Smart City Government as a Platform: Inclusive or Monocentric?

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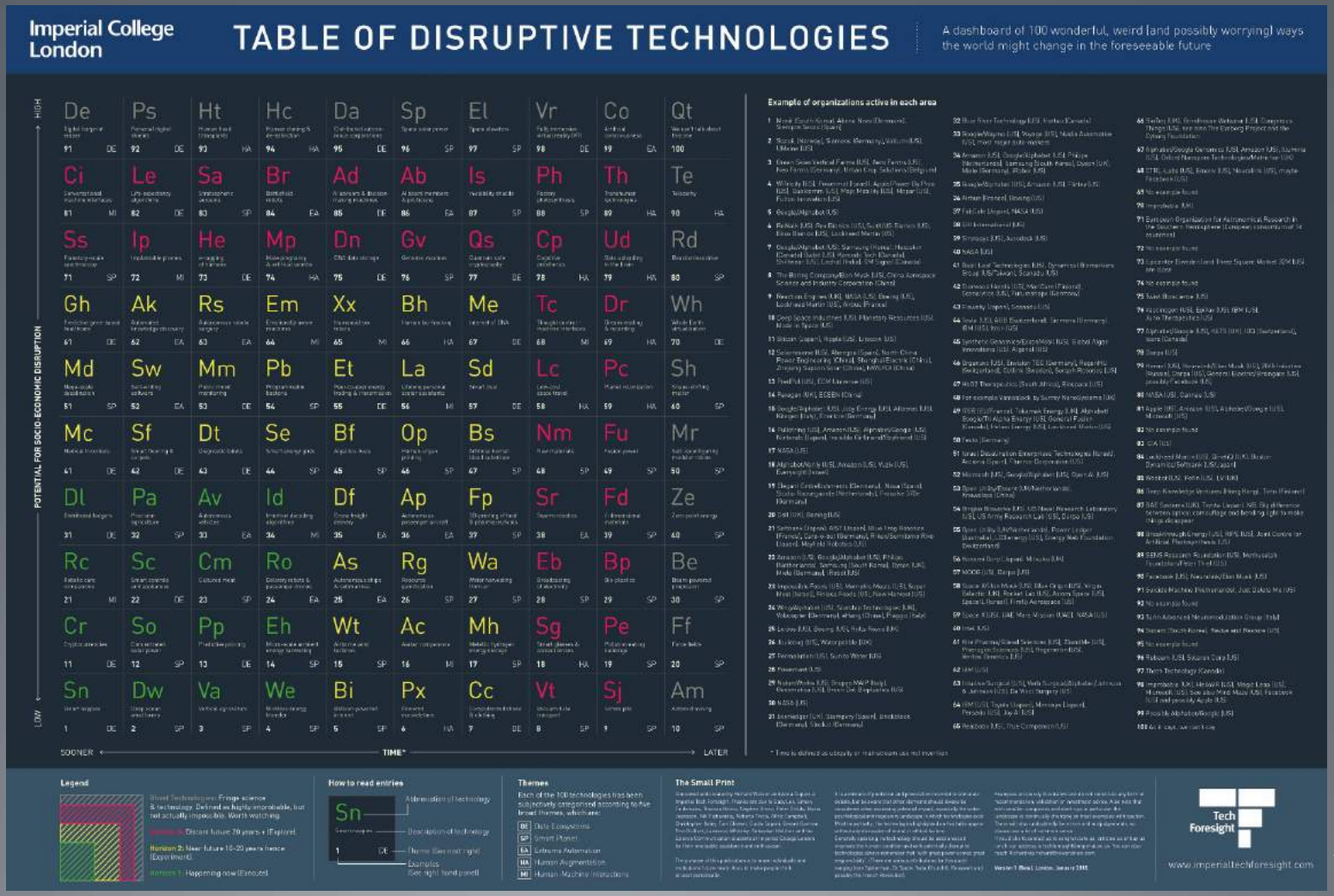
1 Introduction
2 Smart City Government as a Platform (SCGaaP)
3 SCGaaP: Inclusive or Monocentric?
4 Co-existing artificial and social intelligence
5 Conclusion

Introduction

01

Introduction

Smart cities: a linkage of the capabilities and development of disruptive technologies



Source: https://rossdawson.com/blog/periodic-table-disruptive-technologies-innovation/

