LGR

LOCAL GOVERNMENT REVIEW
Putting Research Into Practice

ICMA

Pathways to the Making of Prosperous Smart Cities: An Exploratory Study on the Best Practice

Trusting Politicians and Institutions in a Multi-Level Setting

icma.org

PATHWAYS TO THE MAKING OF PROSPEROUS SMART CITIES

AN EXPLORATORY STUDY ON THE BEST PRACTICE

Kevin C. Desouza, Michael Hunter, Benoy Jacob, and Tan Yigitcanlar

ABSTRACT

In this paper, we examine the under-examined issue of the pathways to smart cities. While the extant literature on smart cities offers several insights into what smart cities are, with a few notable exceptions, it has less to say about how they come to be? With this latter question in mind, we identify three pathways to smart cities — a green field development pathway, a neighborhood development pathway, and a platform-oriented platform. Drawing on eight different case studies, we offer some insights into the ways in which each of these pathways is, more or less, able to realize smart city objectives. While exploratory in nature, we offer unique insights into the pathways to smart cities, as well as areas for future research.

INTRODUCTION

Cities continue to invest significant resources in information and communication technologies (ICT) that increase their 'smartness' and 'intelligence' (Cosgrave; 2013, Angelidou, 2015). These efforts have come to define the smart city movement which, over the past decade, has become an important part of the urban agenda (Kitchen, 2014; Husar et al, 2017). As cities have continued to invest in creating smart (or smarter) cities, scholars have sought to develop an intellectual foundation for understanding this movement. There is now extensive 'smart city literature' that: 1) conceptualizes and defines smart cities (Yigitcanlar et al., 2018), 2) explores its social and political implications (Rossi, 2016), and 3) examines the data that defines and shapes smart city efforts (Hashem et al., 2016). An important, yet understudied issue, is the way in which smart cities actually emerge. With a few notable exceptions, (e.g., Yigitcanlar et al., 2019a; Desouza et al., 2019) there is little in the way of a systematic examination of the pathways that lead to smart cities. Thus, while we have some sense of *what smart cities are,* we know far less about *how they come to be?*

Much of the scholarship suggests that the emergence of smart cities is a "natural" or organic process (Husar, 2017). It represents the 'conclusion' of an ongoing pattern of integrating information and communication technologies (ICT) with the everyday activities of cities. While this "natural" progression represents an important part of the story of smart cities, such as path dependency, it is incomplete. It does not account for the *deliberate and intentional efforts* to create smart cities. This omission is non-trivial. The increasing awareness of urban fragility and need for resilience in the face of a growing population and numerous environmental challenges create a need for cities to deliberately identify new urban efficiencies and planning approaches (Hunter et al., 2019. Desouza et al., 2019). These intentional efforts vary from city to city and, depending on the approach taken, they will present different challenges for the realization of smart city objectives. In this paper, we consider three different types of deliberate approaches, i.e. pathways, to the creation of smart cities: 1) the development of entirely new (smart) cities—from scratch development, 2) smart city development projects within particular parts of the city—infill smart precinct/neighborhood development, and 3) the advancement of smart cities through the integration

of ICTs within the city organization—retrofitting the city with smart technologies and platforms to increase efficiencies.

To better understand the different pathways to smart cities, we employ eight case examinations. It is worth noting that some of the cases in this study are considered canonical examples of smart cities. The reliance on these oft-employed examples have been met with some criticism. For example, Kichen (2015) notes that these examples may be "exceptional in nature, rather than typical." As a result, they have become "master tropes for smart cities...[that] provide idealized visions of possible futures." That said, unlike previous case study research on smart cities, we put these cases forward not as examples of best practices to be emulated, but rather as examples that reflect the continuum of smart city efforts.

Following this introduction, this paper proceeds in four parts. The first part describes our conceptualization of 'pathways to smart cities,' as well as the framework we use to examine these pathways. The second section provides an overview of our cases and their relationship to the three pathways we consider. The third section summarizes our key findings, and then we offer some concluding thoughts in the final section with respect to future directions for research.

PATHWAYS TO SMART CITIES

In this paper, we are interested in understanding the different pathways taken for creating or facilitating smart cities. While scholars have yet to offer any systematic examination of these different pathways, the literature offers fairly clear descriptions thereof. Drawing on this literature, then, we are able to conceptualize three different pathways to smart cities. As depicted in Figure 1 (below) this conceptualization allows for different understandings of 'a city,' and, thus, implies different types of challenges.

First, in many instances, smart cities are developed from scratch. This conceptualization of—and operational approach to—smart cities draws upon the idea of a city as a singular physical entity. As such, it can be built 'from scratch' to draw upon the economic benefits typically attributed to cities. Often referred to as *green field developments*, these new cities are created through a series of public-private partnerships. Often as part of a federal government initiative, these developments are marketed in terms of their potential for solving issues regarding urbanization, congestion, and employment. In this paper, we examine this pathway through three cases: Songdo, South Korea; Masdar, Abu Dhabi; and, Gujarat, India.
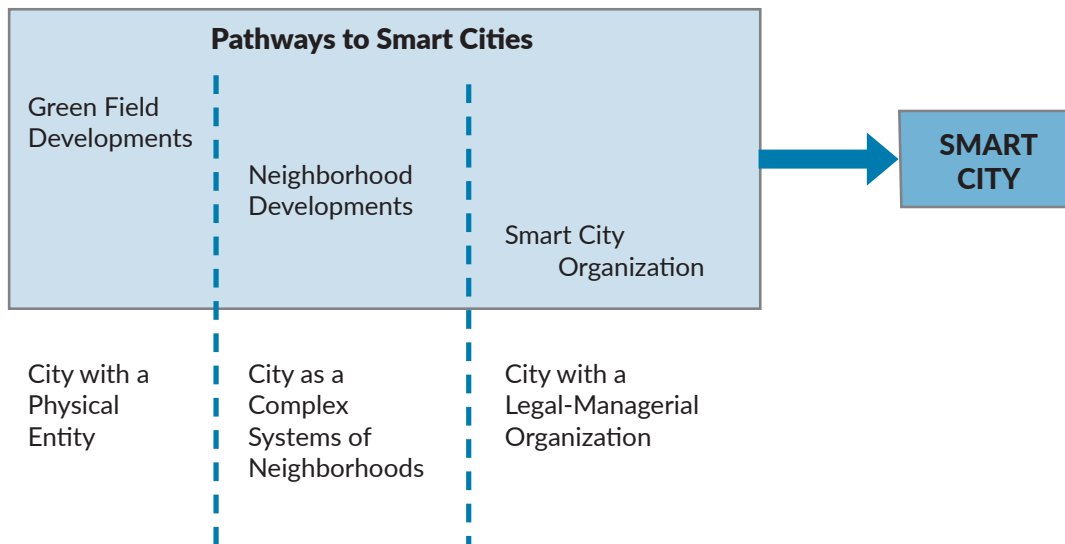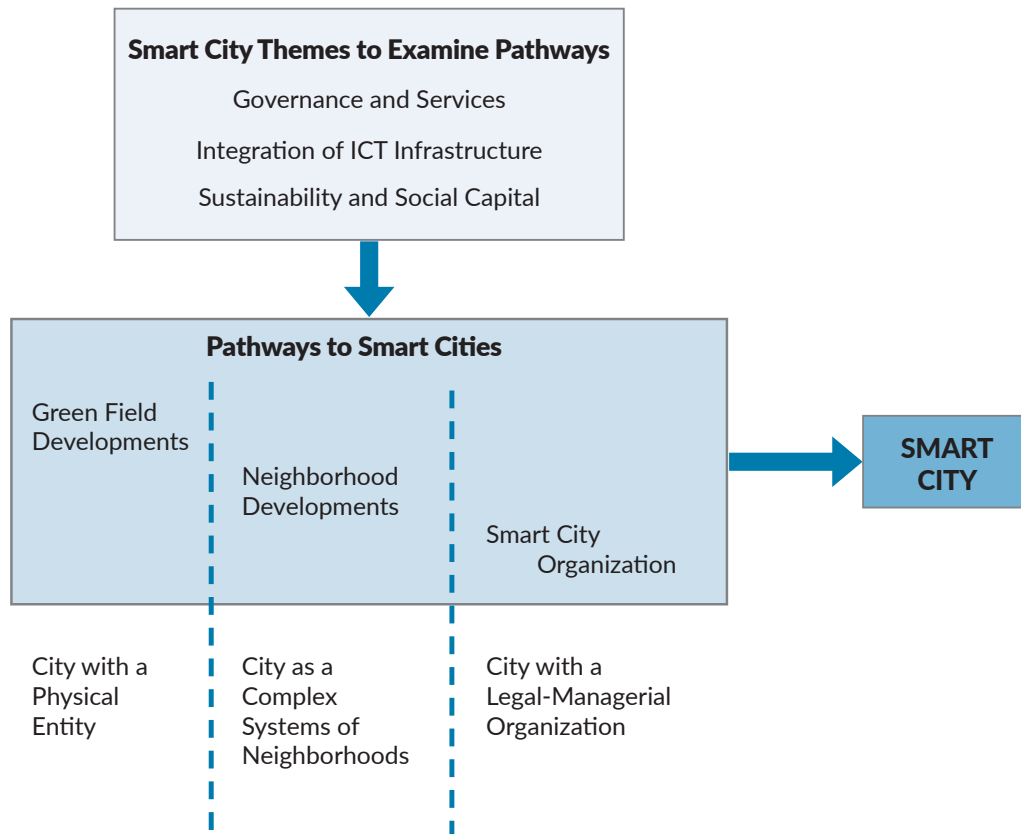

