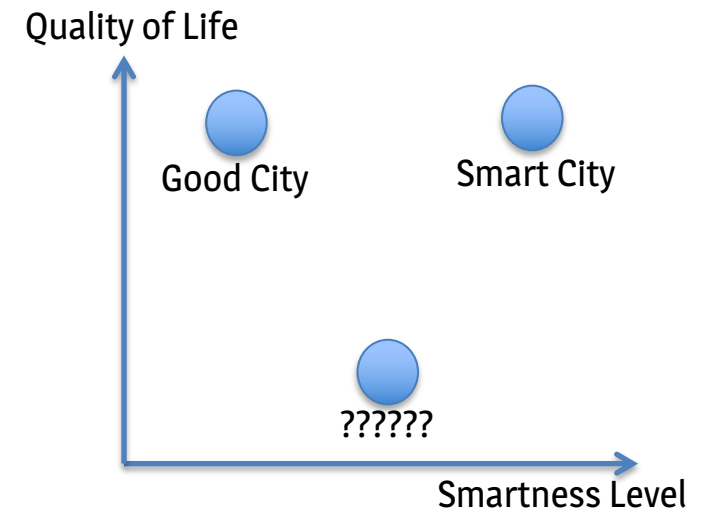
1. **Quality of Life.**

These indicators measure the **Quality of Life level**.

2. **Smartness Level (to change)**

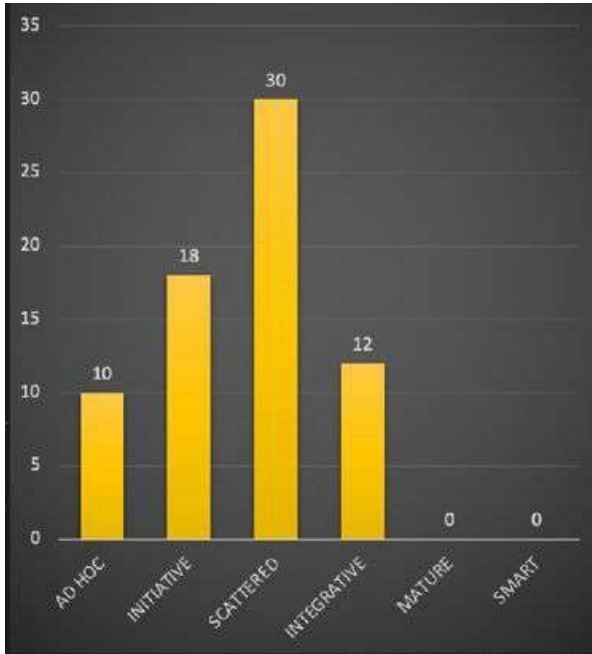
This indicator measure **the way to improve** the Quality of Life to achieve better quality of life.

There are six indicator for smartness:
Sustainableility, Efficient, Responsive, Integrated, Reliable, and Scalable



The Indonesian Smart City Rating Results

Cities maturity level



- 10 Cities (ad hoc)
- 18 Cities (initiate)
- 30 Cities (scattered)
- 12 Cities (Integrative)

Top 20 Cities

Rank	Cities	SMART WAY	NILAI AKHIR	QUALITY OF LIFE	Maturity Level
1	Semarang	77%	70%	62%	Integrative
2	Surabaya	72%	69%	65%	Integrative
3	Bogor	74%	68%	62%	Integrative
4	Bandung	75%	65%	55%	Integrative
5	Surakarta	70%	64%	58%	Integrative
6	Bontang	72%	64%	55%	Integrative
7	Balikpapan	74%	63%	52%	Integrative
8	Yogyakarta	66%	63%	60%	Integrative
9	Pariaman	66%	62%	57%	Integrative
10	Kediri	67%	61%	55%	Integrative
11	Denpasar	67%	61%	55%	Integrative
12	Pontinak	63%	60%	56%	Integrative
13	Tangerang	69%	59%	50%	Scattered
14	Cimahi	70%	59%	49%	Scattered
15	Bukittinggi	73%	59%	45%	Scattered
16	Samarinda	65%	59%	53%	Scattered
17	Magelang	64%	59%	53%	Scattered
18	Banjarbaru	55%	56%	57%	Scattered
19	Kupang	60%	56%	52%	Scattered
20	Jambi	54%	56%	57%	Scattered



G20 Smarter World Living Lab(G2SWL) An approach to Improve Quality of life

Proposed by:

Prof. Suhono H. Supangkat
I G B Baskara Nugraha Ph.D
Dr. Arry A. Arman
Dr. Dwinna Roosmini
Prof. Yasraf Piliang
Dr. Hendra Sandhi Firmansyah

Supported by:



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