01

Introduction

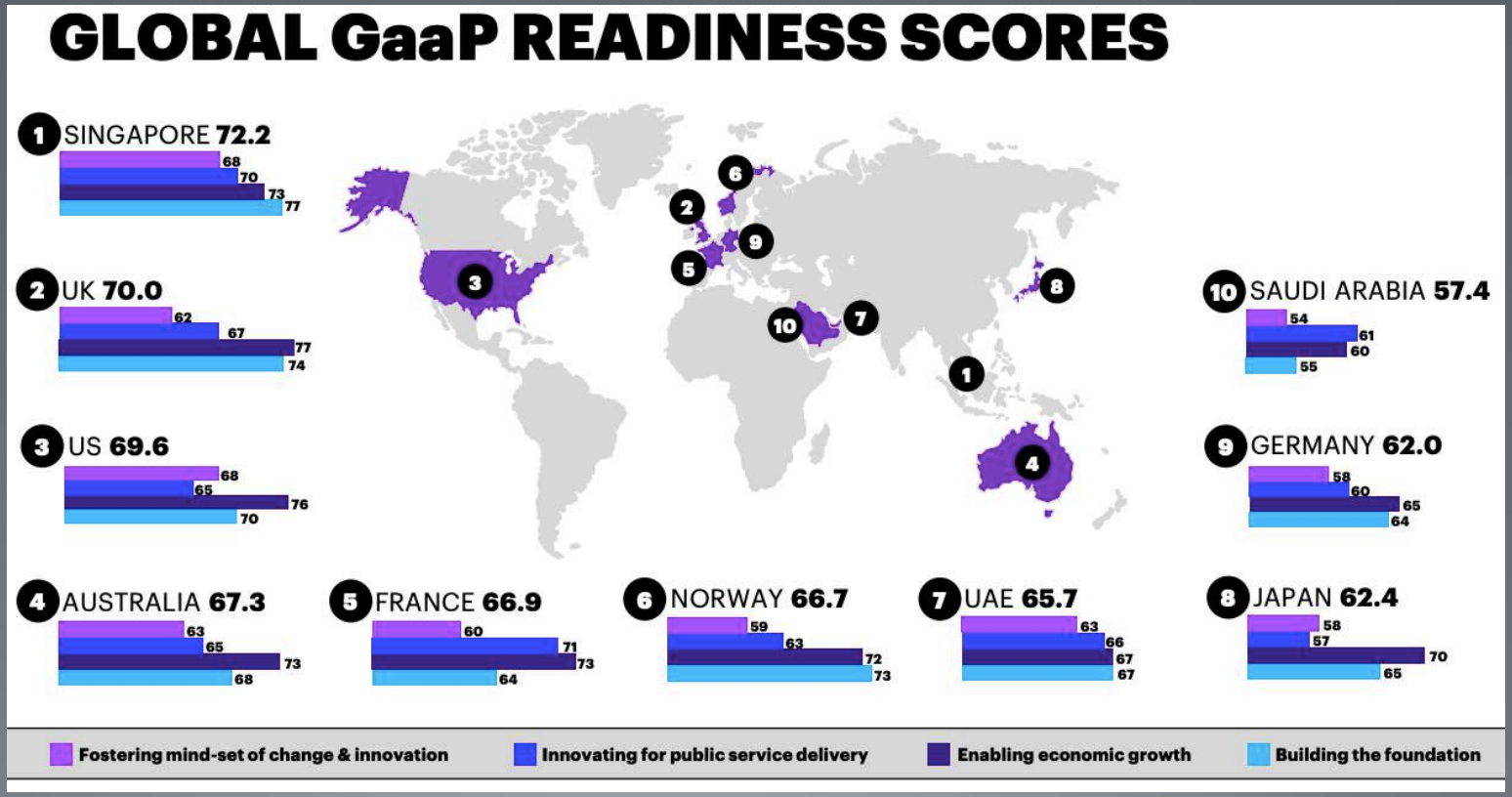
Smart cities: Combining tailor-made human, infrastructural, social and entrepreneurial capital

Source: https://unhabitat.org/un-habitat-for-the-sustainable-development-goals/

01

Introduction

Smart cities: Government as a Platform (GaaP) is a dominant feature for the realization of smart cities



Source: Accenture (2018)