FIGURE 1. Pathways to Smart Cities

Smart City Themes to Examine Pathways

Governance and Services

Integration of ICT Infrastructure

Sustainability and Social Capital

Pathways to Smart Cities

Green Field
Developments

Neighborhood
Developments

Smart City
Organization

SMART CITY

City with a
Physical
Entity

City as a
Complex
Systems of
Neighborhoods

City with a
Legal-Managerial
Organization

FIGURE 2. A Framework for Examining the Pathways to Smart Cities

A second, but related, pathway focuses on the development of particular neighborhoods within a city. To some degree, this is the most challenging conceptualization and operationalization of a smart city. It requires "retrofitting infrastructures and systems" to existing cities. We examine this pathway through two cases: the Hudson Yards development project in New York City, and Jurong Lake development in Singapore.

Finally, the third pathway we consider focuses less on developing the physical space that occupies the city, but rather pursuing a smart city through the development of a technological platform that integrates data from various organizational silos within the city. From this perspective, the city is understood in its organizational and managerial forms. The emphasis here is on the 'smartness' of the city as it relates to improved delivery of public services. We consider this pathway through four cases: Amsterdam, Netherlands; Manchester City, England; Barcelona, Spain; and, Tel Aviv, Israel.

As noted above, these pathways are not wholly unique. Other scholars have described smart city cases in similar terms. The contribution that we offer in this paper, then, is to provide a side-by-side examination of these pathways. To focus our examination, we consider each of these pathways in terms of three dominant themes that comprise the smart city literature—*governance and services, integration of ICT infrastructure,* and *the role of sustainability and social capital.*

As depicted in Figure 2 (above), these themes offer a lens through which we can examine the different pathways to smart cities. The themes, as we describe below, reflect key ideas about the objectives and potential outcomes of smart cities. They provide a reasonable basis, then, by which to consider the different paths toward smart cities. More specifically, we can examine—through our cases—how these objectives and outcomes have been, more or less, realized through different pathways.

Over the previous two decades, scholars have put forward numerous definitions of smart cities. For example, Bowerman, Braverman, Taylor, Todosow, and Wimmersperg (2000) defined a smart city as a place capable of monitoring the conditions of all critical infrastructure while optimizing resources, planning preventative maintenance activities, and monitoring security aspects to maximize services to residents. This definition focuses on the relationship between the physical infrastructure, technology, and systems in place capable of maximizing services to residents. In contrast, Rios (2008: 4) defines a smart city as "A city that gives inspiration, shares culture, knowledge, and life, a city that motivates its inhabitants to create and flourish in their own lives. An admired city, a vessel to intelligence, but ultimately an incubator of empowered spaces." While this idea is on the far side of human centered, it demonstrates the variance between "smartness" through technological means and "smartness" through human capital. Finally, a third definition focuses on governance and information systems. In particular, Piro's (2014: 169) definition denotes "A smart city is intended as an urban environment, which, supported by pervasive ICT systems, is able to offer advanced and innovative services to residents to improve the overall quality of their life."

These definitions reflect the three main themes behind the smart city concept (Waart, 2016); namely a technological theme based on the use of infrastructures; a human theme based on people, education, learning, and knowledge as key drivers; and an institutional theme based on governance and policy and as a result of the importance of cooperation between stakeholders and governments (Nam and Pardo, 2011). We employ these three themes—*'governance and services,' 'integration of ICT infrastructure,'* and *'the role of sustainability and social capital'*—in our analysis. They provide a lens through which to examine the motivations, processes, and outcomes of each case study. As an exploratory project, we seek to develop insights into how each of the pathways manifest the different outcomes described in each theme.

THEME ONE: SMART CITY GOVERNANCE AND SERIVCES

Information systems and urban policy research have launched a large body of scholarly work surrounding the intersection of technology and city governance, with a strong focus on digitalization of services to improve resident's quality of life. For example, Liu, Gavino, and Purao (2014) regard smart governance as a city that develops policies, strategies, and frameworks that serve the unique needs of individual residents. Dunleavy, Margetts, Bastow, and Tinkler (2006) describe this as Digital Era Governance and notes a transition towards a re-aggregation of public services under direct government control around the resident.

Over the past two decades, this perspective has largely defined the use of ICT within public services and has been identified as having three separate phases. Liu et al. (2014) regard the first generation as a mirror of the private sector with a focus on reducing costs and increasing automation. The second generation saw government adopting market-based mechanisms to increase efficiencies, however, it often resulted in increased complexity for government organizations. In the final phase, governance has adopted a platform-based approach where ICT products are enablers of outcomes, with a focus on service to residents (Fishenden, 2013).

THEME TWO: SMART CITY ICT/ INFRASTRUCTURE

Another focus of smart city research has been the movement toward technologically enhanced public infrastructure. By focusing on technological advancements, researchers considered that efficiencies of the urban environment could be increased considerably to deal with rising populations (Yigitcanlar et al., 2009b). Heo et al. (2014) divide a smart city into six main technological areas: 1) Smart power grids, 2) Structural approaches, 3) Surveillance applications, 4) Transportation and traffic management, 5) Food, water quality, and environmental monitoring, and 6) Ubiquitous healthcare applications. This approach varies considerably from the digital governance focus of other researchers. This approach has a definite focus on a city's infrastructure rather than the services it can offer to residents. Thus, this theme requires that we consider how, as a city's infrastructure is improved by technological advancements, it might open the city to challenges regarding network scalability, security, and privacy concerns; network communication standards; and system interoperability (Heo et al., 2014).

THEME THREE: SMART CITY SUSTAINABILITY AND SOCIAL CAPITAL

The concept of sustainability developed from the realization that current social, economic, and urban development research failed to fully account for the risks of environmental disasters or social decays (Bibri, 2018: 100). Following this, the premise of sustainability has risen as a holistic approach to aligning city practices and urban development with nature (Bibri and Krogstie, 2017). Its defining factor is that it looks at all-inclusive decisions for long-term benefits. This is a key distinction from the Digital Era Governance approach (described above) that look toward individualized services. Instead, sustainability is based in the holistic, all-encompassing nature of future developments. As such, sustainability can be thought of as a state in which the natural and social systems are not undermined by society (Bibri, 2018: 101).

Smart city sustainability research has largely focused on ICT enablement to support the natural environment and, as such, the common understanding of smart city sustainability tends to focus on renewable energies, waste removal, and other environmentally sustainable practices. While these practices often focus on the physical environment, researchers have begun to suggest that sustainability must also consider the social sphere in general, and social capital, in particular (Lara, 2016; Granier and Kudo, 2016).

Social capital can be understood as: "the links, shared values and understandings in society that enable individuals and groups to trust each other and so work together" (OECD, 2007: 102). Within the smart city literature, this idea has been adopted to consider the influence of information technologies to empower communication, community engagement, and co-creation. This approach to a city's "smartness" is based on creating a network of communication that simultaneously shares, educates, and involves all residents, helping the city adapt to the problems that arise. This thinking follows the idea that "human capital will transform how people live and interact with each other, leading to advancements in tech innovation. Investments in communities and their learning capabilities would lead to a better yield in innovation and entrepreneurship" (Kummitha, 2017: 47).

FINDINGS AND DISCUSSION

Our objective in this paper is to begin to develop some insights into the different pathways that lead to the making of prosperous smart cities. In particular, we sought to understand how the pathways differed (or not) with respect to achieving key outcomes that define smart cities; notably governance and services, integration of ICT infrastructure, and the role of sustainability and social capital. In this section we summarize the key insights from our case examinations for each of these outcomes.

First, at the core of the *governance and services* theme, is a question of the provision of public services. That is, how is the adoption of ICT's facilitating government services? It may not be surprising, but the two development pathways—green field and neighborhood development—seem less successful than the platform pathway in enhancing public service delivery. This insight, however, may be somewhat premature. The primary objective of the development pathways is to establish a new physical infrastructure—which these development projects have, more or less, achieved. The question of how these infrastructure efforts have effectively met the needs of residents remains somewhat of an open question. In contrast, the platform-based pathway, perhaps predictably, is more quickly and effectively enhancing the service provision for local residents. For example, Tel Aviv's population has seen a large improvement in technological capabilities from the Digi-tel platform, noting residents even developing their own improvements to the software. This technologically educated population provides an attractive talent pool for business and investment and allows residents to engage further with the co-creation of solutions to numerous urban challenges. Additionally, to the degree that "transparency" is an objective of public sector service provision, the platform pathway far exceeds the two development pathways. For example, in smart city initiatives in both Amsterdam and Barcelona, the government enhanced transparency toward the community by publishing documents and websites that clearly outline the goals of the initiative. Rather than attempting to reach these goals independently, council launched a platform where the community can contribute and become a part of the discussion.

The second theme, *integration of ICT infrastructure,* shifts the emphasis from service delivery to infrastructure development. As one might anticipate, both development pathways are clearly more successful at integrating ICT's with their physical infrastructure than the platform-based approach. That said, these development pathways face multiple challenges in terms of achieving "smartness." That is to say, projects have demonstrated varying levels of success, partly due to the complexity, duration, and scale of the transformation. For example, green field developments like Masdar City show little success in terms of population, but large success in terms of global partnerships and economic return. Also, Hudson Yards is one such example that has received public criticism due to its failure to so far deliver on the advanced data and sensor technology it promised. The physical construction is successful, but without delivering on some of the initial smart city deliverables, the development has been interpreted as purely an exercise for commercial investment, without a clear benefit for the greater public. What these examples demonstrate is that even as the physical infrastructure is developed, one of the most difficult challenges with these development projects—both green field and neighborhood—is in aligning the development processes with the socioeconomic and political conditions in which they operate. Often, the most impressive infrastructure upgrades have been left underutilized due to a lack of public interest, or the political conditions change before the project's completion.

In our final theme, *the role of sustainability and social capital,* we find some unique findings. At the heart of this theme is the idea that smart communities are both environmentally and socially sustainable—where social sustainability is understood in terms of resident engagement and connectedness. Interestingly, the platform pathway has provided far greater reported level of engagement and connectedness. This is somewhat surprising. Because the development pathways occur in the physical space of the city and are, typically, part of a public development approval process, one might expect to see more resident engagement than in smart cities created through the platform pathway. Conversely, we found the opposite. For example, a noticeable trend across the European smart city landscape; Amsterdam, Barcelona, and Manchester have all focused on the development of a platform that allows residents

to participate within the urban transformation conversation. At the outset, these initiatives are cheaper and tend to result in greater buy-in from the public. Less examples of public criticism can be found within these initiatives, as the public is a present actor within the transformation. These initiatives tend to align with the transformation of existing areas and the integration of ICT systems to enable the resident-government conversation. Relative to the development pathways, the platform pathways are, in some ways, developed and implemented through a more engaged and bottom-up approach. That said, both development pathways are clearly far more complex undertakings. As a result, more top-down approaches may seem to be the more expedient way forward. But to pursue smart city developments from this perspective presents clear limits on the ability to fully develop a city's "smartness."

CONCLUSION

Transforming urban areas into prosperous, livable, and sustainable settlements is a longstanding goal for local governments. Today, countless urban settlements across the globe have jumped onto the smart city bandwagon to achieve this goal. Under the smart city agenda, presently, many government agencies are attempting to engineer an urban transformation to tackle urban prosperity, livability, and sustainability issues mostly through the means of technology solutions (Yigitcanlar et al., 2019a). Nevertheless, there is limited understanding on what smart cities really are, how they emerge, and how prosperous and sustainable smart cities can be erected. This paper aimed to shed light on this understudied area and generate insights to assist cities and their administrations.

Our exploratory study focusing on the smart city best practices across the globe helped us develop insights into the making of prosperous smart cities. The investigation revealed that we are at the beginning of a new era that technology and the city are converging; but at the same time the traditional tools of urban policymaking and planning—such as stakeholder/community engagement, placemaking, participatory design, urban metabolism approach—are still highly relevant. A healthy mix of contemporary and traditional tools and approaches are critical in the development of prosperous and sustainable smart cities. This is

to say, while smart technology is critical, technology alone cannot create smart cities, as it takes more than just the state-of-the-art technological solutions to transform cities into truly smart and sustainable ones (Yigitcanlar and Kamruzzaman, 2018).

Additionally, as the study reveals, different approaches are followed in different corners of the globe for the development and practice of smart cities. This finding has helped us to conceptualize three distinctive pathways for smart cities. These pathways to the making of prosperous smart cities are: 1) the development of entirely new (smart) cities—from scratch development, 2) smart city development projects within particular parts of the city—infill smart precinct/neighborhood development, and 3) the advancement of smart cities through the integration of ICT's within the city organization—retrofitting the city with smart technologies and platforms to increase efficiencies.

Finally, while each of the above-mentioned pathways has their strengths and weaknesses and suitability for certain country contexts, they shed light on the future research studies that will focus on the development of new and consolidated pathways. Nevertheless, it should not be forgotten that the making of prosperous smart cities highly depends on adequately linking the guiding principles (such as having a system of systems approach, adopting a quadruple-bottom-line sustainable urban development perspective, and mainstreaming the urban metabolism approach) and traditional policymaking and planning methods with technological advancements and the needs of the societies (Yigitcanlar et al., 2019c). This rule applies to all of the distinctive pathways this study introduced, and the prospective ones yet to be formed.

Adapted from a forthcoming paper in the Journal of Urban Technology: https://www.tandfonline.com/doi/full/10.1080/10630732.2020.1807251

KEVIN C. DESOUZA
Professor of Business, Technology and Strategy
School of Management, QUT Business School
Queensland University of Technology
kevin.c.desouza@gmail.com

MICHAEL HUNTER
Researcher
School of Information Systems
Queensland University of Technology
Mg,hunter@qut.edu.au

BENOY JACOB, PhD
Director, Community Development Institute
University of Wisconsin, Madison
Affiliated Faculty
LaFollette School of Public Affairs
benoy.jacob@unlv.edu

TAN YIGITCANLAR
Associate Professor of Urban Studies and Planning
School of Built Environment
Queensland University of Technology
tan.yigitcanlar@qut.edu.au

BIBLIOGRAPHY

R. Abhirup and R. Jain, *India's jobs deficit: Project in Gujarat struggling to create employment* (n.d, USA: Reuters, 2019) https://www.reuters.com/article/us-india-election-giftcity-insight/indias-jobs-deficit-project-in-gujarat-struggling-to-create-employment-idUSKCN1SU04Y Accessed May 24, 2019.

E. Albers, *Using Free Software to build a more democratic, inclusive and sustainable digital society* (n.d, ES: Free Software Foundation Europe, 2018). https://fsfe.org/news/2018/news-20180705-01.en.html Accessed June 12, 2019.

V. Albino, U. Berardi & R. Dangelico, "Smart Cities: Definitions, Dimensions, Performance, and Initiatives", *Journal of Urban Technology*, 22:1, (2015).

I. Amsterdam, Amsterdam: *Capital of Innovation* (Amsterdam, NL: Amsterdam and Partners Foundation, 2019) https://www.iamsterdam.com/en/business/news-and-insights/capital-of-innovation Accessed May 28, 2019.

Amsterdam Smart Citizens Lab, *Citizen Science – The Bottom Up Way*. (Amsterdam, NL: Amsterdam Smart Citizens Lab, 2016) https://amsterdamsmartcity.com/projects/amsterdam-smart-citizens-lab-3901oh7g Accessed May 28, 2019.

M, Angelidou. The Role of Smart City Characteristics in the Plans of Fifteen Cities, *Journal of Urban Technology*, 24:4, 3-28 (2017).

ANS: *Creating the 1st blueprint for UK smart cities - ANS means business* (Manchester, UK: ANS, 2018) https://www.ans.co.uk/case-studies/cityverve/ Accessed June 11, 2019.

ASTAR (2017). Opening Address by Chairman of A*STAR, Mr. Lim Chuan Poh, at the Future of Manufacturing Summit Singapore on 5 September 2017 at Resorts World Sentosa https://www.a-star.edu.sg/News-and-Events/News/Speeches/ID/5671 Accessed June 20, 2019.

J. Anuta, *Hudson Yards to be first 'quantified community'* (New York, NY, Crains New York Business, 2014) https://www.crainsnewyork.com/article/20140414/REAL_ESTATE/140419932/hudson-yards-to-be-first-quantified-community Accessed May 12, 2019.

R. Au-Yong, *The Story of Jurong Lake District - from the boondocks to boom-town and beyond*: The Straits Times, 2017) https://www.straitstimes.com/singapore/from-the-boondocks-to-boom-town-and-beyond Accessed June 18, 2019.

T. Bakici, E. Almirall & J. Wareham, "A Smart City Initiative: the Case of Barcelona", *Journal of the Knowledge Economy*, 4:2, (2013).

Barcelona, *General Principles of Technological Sovereignty* (Barcelona, EG: Barcelona Government, 2016) https://www.barcelona.cat/digitalstandards/en/tech-sovereignty/0.1/general-principles.

P. Berrone, J. Ricart, & C. Carrasco, "The Open Kimono: Toward a General Framework for Open Data Initiatives in Cities", *California Management Review*, 59: 1, (2016).