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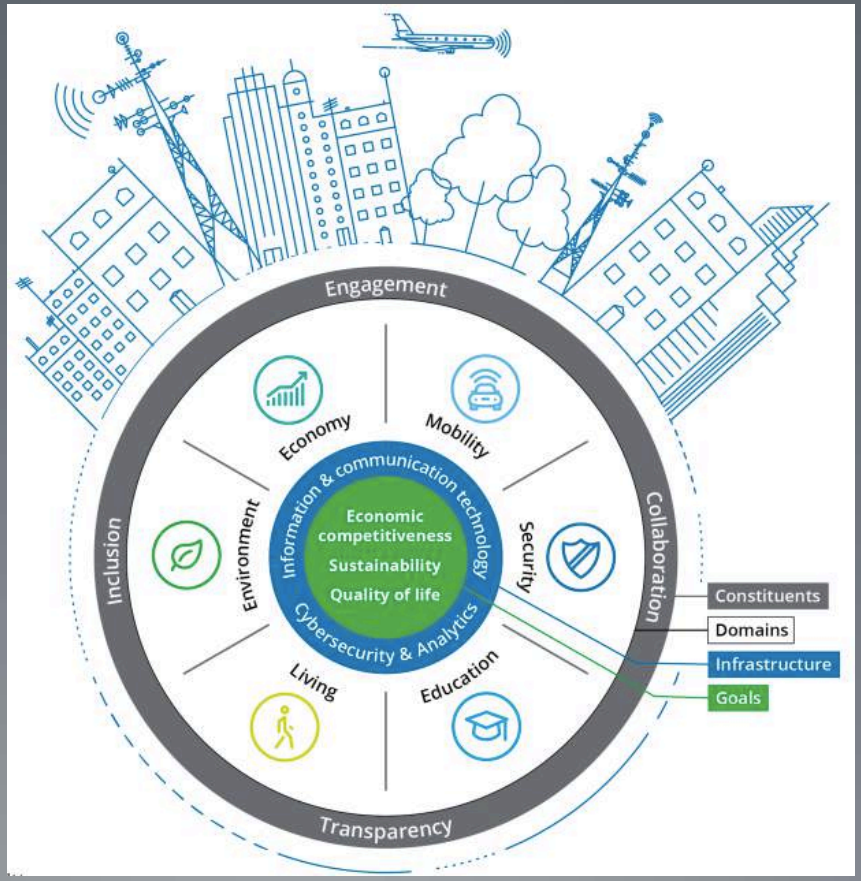
Introduction

Smart cities: Thought of City as a Platform (CaaP) shifts the role of government from "doing things" to enabling participation in civic innovation



Source: Deloitte (2017)

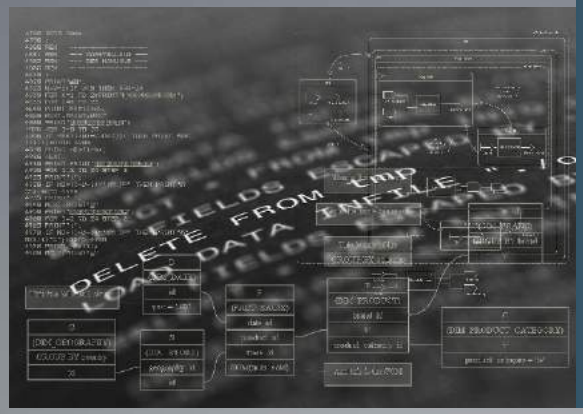
01

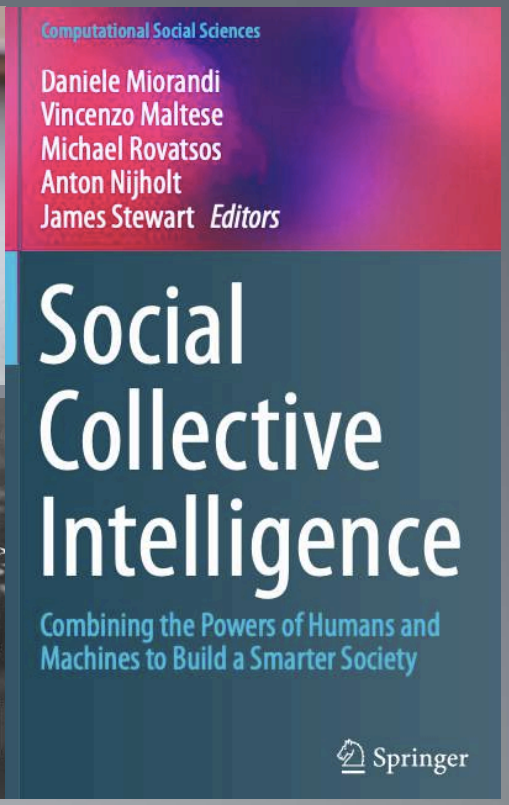
Introduction

Smart cities:

However,

- Emphasizing on such a supply-side technology and extreme dependency of an algorithmic approach
- Lacking of socio-spatial traits in real smart city fabrics such as social or collective intelligence, cultural artefacts.





01

Introduction

Question: Smart City Government as a Platform (SCGaaP) is INCLUSIVE or MONOCENTRIC?

Smart City Government as a Platform

02

Smart City Government as a Platform (SCGaaP)

1 Platform for Government (PfG) (Brown et al., 2017)

- 'Cathedral' mode of organizing (traditional)
- Open access
- Passive consumption of services
- 'Platform' is pieces of technology
- 'Agile' is about Government tech responding to 'user needs"
- Government provides better access to its 'vending machine' of services
- Traditional economics (government pays people to build, and run, its technology)
- Focus on technology inputs; open source
- Substantial technology and commercial legacy

02

Smart City Government as a Platform (SCGaaP)

2 Government as a Platform (GaaP) (Brown et al., 2017)

- 'Bazaar' mode of organizing (disruptive)
- Open participation
- Active co-creation of services
- 'Platform' is a business model
- 'Agile' is about citizens organizing differently
- Government stewards and enables civic marketplace
- Platform-ecosystem economics (government consolidates around standard business rules; market innovates continually around this demand)
- Focus on services outcomes; open standards
- Minimal technology and commercial legacy

02

Smart City Government as a Platform (SCGaaP)

3 City as a Platform (CaaP) (Bollier, 2016; Deloitte, 2017)

- Cities are not just as ‘places’, but as ’platforms’
- ‘Convergence’ of people, data, infrastructure and technologies
- New information sharing ‘partnership’ between the city, residents, and business
- City as a ‘platform’ becomes governance experiments
- ‘Platform’ enables smarter ‘decision making’
- Platform is a new ‘affordances’ for citizen engagement
- Citizens are ‘sensors’
- Focus on collective intelligence
- Delivers a joy of ‘participation’

Real smart city fabrics

03

Real Smart City Fabrics

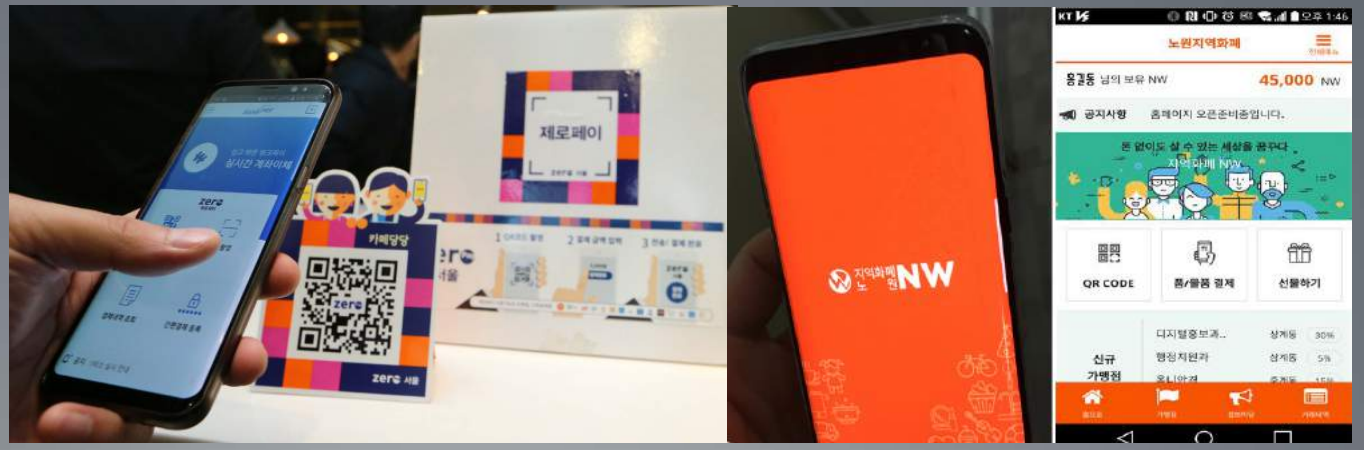
Finance (local currency)