J. Bhatnarga (2015) "Gujarat International Finance Tec-city: A Smart GIFT". Smart Cities of Tomorrow. Accessed October 15, 2019.

T. Bhattacharya, A. Bhattacharya, B. McLellan, B. & T. Tezuka, "Sustainable smart city development framework for developing countries", *Urban Research & Practice*, (13:2), (2018).

Bibri, S. (2018). *Smart Sustainable Cities of the Future The Untapped Potential of Big Data Analytics and Context–Aware Computing for Advancing Sustainability* (1st ed. 2018).

S. Bibri, & J. Krogstie, "Smart sustainable cities of the future: An extensive interdisciplinary literature review", *Sustainable Cities and Society*, (31: issue), (2017).

J. Blackman, *We will seriously 'productize' CityVerve* (United Kingdom, UK: Internet of Things Enterprise, 2018) https://enterpriseiotinsights.com/20180620/channels/news/we-will-productise-cityverve-says-cisco-tag40 Accessed June 21, 2019.

Bloomberg, *Gujarat International Finance Tec-City and Bloomberg Collaborate to Advance India's International Financial Services Center to Global Investors* (United States of America, US: Bloomberg Professional Services, 2018). https://www.bloomberg.com/company/press/gujarat-international-finance-tec-city-gift-city-bloomberg-collaborate-advance-indias-international-financial-services-centre-ifsc-global-investors/ Accessed June 10, 2019.

I. Boughed, C., Alalouch & N. Fava, "Towards smart sustainable cities: A review of the role digital citizen participation could play in advancing social sustainability", *Sustainable Cities and Society*, (50) (2019).

B. Bowerman, J. Braverman, J. Taylor, H. Todosow, & U. Wimmersperg, "The Vision of a Smart City", paper presented at 2nd International Life Extension Technology Workshop (Paris, September 28, 2000).

B. Byung-yeul, *Incheon FEZ becomes global business hub* (Korea, KOR: The Korea Times, 2018) http://www.koreatimes.co.kr/www/tech/2018/12/693_259369.html Accessed June 14, 2019.

I. Capdevila, & M. Zarlenga. Smart city or smart citizens? The Barcelona case. *Journal of Strategy and Management*, 8(3), 266–282 (2015).

A. Charles, *How can India make smart cities a reality?* (Davos, CH, *World Economic Forum*, 2015) https://www.weforum.org/agenda/2015/11/how-can-india-make-smart-cities-a-reality/.

J. Choque, A. Medela, J. Echevarria, L. Diez, & L. Munoz, "Enabling incentivization and citizen engagement in the smart-city co-creation paradigm", paper presented at *2018 Global Internet of Things Summit* (June 4-7, Bilbao, 2018).

CISCO, *CISCO announces $1 billion program for Smart Cities* (Manchester, UK: CISCO, 2017) https://newsroom.cisco.com/press-release-content?type=webcontent&articleId=1895705 Accessed June 15, 2019.

CISCO, *Public Sector Digital Transformation Map - CISCO Case Studies* (Manchester, UK: CISCO, 2019) https://www.cisco.com/c/m/en_us/solutions/industries/smart-connected-communities/digital-transformation-map.html Accessed June 15, 2019.

J. Cluer, *Top Five: Israel's Innovation Centre* (Western Australia, AUS, *Australia-Israel – Chamber of Commerce WA Inc., n.d*) http://www.aiccwa.org.au/Profiles/aiccwa/Assets/ClientData/Images/Events/Israels_Innovation_Culture.pdf Accessed July 2, 2019.

B. Cohen, *The three generations of smart cities* (New York, NY: Fast Company, 2015) https://www.fastcompany.com/3047795/the-3-generations-of-smart-cities Accessed September 15, 2015.

C. Cooper, *How Israel became a start-up nation* (Melbourne, AU: *InTheBlack – Economics, 2017*) https://www.intheblack.com/articles/2017/11/01/israel-start-up-nation Accessed July 2, 2019.

E. Cosgrave, K, Arbuthnot, & T. Tryfonas. Living Labs, Innovation Districts and Information Marketplaces: A Systems Approach for Smart Cities. *Procedia Computer Science, 16*(C), 668–677 (2013).

F. Cugurullo, *"How to Build a Sandcastle: An Analysis of the Genesis and Development of Masdar City", Journal of Urban Technology,* 20:1, (2013).

Cugurullo, F. (2016). Urban eco-modernisation and the policy context of new eco-city projects: where Masdar City fails and why. *Urban Studies*, 53(11), 2417–2433.

R. Dameri, *"Searching for smart city definition: A comprehensive proposal",* International Journal of Computers and Technology, 11:5, (2013) 2544-2551.

K. Da-sol, *IEFZ unveils plans to make Songdo world-class bio industry hub* (Korea, KOR: The Korea Times, 2018) http://www.koreaherald.com/view.php?ud=20180424000721 Accessed July 2, 2019.

K. Desouza & A. Bhagwatwar *"Citizen Apps to Solve Complex Urban Problems," Journal of Urban Technology,* 19:3, (2012) 107-136.

K. Desouza & A. Bhagwatwar "Technology-Enabled Participatory Platforms for Civic Engagement: The Case of US Cities," *Journal of Urban Technology,* 21:4 (2014) 25-50.

K. Desouza & T. Flanery "Designing, Planning, and Managing Resilient Cities: A Conceptual Framework," *Cities,* 35:1 (2013) 89-99.

K. Desouza, M. Hunter and T. Yigitcanlar "Under the hood: A look at techno-centric smart city development," *Public Management 101:11,* (2019) 30-35.

T, Dodd, *Hebrew University of Jerusalem earned US20b revenue from commercializing its research.* (Australia, AUS: *Australian Financial Review,* 2017). https://www.afr.com/work-and-careers/management/hebrew-university-of-jerusalem-earns-us20b-from-commercialising-its-research-20170713-gxaqb9 Accessed July 4, 2019.

C. Drubin, *"Singapore tops in smart city rankings," Microwave Journal,* 61:6, (2018). https://gateway.library.qut.edu.au/login?url=https://search-proquest-com.ezp01.library.qut.edu.au/docview/2060947949?accountid=13380 .

P. Dunleavy, H. Margetts, S. Bastow and J. Tinkler, "New public management is dead—long live digital-era governance," *Journal of public administration research and theory, 16:3,* (2006) 467-494.

European Commission: Amsterdam Smart City. (Amsterdam, N: *European Commission,* 2011). https://ec.europa.eu/regional_policy/en/projects/best-practices/netherlands/2115 Accessed June 2, 2019.

J. Fishenden, and M, Thompson. Digital government, open architecture, and innovation: why public sector IT will never be the same again. *Journal of public administration research and theory,* 23 (4), 2013, 977-1004.

M. Fitzgerald, Data Driven City Management. *MIT Sloan Management Review.* (2016). https://sloanreview.mit.edu/case-study/data-driven-city-management/.

Garber, B. (1991, Oct 24). Israel opens labor force for Russians. *Jewish Advocate* Retrieved from https://gateway.library.qut.edu.au/login?url=https://search.proquest.com/docview/205159350?accountid=13380.

Garfield, L (2017). South Korea is building a $40 billion city designed to eliminate the need for cars. *The Business Insider – Research – Tech Insider.* February 15, 2017. https://www.businessinsider.com.au/songdo-south-korea-design-2017-11?r=US&IR=T.

Gascó-Hernandez, M. Building a smart city: lessons from Barcelona. Communications of the ACM, 61(4), 50–57 (2018).

GIFT (2019). GIFT Special Economic Zone. *Gujarat International Financial Services Centre.* 2019. http://www.giftgujarat.in/gift-sez.

Goh, E., & Reilly, J. (2017). China's Belt and Road Initiative. *East Asia Forum Quarterly, 9*(4), 33–34. Retrieved from http://search.proquest.com/docview/2185821625/.

Goldenberg, S. (2016). Analysis shows Hudson Yard's Impact of City's Economy. *Politico.* 3rd May, 2016. https://www.related.com/sites/default/files/2019-03/acquiadam-assets/relatedcorporate-news-05-2017-Politico-HudsonYards-economic-impact.pdf.

Goldenberg, S. (2016). Masdar's zero-carbon dream could become world's first green ghost town. The Guardian, Greenhouse Gas Emissions. February 17, 2016. https://www.theguardian.com/environment/2016/feb/16/masdars-zero-carbon-dream-could-become-worlds-first-green-ghost-town.

Granier, B., & Kudo, H. (2016). How are citizens involved in smart cities? Analysing citizen participation in Japanese "Smart Communities". *Information Polity*, 21(1), 61–76.

GUCD, (2019). About Us. *Gujarat Urban Development Company*. 2019. http://www.gudcltd.com/.

GulfNews (2019). 10.5 billion worth of deals reach at energy summit in Abu Dhabi. *Gulf News – Energy*. January 21, 2019. https://gulfnews.com/business/energy/105-billion-worth-of-deals-reached-at-energy-summit-in-abu-dhabi-1.1548070371434.

Haag, M. (2019). Amazon's Tax Breaks and Incentives Were Big. Hudson Yards are Bigger. *The New York Times*. March 9, 2019. https://www.nytimes.com/2019/03/09/nyregion/hudson-yards-new-york-tax-breaks.html.

Hammer, S., Kamal-Chaoui, L., Robert, A., and Plouin, M., Cities and Green Growth: A Conceptual Framework, OECD Regional Development Working Papers 08, OECD Publishing, 2011.

Hanifan, L. J. (1916). The Rural School Community Centre. Annals of the American Academy of Political and Social Sciences 67, 130-38.

Hashem, I. A., Chang, V., Anuar, N. B., Adewole, K., Yaqoob, I., Gani, A. & Chiroma, H. (2016). The role of big data in smart city. *International Journal of Information Management*, 36(5), 748-758.

Heo, T., Kim, K., Kim, H., Lee, C., Ryu, J., Leem, Y., Ko, J. Escaping from ancient Rome! Applications and challenges for designing smart cities. *Transactions on Emerging Telecommunications Technologies*, 25(1), 109–119 (2014).

Hollands, R. (2008). Will the real smart city please stand up?: Intelligent, progressive or entrepreneurial? City, 12(3), 303–320.

Hudson Yards, New York (2016). New Report Details Substantial Economic Impact of Hudson Yards Development. *Hudson Yards – Press Releases*. May 2, 2016. https://www.hudsonyardsnewyork.com/press-media/press-releases/new-report-details-substantial-economic-impact-hudson-yards-development.

M. Hunter, JD. Selby, K.C. Desouza "Cities Are Surprisingly Fragile" Observations: Scientific American, 2019. https://blogs.scientificamerican.com/observations/cities-are-surprisingly-fragile/.

IMD, 2019. IMD and SUTD unique ranking shows importance of citizens' needs in policy making. *IMD Smart City Index*. 2019. https://www.imd.org/smart-city-observatory/smart-city-index/.

Incheon Global Campus (2019). About. *Incheon Global Campus*. 2019. http://www.igc.or.kr/en/index.do

India ICT (2019). Digitel – Tel Aviv, Israel. *Case Study – ICT Enabled Integration for Green Growth Project*. 2019. http://icities4greengrowth.in/casestudy/digitel-tel-aviv-israel.

Indianix (2019). Services, About Us. *International Financial Services Centre*. 2019. https://www.indiainx.com/static/ifsc.aspx

Ismail, N. (2018). 3 Smart City Lessons from Manchester and the UK's Smart City IoT demonstrator, City Verve. *Information Age, Topics, Smart Cities*. August 20, 2018. https://www.information-age.com/smart-city-lessons-123474272/.

JTC Corporation (2019). Jurong Innovation District. JTC – *Projects and Properties*. 2019. https://www.jtc.gov.sg/industrial-land-and-space/Pages/jurong-innovation-district.aspx.

Kaye, L. (2017). Pushing the low carbon boundaries: South Korea's smart grid initiative. *The Guardian*, 5th September, 2011. https://www.theguardian.com/sustainable-business/south-korea-smart-grid-low-carbon.

Khare, V. (2019). India Election 2019: Have '100 smart cities' been built? *BBC News*. March 25, 2019. https://www.bbc.com/news/world-asia-india-47025472.

Komninos, N., Kakderi, C., Panori, A. & Tsarchopoulos, P. (2019) Smart City Planning from an Evolutionary Perspective, *Journal of Urban Technology, 26:2*, 3-20, DOI: 10.1080/10630732.2018.1485368.

Kummitha, R., & Crutzen, N. (2017). How do we understand smart cities? An evolutionary perspective. Cities, 67, 43–52.

Lara, A., Moreira Da Costa, E., Furlani, T., & Yigitcanlar, T. (2016). Smartness that matters: towards a comprehensive and human-centered characterisation of smart cities. *Journal of Open Innovation: Technology, Market, and Complexity*, 2(1), 1–13.

Lawrence, C. (2019). Why Smart City Amsterdam is the Home of Innovation. *IoT Zone*. October 25, 2017. https://dzone.com/articles/why-smart-city-amsterdam-is-the-home-of-innovation.

Liu, N., Gavino, A., & Purao, S. (2014). A method for designing value-infused citizen services in smart cities. *Proceedings of the 15th Annual International Conference on Digital Government Research*, 34–43.

Macpherson, L. (2018). 8 Years on, Amsterdam is still leading the way as a Smart City. Towards Data Science. September 8, 2017. https://towardsdatascience.com/8-years-on-amsterdam-is-still-leading-the-way-as-a-smart-city-79bd91c7ac13.

Malon, D. (2016). Despite troubled development, Masdar City forges ahead. *BCD Network, Urban Planning*. October 20, 2016. https://www.bdcnetwork.com/despite-troubled-development-masdar-city-forges-ahead.

Mancebo, F. (2019) Smart city strategies: time to involve people. Comparing Amsterdam, Barcelona and Paris, Journal of Urbanism: International Research on Placemaking and Urban Sustainability,

MASDAR (2019). Clean Energy - Projects. *Masdar City Website – The City.* 2019. https://masdar.ae/en/masdar-city/the-city/sustainability.

MASDAR (2019). Sustainability. *Masdar City Website – The City.* 2019. https://masdar.ae/en/masdar-city/the-city/sustainability.

Mckinsey (2018). Smart Cities: Digital Solutions for a more livable future. *Mckinsey Global Institute.* June, 2018. https://www.mckinsey.com/industries/capital-projects-and-infrastructure/our-insights/smart-cities-digital-solutions-for-a-more-livable-future.

Meetup, 2019. Amsterdam Smart Citizens Lab. *Meetup.com.* October 17, 2019. https://www.meetup.com/Amsterdam-Smart-Citizens-Lab/events/.

Menny, M., Palgan, Y., & McCormick, K. (2018). Urban Living Labs and the Role of Users in Co-Creation. *Gaia, 27*(S1), 68–77.

Microsoft (2017). Microsoft driving intelligent, connected smart cities. *Microsoft in Government, Industry Blogs.* November 12, 2018. https://cloudblogs.microsoft.com/industry-blog/government/2018/11/12/microsoft-driving-intelligent-connected-smart-cities/.

Microsoft (2019). Welcome to Microsoft CityNext. *Partner Network, Microsoft.* 2019. https://partner.microsoft.com/en-us/solutions/citynext.

Mora, L., Deakin, M., & Reid, A. (2019). Strategic principles for smart city development: A multiple case study analysis of European best practices. *Technological Forecasting and Social Change, 142,* 70–97.

Moser, S (2013). New Cities: Opportunities, Visions and Challenges: Summary and Analysis Report. *Cityquest – KAEC Forum 2013.* November 25, 2013. https://newcities.org/wp-content/uploads/2014/06/PDF-CityquestKAECForum-Report-Sarah-Moser.pdf.

Mullins, P & Shwayri, S (2016) Green Cities and "IT839": A New Paradigm for Economic Growth in South Korea, *Journal of Urban Technology, 23:2,* 47-64.

Nam, T., & Pardo, T. A. (2011). Conceptualizing smart city with dimensions of technology, people, and institutions. In 12th Annual International Digital Government Research Conference: Digital Government Innovation in Challenging Times (pp. 282–291).

Newton, P. (2012) Liveable *and* Sustainable? Socio-Technical Challenges for Twenty-First-Century Cities, *Journal of Urban Technology, 19:1,* 81-102.

Nolan, H. (2019). New York's Hudson Yards is an ultra-capitalist Forbidden City. *The Guardian, Opinion, New York.* 13th March, 2019. https://www.theguardian.com/commentisfree/2019/mar/13/new-york-hudson-yards-ultra-capitalist.

Nonko, E. (2019). Hudson Yards promised a High-Tech Neighborhood – It was a greater challenge than expected. *Metropolis Magazine.* February 5, 2019. https://www.metropolismag.com/cities/hudson-yards-technology-urbanism/.

OECD Insights. (2007). The Bigger Picture. Human Capital: How what you know shapes your life. 6, 102-105.

Oliveira, E. (2017). [Review of *Citizen Empowerment and Innovation in the Data-Rich City*]. *Journal of Urban Technology, 24(2),* 111–114.

Otgaar, A., & Carvalho, L. (2016). Mobile world capital (Barcelona). *In Delivering Sustainable Competitiveness: Revisiting the Organising Capacity of Cities* (pp. 92–107).

Pereira, G., Cunha, M., Lampoltshammer, T., Parycek, P., & Testa, M. (2017) Increasing collaboration and participation in smart city governance: a cross-case analysis of smart city initiatives, *Information Technology for Development, 23:3,* 526-553.

Piro, G., Cianci, I., Grieco, L. A., Boggia, G., & Camarda, P. (2014). Information centric services in smart cities. *Journal of Systems and Software, 88(1),* 169–188.