- **Zero Pay, Seoul:** a mobile direct transaction system using the existing apps of commercial banks or online payment platforms
- **Many Local governments newly introduce or plan to introduce similar types of mobile-based local currency such as Gimpo Pay (Gimpo) as well as blockchain-based local currency (e.g., NOWON, Nowon-gu, Seoul)**
- **However, why people consider that existing transaction methods are more convenient?**

Comparison of application history in Zero Pay and Credit Card (2019.01)

	Zero Pay	Credit Card	Zero Pay / Credit Card (%)
Number of Payments	8,633	1,560,000,000	0.0006
Amounts of Payments	$ 200 million	$ 5.8 trillion	0.0003

Source: https://www.segye.com/newsView/20190306004747



Source: http://www.donga.com/news/article/all/20190306/94423400/1; http://news.khan.co.kr/kh_news/khan_art_view.html?art_id=201801181619001

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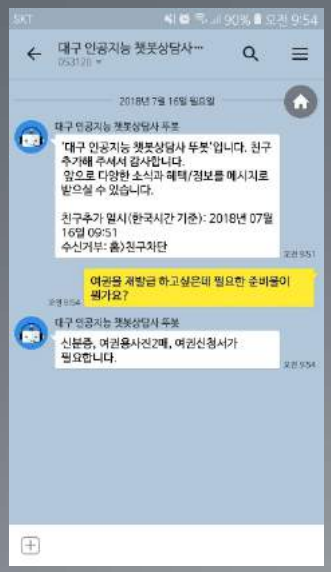
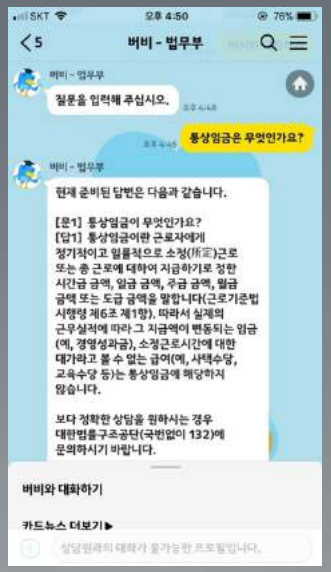
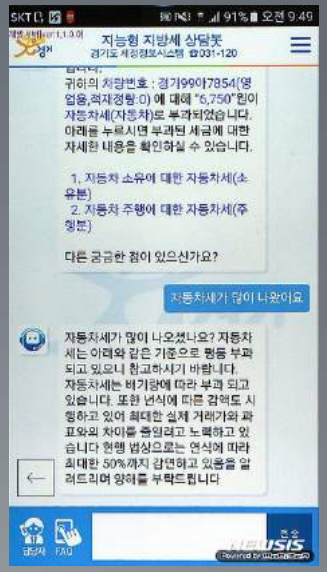
Real Smart City Fabrics

Communication (Chatbot)

- **Ddubot, Daegu:** as the first AI-based Chatbot in a local government, it is an interactive dialogue system answering civil affairs automatically through deep machine learning (with 57,000 relevant data) using a SNS platform on smart devices.
- **Other best practices of AI-based Chatbot in public sectors include: Beoby (Ministry of Justice); Smart taxbot (Gyeonggi-do); Gangnambot (Gangnamgu, Seoul)**
- **However, people rarely use and participate in communication through the platforms. Why?**