Plitt, A. (2019). Hudson Yards opening: Timeline of the megaproject's major moments. *Curbed New York – NYC Development News.* March 13, 2019. https://ny.curbed.com/2019/3/13/18252323/hudson-yards-new-york-construction-timeline.

Poon, L (2018). Sleepy in Songdo, Korea's Smartest City. Citylab. 22nd June 22, 2018. https://www.citylab.com/life/2018/06/sleepy-in-songdo-koreas-smartest-city/561374/.

Press, G. (2018). 6 Lessons From Tel-Aviv For Successful Digital Transformation Of Smart Cities. *Forbes, Enterprise and Cloud.* March 22, 2018. www.forbes.com/sites/gilpress/2018/03/22/6-lessons-from-tel-aviv-for-successful-digital-transformation-of-smart-cities/#351873965330.

A Record-breaking Edition of Smart City Expo Will Focus on Building More Liveable Cities. (2018, November 13). *PR Newswire.* Retrieved from http://search.proquest.com/docview/2132240521/.

Reboredo, R. (2019). What a failed Johannesburg project tells us about mega cities in Africa. *The Conversation – Business and Economy.* March 6, 2019. http://theconversation.com/what-a-failed-johannesburg-project-tells-us-about-mega-cities-in-africa-112420

Rios, P. (2008). Creating "the smart city". https://archive.udmercy.edu/handle/10429/393.

Rojc, P. (2019). Promised Data-Driven Infrastructure on Hold at Hudson Yards. *Planetizen – News.* February 24, 2019. https://www.planetizen.com/news/2019/02/103015-promised-data-driven-infrastructure-hold-hudson-yards.

Rossi, U (2016) The Variegated Economics and the Potential Politics of the Smart City, Territory, Politics, Governance, 4:3, 337-353.

Shwayri, S., (2019). "A Model Korean Ubiquitous Eco-City? The Politics of Making Songdo," *Journal of Urban Technology*, 20: 1 (2013) 39–55.

SmartCities (2019). Smart Cities Mission. *Ministry of Housing and Urban Affairs, Government of India.* 2016. http://smartcities.gov.in/content/.

SmartCitiesWorld (2018). Citizen Engagement is the key to smart city success. *Smart Cities World – News.* March, 8 2018. https://www.smartcitiesworld.net/news/news/citizen-engagement-is-key-to-smart-city-success-2685.

SmartCity.com (2019). Oslo – A Smart City with a Pioneering Thinking Against Climate Change. *Environment, Climate Change, Europe, Smart City Press.* April 2, 2019. https://www.smartcity.press/climate-change-in-oslo/.

SmartCityExpo (2014). SCEWC 2014 Report. Change The World. *Smart City Expo, World Congress.* 2014. http://www.smartcityexpo.com/the-event/past-editions-2014.

Soyata, T., Habibzadeh, H., Ekenna, C., Nussbaum, B., & Lozano, J. (2019). Smart city in crisis: Technology and policy concerns. *Sustainable Cities and Society, 50.*

Tieman, R. (2017). Barcelona: smart city revolution in progress. *Financial Times – Special Report – Smart Cities.* October 26, 2017. https://www.ft.com/content/6d2fe2a8-722c-11e7-93ff-99f383b09ff9.

Tyler, J. Bendix, A (2018). Hudson Yards is the most expensive real-estate development in the US history. Here's what it's like inside the $25 billion neighbourhood. *Business Insider – Research – Briefing.* October 1, 2018. https://www.businessinsider.com.au/hudson-yards-tour-of-most-expensive-development-in-us-history-2018-9?r=US&IR=T.

UN, United Nations, "World Urbanization Prospects: The 2007 Revision Population Database" (2008), http://esa.un.org/unup/.

USGBC (2019). Green building leadership is LEED. *Leadership in Energy and Environmental Design.* 2019. https://new.usgbc.org/leed.

van den Bosch, H (2018). Smart beyond technology push. Smart City Hub, Technology and Innovation. December 18, 2018. http://smartcityhub.com/technology-innnovation/smart-beyond-technology-push/.

van Waart, P., Mulder, I., de Bont, C., Bolívar, M., Meijer, A., & Gil-Garcia, J. (2016). A Participatory Approach for Envisioning a Smart City. *Social Science Computer Review,* 34(6), 708–723.

Venkataraman, P. (2018). Gujarat's GIFT City named among top three emerging business hubs in the world. *News18, Business.* September 13, 2018. https://www.news18.com/news/business/gujarats-gift-city-named-among-top-three-emerging-business-hubs-in-world-1876885.html.

Wade, G. (2017). China's 'One belt, One Road' initiative. *Foreign Affairs, Defence and Security. Parliament of Australia.* 2017. https://www.aph.gov.au/About_Parliament/Parliamentary_Departments/Parliamentary_Library/pubs/BriefingBook45p/ChinasRoad.

Yigitcanlar, T. (2011). Moving Towards a Knowledge City?: Brisbane's Experience in Knowledge-Based Urban Development. *International Journal of Knowledge-Based Organizations (IJKBO), 1*(3), 22–38.

Yigitcanlar, T., & Lee, S., (2014). Korean ubiquitous-eco-city: a smart-sustainable urban form or a branding hoax? *Technological Forecasting and Social Change, 89,* 100-114.

Yigitcanlar, T. (2016). Technology and the city: Systems, applications and implications. Routledge.

Yigitcanlar, T., Kamruzzaman, M. (2018). Does smart city policy lead to sustainability of cities? *Land Use Policy 73,* 49–58.

Yigitcanlar, T., Kamruzzaman, M., Buys, L., Ioppolo, G., Sabatini-Marques, J., Costa, E., & Yun, J., (2018). Understanding 'smart cities': intertwining development drivers with desired outcomes in a multidimensional framework. *Cities, 81,* 145-160.

Yigitcanlar, T., & Inkinen, T. (2019). *Geographies of Disruption: Place Making for Innovation in the Age of Knowledge Economy.* Springer International Publishing.

Yigitcanlar, T., Hoon, M., Kamruzzaman, M., Ioppolo, G., & Sabatini-Marques, J., (2019a). The making of smart cities: are Songdo, Masdar, Amsterdam, San Francisco and Brisbane the best we could build? *Land Use Policy, 88,* 104187.

Yigitcanlar, T., Kamruzzaman, M., Foth, M., Sabatini-Marques, J., Costa, E., & Ioppolo, G. (2019b). Can cities become smart without being sustainable? A systematic review of the literature. *Sustainable Cities and Society, 45,* 348–365.

Yigitcanlar, T., Foth, M., Kamruzzaman, M. (2019c). Towards post-anthropocentric cities: reconceptualising smart cities to evade urban ecocide. *Journal of Urban Technology,* 26(2), 147–152.

Zarroli, J. (2015). How Singapore became one of the richest places on earth. *Weekend Edition Sunday.* NPR. March 29, 2015. https://www.npr.org/2015/03/29/395811510/how-singapore-became-one-of-the-richest-places-on-earth .

Zhang, X. (2019). Remaking Sustainable Urbanism Space, Scale and Governance in the New Urban Era (1st ed. 2019).

TRUSTING POLITICIANS AND INSTITUTIONS IN A MULTI-LEVEL SETTING

Sune Welling Hansen And Ulrik Kjaer

Trust in government and in politicians is a very crucial prerequisite for democratic processes. This is true not only for the national level of government, but also for the regional and local levels. We make use of a large-scale survey among citizens in Denmark to evaluate trust in politicians at different levels of government. And we find that trust in local politicians is somewhat higher than trust in members of Parliament (MPs)—especially among citizens who are well satisfied with the municipal service delivery. By introducing several municipal-level variables in a multi-level analysis (MLA), it is also found that very chaotic government formation processes can negatively influence trust in the mayor and the councilors. Reaching out for local power by being disloyal to one's own party or by breaking deals already made can sometimes secure the mayoralty, but it comes at a cost: lower trust among the electorate.

POLITICAL TRUST IN A MULTI-LEVEL SETTING

The defining feature of representative democracy is the representative connection between voters and elected representatives by which voters elect politicians who then make decisions on their behalf until the next election, when voters then evaluate the representatives by voting them in or out of office (Manin, 1997; Przeworski et al., 1999; Trounstine, 2010). In its simplicity, this vital mechanism for representative democracy looks ingenious at first, but it is worth noticing how radical the idea of representational democracy is. For an extensive period of time (in many cases, four or five years) the many voters allow the few politicians to rule them and let them make sometimes critical political decisions on their behalf. Deliberative arrangements, which make discussions between citizens and politicians possible in between elections, are, of course, also a part of the representative democratic set-up in many countries, but what basically keeps the system together and enables political representation as a continuously working form of democracy is *trust*. If the voters trust the politicians and the political institutions, then the system is viable and can survive; otherwise it will be seriously challenged. And in a world where representative democracy in many countries is seen as the preferred form of democracy, it is therefore essential to monitor the level of the citizens' trust in their representatives and in the legislatures these politicians inhabit.