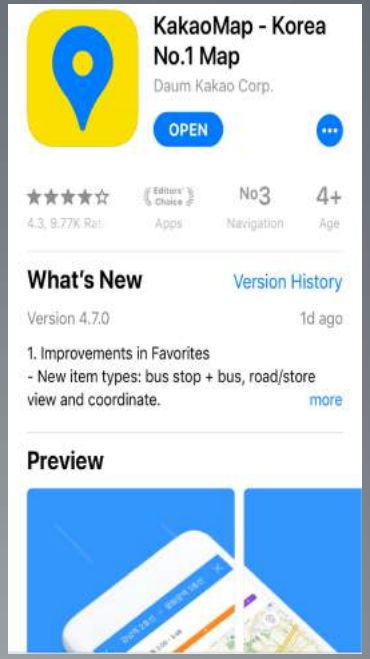
Source:
https://m.blog.naver.com/PostView.nhn?blogId=buk_daegu&logNo=221319892526&proxyReferer=https%3A%2F%2Fwww.google.com%2F&view=img_5; http://www.korea.kr/jobinfo/uniqueJobView.do?newsId=148848383;
https://news.joins.com/article/21259718;
http://www.news2day.co.kr/88285

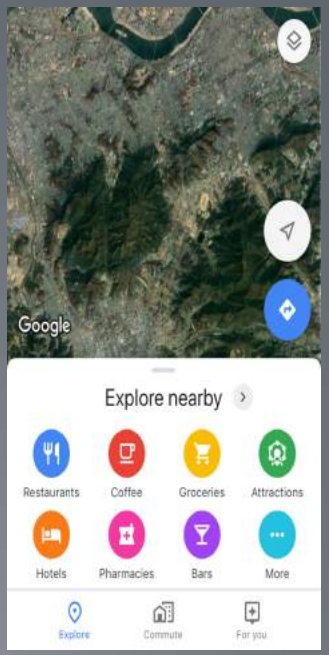
03

Real Smart City Fabrics

Spatial Information (All-in-One Portal)

- **SEE:REAL, Korea Land & Housing Corporation (LH):** a real estate portal service providing thematic maps, real estate statistics and current trends
- **Vworld, Ministry of Land, Infrastructure and Transport (MOLIT):** an open platform providing varying national 3D spatial information (e.g,, 6 base spatial information and 74 administrative spatial information)
- **However, people tend to use other platforms for different purposes in private sectors such as Kakao map; Naver map; Google map. Why?**





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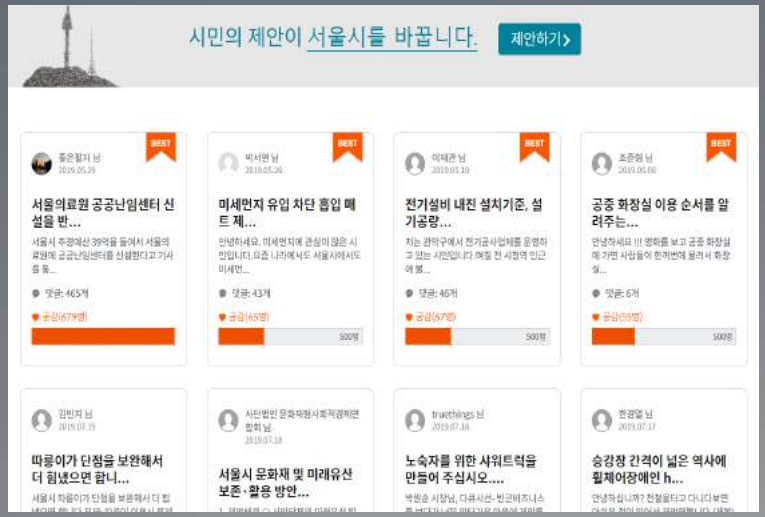
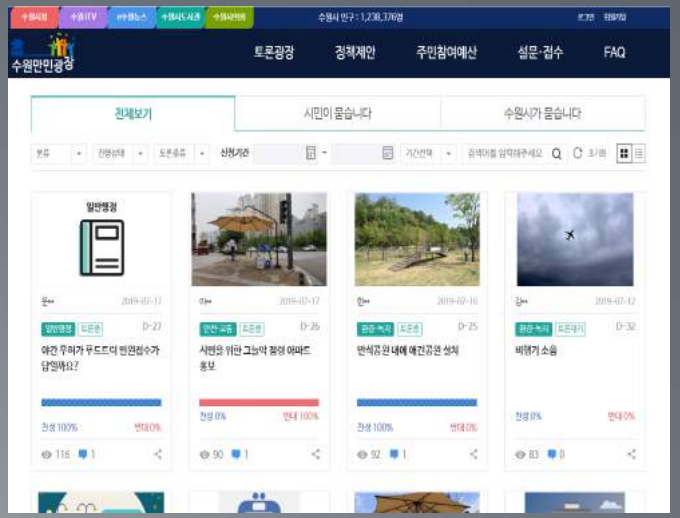
Real Smart City Fabrics