Therefore, it is no surprise that the concept of political trust has been discussed and researched extensively for many years (e.g., Easton, 1965; Miller, 1974; Bianco, 1994; Norris, 1999; Levi and Stoker, 2000). The definitions of *trust* are many; for now we will follow Miller and Listhaug who state that: "Trust…reflects evaluations of whether or not political authorities and institutions are performing in accordance with normative expectations held by the public. Citizen expectations of how government should operate include, among other criteria, that it be fair, equitable, honest, efficient, and responsive to society's needs. In brief, an expression of trust in government (or synonymously political confidence and support) is a summary judgement that the system is responsive and will do what is right even in the absence of constant scrutiny" (Miller and Listhaug, 1999).

We fully acknowledge that several different dimensions of political trust can be identified, but instead of getting involved in that discussion, we will stick to the definition's point that trust is a kind of "summary judgment." And therefore, throughout the article, we will take for granted the summary judgment of the citizens that we have surveyed—if they say that they have trust in politicians when asked directly, we will trust their evaluation.

We will take the discussion and the empirical analysis in a very specific direction, since we also find it important that this concept and the empirical understanding hereof is more multi-level in nature than what has previously been seen. Despite more and more focus on multi-level governance (Bache and Flinders; Piattoni, 2010), it seems that in most cases this means including the supranational level (e.g., the European Union), whereas the local government level continuously is, if not outright forgotten, then somewhat overlooked in many branches of political and administrative science.

FOCUSING ON THE LOCAL LEVEL

The scarcity of studies on political trust at the local level might have something to do with the tendency to pay less attention to "low politics" compared to "high politics." Local governments often take care of roads, sewage, water, zoning, and other "technical" matters, whereas economic policy and foreign policy are decided at the national level and in the national political realm, sometimes even in supranational spheres. (Although in many countries, local governments are often in some ways involved in important policy fields such as schools, social services, and care for the elderly). However, without taking sides in the debate on whether local or national governments are the most important, it could be argued that more attention should be paid to the local government level. In all countries there are by far more politicians elected at the local level than at the national, and therefore it seems a bit peculiar not to take these many local politicians into account when political trust is discussed. Also, by including the local level in the analyses of political trust, we get a better empirical understanding of this specific political/administrative phenomenon. Not only does the local level supply us with more cases to scrutinize, it also offers a unique comparative basis of

analysis. We might be able to learn from comparing trust at different political levels within the same country and learn from the comparison different local governments within the same country, thereby being able to have many comparable cases (Lijphart, 1975).

Paradoxically, the sheer number of local governments not only makes them interesting from a scholarly point of view, it sometimes also makes them less accessible for scholars since data on local governments are often harder to access compared to data on national governments. Precisely because of data scarcity, it has been concluded, in regard to the study of trust, that: "The extant literature is thus ill equipped to comment critically on the nature of public trust in local government" (Rahn and Rudolph, 2005: 531). But data on local government can be produced, and therefore we will accept the challenge and partake in an MLA on trust in governments.

We will do this by asking two questions. First, we will ask where the level of political trust is highest—at the national, regional, or local government level? Second, we will focus on the local government level and try to explain the variation across different municipalities. This is in line with Rahn and Rudolph when they ask: "Why is local political trust higher in some places than in others?" (2005: 531).

We will conduct the study as a single country study (comparing across levels and local governments) and have chosen Denmark as our case. The reason for the case selection is mostly related to the unique data situation in Denmark. The official statistics on the regional and municipal level are among the best in the world (since most official statistics are split by region and municipality). Also, and most importantly, it has been possible to conduct several large-scale surveys among Danish citizens over the years—surveys where the number of respondents in each municipality has been sufficiently high to apply MLA to the data.

Denmark consists of 98 municipalities and five regions so that every Dane votes for three elective bodies: municipal council, regional council, and national parliament (Folketinget). In a survey conducted in 2013, we asked 4,902 Danes about their level of trust in these three institutions and their level of trust in the politicians at each of the levels (municipal councilors, regional councilor, and MPs). We have sampled at least 30 respondents in each municipality so that variables at the municipal level can be included in multi-level analyses.

In the next two parts of the article, we will use this unique dataset to answer the two questions posed above. In the first part, we will compare the trust among the citizens to different levels of government and in the next part we will explain the variation in the trust of local politicians between citizens living in different municipalities.

THE LOWER THE LEVEL OF GOVERNMENT, THE MORE TRUST?

Does citizen trust differ depending on which level of government is under scrutiny? And if so, which level of government receives the highest level of trust? The hypothesis derived from the literature is quite clear: "Trust is anticipated to grow as it becomes closer in spatial scale—thus, the more local, the higher the trust" (Petrzelka et al., 2013: 338). It is claimed that it is distance between the citizen and the politicians/administrators that can potentially create mistrust, and from this premise it follows that trust is relatively higher at the local government level than at the regional and national level of government. The claim has been made by several authors (e.g., Jennings, 1998; Levi and Stoker, 2000; Cole and Kincaid, 2001) and it has also found some empirical support (Cole and Kincaid 2000), although the evidence is not conclusive (e.g., Petrzelka et al. 2013).

The argument that trust is higher at the lower levels seems sound and consistent with the tendency not to trust strangers; the larger the jurisdiction, the farther away the political/administrative system will ceteris paribus be to the average citizen, in terms of physical distance and in more figurative terms, and therefore the politicians will be less known and thereby less trusted. However, this line of argument could also be challenged. First of all, some people might actually trust strangers. Secondly, the way citizens get to "know" their politicians is not only by meeting them in person—today most people probably "know" their politicians from the media. Thirdly, by hypothesizing that the closer the citizens are to their politicians, the more they trust them, it is more or less implied that knowledge can only be advantageous for the way citizens perceive politicians, thereby neglecting that information can also reveal less trustworthy traits of the politicians.

Therefore, the question of trust at different levels of government is more an empirical question. When surveying citizens' trust, it is, however, important to make a few distinctions. A distinction can be made between trust in the politicians and trust in the institutions—it is possible to trust the parliament as an institution without trusting the MPs currently serving there, and vice versa. Also, politicians are different—some of them are not only representatives but also hold executive power and/or a leadership position.

Therefore, in the Danish case, we have asked the citizens about their trust in the parliament as an institution, the MPs, and those MPs who hold a leadership position. And we have asked about their trust in these three institutions/politicians at the national, regional, and local government level, respectively. The results in terms of the average level of trust for these nine groups, based on the survey conducted in Denmark, are reported in Table 1.

As demonstrated in Table 1, Danish citizens' trust in their politicians and the institutions they inhabit is not that overwhelming. On the 10-point scale applied, most of the results are around the middle of the scale, indicating that Danes in general are not mistrustful of their politicians, but they do not trust them a lot either.

For all three levels of government, it is also demonstrated that the trust in politicians is a little lower than the trust in the corresponding legislatures. The differences are not huge, but as it can be seen in Table 1, they are statistically significant. Citizens trust their national parliament, their regional parliament, and their local parliament to some extent, but they trust the politicians who are presently holding the seats there a little less. As for the leadership, the findings are inconclusive.

For our purpose, the most interesting finding reported in Table 1 pertains to trust across levels of government. No matter whether we analyze trust in legislatures, leadership, or politicians, a clear pattern can be observed: The citizen's trust in the local government level is higher than the same citizen's trust in the regional and national level of government. The difference is not huge, but it is statistically significant. So, in the Danish case, the traditional hypothesis claiming higher trust at the local level cannot be rejected.

Table 1. Trust in politicians and institutions at different levels among voters in Denmark 2013 (mean on a 10-point scale – 95 percent confidence intervals in parentheses)

	Legislature	Leadership	Politicians
National level	5.02 (4.95-5.10)	4.27 (4.19-4.36)	4.76 (4.69-4.83)
Regional level	4.82 (4.76-4.88)	4.60 (4.53-4.66)	4.66 (4.59-4.72)
Local level	5.53 (5.47-5.60)	5.41 (5.34-5.49)	5.28 (5.21-5.34)

Notes: The nine numbers on trust represents (from left to right, top to bottom): Parliament, the national government, members of parliament, regional council, chairman of regional councils, regional councilors, municipal council, mayors, and municipal councilors.

Scale 0 ("No trust at all"), 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 ("Very high level of trust").

n = 4.902 (weighted).

Source: Danish Local Democracy Survey 2013

WHO TRUSTS LOCAL POLITICIANS THE MOST?

Not all the citizens have the same level of trust in their politicians. Therefore, we will move on to the second question posed in the introduction, namely: Who trusts their politicians the most? We will focus on the local politicians—the councilors—since this will allow us to search for explanations also at the institutional level. Studies of trust have already included several individual-level variables, but our claim is that not only is the individual interesting in that respect, but the political jurisdiction where this individual is living can also be important for our understanding of the individual's evaluation of the political jurisdiction and its politicians. We will follow Rahn and Rudolph who state, "[Trust]… cannot be explained solely by accounting for variation in the attributes and attitudes of the individuals who live in each city" (Rahn and Rudolph 2005: 531) and have as our main focus to expand the analysis by also including institutional-level variables.