Digital Agora

- **Seoul and Suwon municipal governments:** online platform for the citizens to provide suggestions and complaints, and to share and debate on various issues of the city
- **Citizen opinion is more likely to be disclosed in SNS(Social Network Services) or online search engines**
- **Progress of inclusive citizen participation, but the government continues to be the dominant player**





Source:
http://www.suwon.go.kr
http://democracy.seoul.go.kr

03

Real Smart City Fabrics

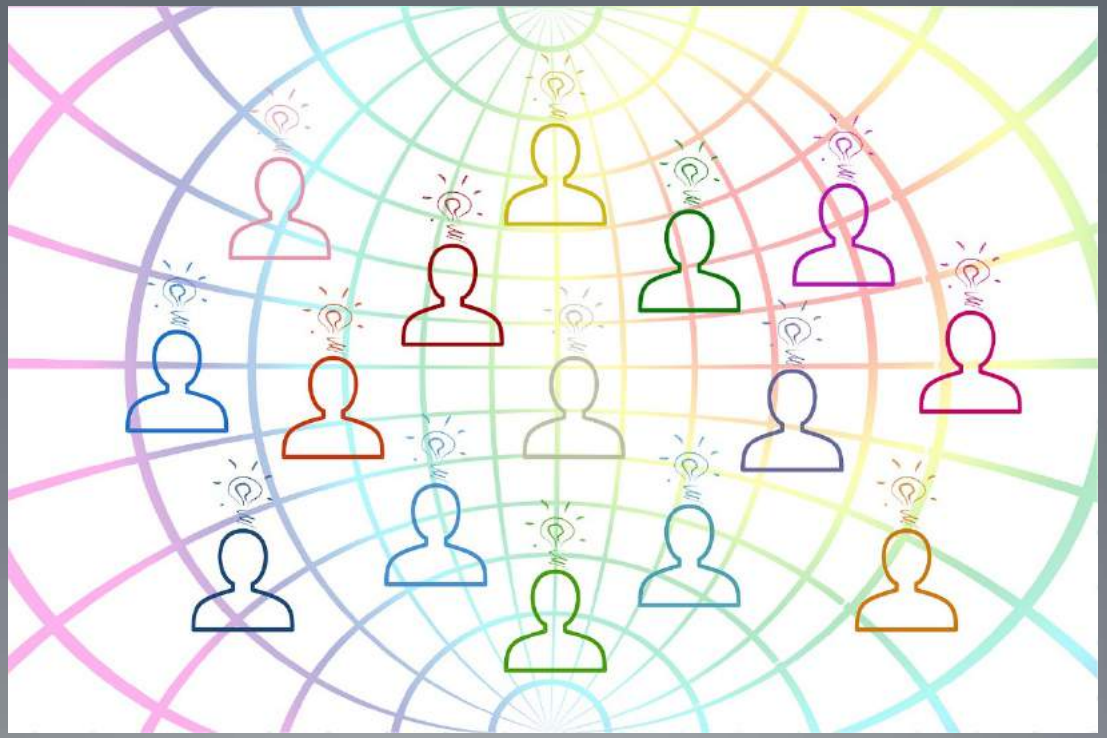
Process in bottom-up citizen participation

**Luchtsingel pedestrian bridge,
crowdfunding urban planning in Rotterdam**

- The railroad tracks created disconnection in the city
- The ZUS (Zones Urbaines Sensibles) proposed to build a pedestrian bridge to 'bridge the gap' with internet-based crowdfunding
- Was able to raise € 100,000 in 3 months(1/3 of target figure), which made the local government to support € 400,000 more.

(Picture: http://www.morethangreen.es)

Co-existing Artificial and Social Intelligence



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Co-existing Artificial and Social Intelligence

Smart City Government as a Platform

"We tend to think of government as doing things…but we should also think of government as a platform that lets things happen."

-Tim O'Reilly

04

Co-existing Artificial and Social Intelligence

Smarter City Government as a Platform

- The government still plays central role in making, planning, and implementing policies
- Korea is still at the stage of placation, others have entered the stage of partnership and moving up to delegated power

Sherry Arnstein's Ladder of Citizen Participation

Citizen Control	Actual Participation
Delegated Power	
Partnership	
Placation	Perfunctory participation
Consulting	
Informing	
Therapy	Mobilized participation/ Nonparticipation
Manipulation	

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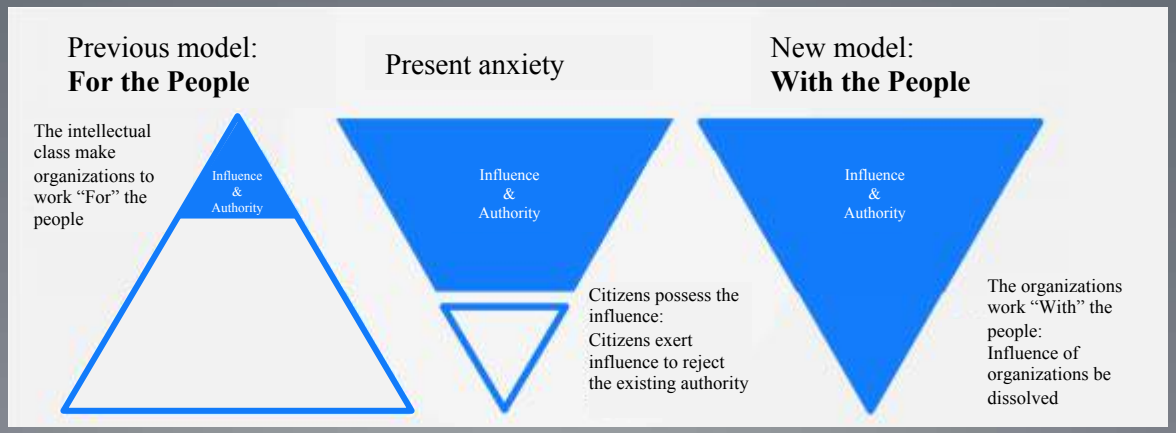
Co-existing Artificial and Social Intelligence

Smarter City Government as a Platform

"Now that the people do not rely on government authorities or media as they used to, the government needs to create a new model to operate 'With the people'" (Edelman, 2017)

Edelman trust index analysis



(Source: 2017 Edelman Trust Barometer)

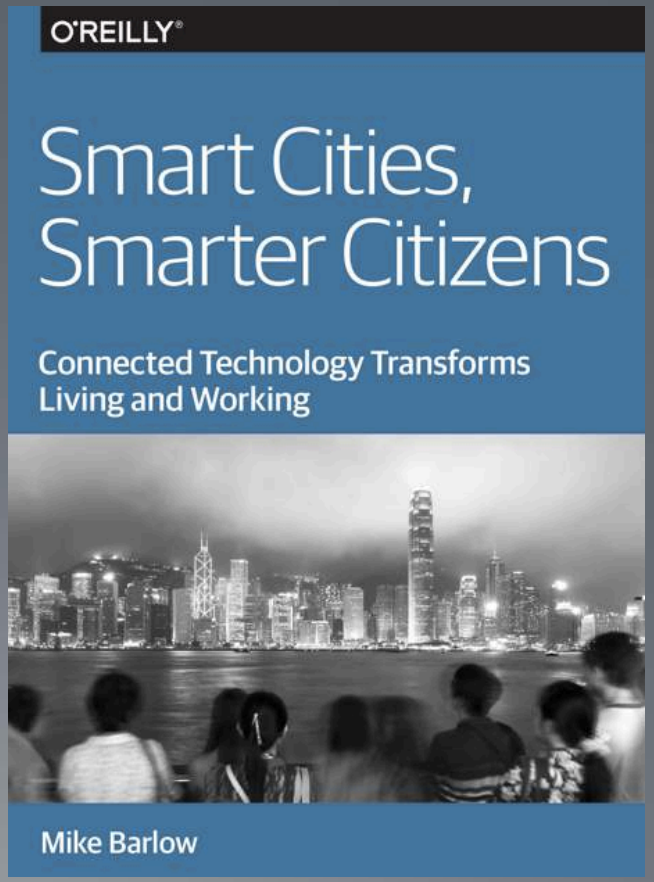
Conclusion

05

Conclusion

Smart City Government as a Platform

- Streetwise data science
- Social physics
- Idea flow
- Engagement
- Living laboratories



Thank you very much for your attention!