We will, of course, in our models, still include variables at the individual level, but they will mostly serve as controls. These individual-level variables will be the "usual suspects"; that is, variables that are often included in studies of trust (Levinsen, 2003). We will include in our analyses a number of sociodemographic variables, namely age, education,

employment sector, and income, hypothesizing that older, more educated, higher-income citizens, as well as those employed in the public sector, will have higher trust than their counterparts. We will also include a number of attitudinal variables, namely how informed the individual is about local politics, their interest in local politics, their satisfaction with the municipal services provided, and their general trust in other people (social trust), hypothesizing that the more informed, the more interested, the more satisfied, and the more socially trusting, the more the individual will trust their local politicians.

Then there is our additional claim, namely that explanations to the variation in trust should also be examined at the institutional level—in this case, at the municipal level. Already, two municipal-level variables have been introduced in the literature. First, at least since Dahl and Tufte's seminal book on size and democracy (Dahl and Tufte, 1973), there has been an interest in the potential effect of the municipal size (in terms of the number of inhabitants) on different dimensions of local democracy. Politicians are supposed to be more responsive in smaller democracies (Dahl and Tufte, 1973: 12ff), leading to more trust in smaller municipalities than in larger. And even though there has not been a lot of empirical testing of the "small is beautiful"-thesis (Petrzelka et al. 2013), some studies have found a negative correlation between municipal size and citizen trust (Rahn and Rudolph, 2005: 547; Denters, 2002; see

however Levinsen, 2003). Therefore, the following is our first hypothesis at the municipal level: **Hypothesis 1: The larger the municipality, the lower the citizens' trust in their local politicians.**

Municipal size is one thing—another is if the municipality has recently merged with other municipalities and therefore if citizens have experienced a change in the size of their municipality. If an amalgamation has been implemented, the citizen may have lost some of their faith in the councilors; for instance, in some cases councilors may no longer live in the citizen's own village or neighborhood. Even though reform effects are in some studies discarded (Reitan et al., 2015), a negative effect of municipal mergers on citizen trust has been empirically demonstrated (Hansen, 2013), and therefore our second hypothesis is: **Hypothesis 2: If the municipality has recently been part of an amalgamation, the citizen's trust in their local politicians will be lower.**

As clever and insightful as Dahl and Tufte's book on size and democracy is, it has, however, also led to a tendency to focus almost exclusively on the question of size when dimensions of local democracy are evaluated (e.g. Denters et al., 2014; Kjaer and Mouritzen, 2003). We will, however, also go beyond size and include specific political variables. First, we will include the level of political conflict in the municipality; if the politicians regularly engage in infighting, it might lead to higher levels of mistrust among the citizens. It is often claimed that local politics is more consensual than politics at other levels (Barber, 2013), and not least in Denmark where local politics has been assessed as being very consensual with a widespread norm of consensus (Berg and Kjær, 2009). The most important determinant of how consensual politics is conducted in the municipalities is supposed to be the width or breadth of the coalition forming the majority behind the mayor (the mayor is indirectly elected by and among the councilors), and therefore, our third hypothesis is: **Hypothesis 3: The broader the mayoral coalition, the greater the citizen trust in local politicians.**

When there have been negative stories about the councilors and the mayors in Denmark in the past years, it has mostly been regarding the coalition formation processes. At the 2009 local elections (the latest election before our survey was administered in spring 2013), several municipalities experienced unusually chaotic formation processes characterized by extreme political tumult. In no less than 10 out of the 98 municipalities, a situation occurred where the coalition formed right after the election was cancelled and a new one formed before the original coalition was formally put into effect. In some of these cases, councilors left their own party to join the opposing party (and get the mayoralty themselves). The stories from the 10 municipalities differ slightly (see Elklit and Kjaer, 2013), but what they have in common is that they were intensively covered by local and national media, and the citizens were in most cases not only surprised but also somewhat offended by the councilors failing to respect the electoral result and not honoring their own original deals with each other. Therefore, our fourth hypothesis is: **Hypothesis 4: In municipalities where the coalition formation process at the latest election was extremely chaotic, the citizen's trust in their local politicians will be lower.**

We have run three different models including these variables stepwise. In the first model, only the sociodemographic explanatory variables are included, while in the second model, the attitudinal variables and individual-level variables are also included. In the third model, the municipal-level variables are also included, making it possible to test our four hypotheses (therefore, this third model is run as an MLA).

We run each of the three models using three different dependent variables, namely trust in the mayor, trust in the councilors, and trust in MPs (the last one as a control). The results are reported in Table 2.

In Table 2, it can be seen that among the individual-level variables, the attitudinal variables are far more important than the sociodemographic ones. None of the sociodemographic variables are significant in the model explaining trust in the mayor, when the attitudinal variables are included, and only minor effects (negative ones) are found regarding age and education in the model explaining trust in councilors. The explanatory power of the attitudinal variables is much higher—a clear and statistically significant positive correlation with trust in mayors and councilors is found for level of information, interest in local politics, satisfaction with local service, and general social trust. This is more or less as expected (see also Levinsen, 2003).

Table 2. Danish citizens' trust in mayors, councilors, and members of parliament (MPs)

	Trust in mayor			Trust in councilors			Trust in MPs		
Age	0.022***	0.004	0.004	0.014***	-0.006***	-0.006***	0.010***	-0.004	-0.004
	(0.003)	(0.003)	(0.003)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)	(0.002)
High school diploma	0.242***	-0.052	-0.050	0.133**	-0.148***	-0.146**	0.225***	-0.001	0.002
	(0.082)	(0.071)	(0.071)	(0.068)	(0.057)	(0.058)	(0.069)	(0.064)	(0.065)
Employment sector									
Private sector	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.	Ref.
Public sector	0.066	0.040	0.041	0.185**	0.121*	0.118	0.092	0.040	0.037
	(0.101)	(0.088)	(0.088)	(0.084)	(0.072)	(0.072)	(0.088)	(0.081)	(0.081)
Unemployed	0.054	0.126	0.131	0.037	0.099	0.100	-0.129	-0.062	-0.065
	(0.093)	(0.081)	(0.081)	(0.078)	(0.066)	(0.066)	(0.081)	(0.074)	(0.074)
Low-income family	-0.188**	-0.012	-0.015	-0.167**	0.014	0.012	-0.236***	-0.081	-0.079
	(0.087)	(0.076)	(0.076)	(0.072)	(0.061)	(0.062)	(0.075)	(0.069)	(0.069)
Informed about municipal politics		0.120***	0.119***		0.101***	0.102***		0.127***	0.129***
		(0.044)	(0.044)		(0.036)	(0.036)		(0.040)	(0.040)
Interest in municipal politics		0.112**	0.112**		0.253***	0.254***		0.079*	0.076
		(0.052)	(0.052)		(0.042)	(0.042)		(0.047)	(0.047)
Satisfaction with municipal services		0.534***	0.534***		0.429***	0.429***		0.303***	0.305***
		(0.016)	(0.016)		(0.013)	(0.013)		(0.014)	(0.014)

	Trust in mayor		Trust in councilors		Trust in MPs	
Social trust	0.149***	0.149***	0.174***	0.174***	0.197***	0.197***
	(0.015)	(0.015)	(0.012)	(0.012)	(0.014)	(0.014)
Municipal size						
-30.000 inhabitants		-0.163		-0.016		0.057
		(0.172)		(0.088)		(0.098)
30.001-45.000		0.120		0.105		0.089
		(0.154)		(0.079)		(0.088)
45.001-60.000		Ref.		Ref.		Ref.
60.001-90.000		0.073		0.038		0.112
		(0.184)		(0.094)		(0.105)
90.001+		0.068		0.049		0.045
		(0.213)		(0.109)		(0.122)
Municipality part of merger in 2007		-0.066		0.028		0.159**
		(0.136)		(0.070)		(0.078)
Width of mayoral coalition						
50-59 % of seats		Ref.		Ref.		Ref.
60-69 %		0.223		-0.019		0.108
		(0.171)		(0.087)		(0.097)
70-79 %		0.368**		0.110		0.146
		(0.169)		(0.086)		(0.096)

	Trust in mayor			Trust in councilors			Trust in MPs		
80-89 %			0.370			0.193			0.006
			(0.325)			(0.164)			(0.184)
90-99 %			-0.102			-0.116			0.026
			(0.244)			(0.123)			(0.138)
100 %			0.405***			0.121			-0.015
			(0.157)			(0.080)			(0.089)
Chaotic coalition formation processes			-0.652***			-0.260**			0.163
			(0.201)			(0.102)			(0.114)
Intercept	4.172***	0.626***	0.515**	4.517***	1.154***	1.077***	4.236***	1.466***	1.229***
	(0.193)	(0.197)	(0.255)	(0.151)	(0.154)	(0.175)	(0.152)	(0.173)	(0.197)
Var(intercept)	0.515***	0.273***	0.190***	0.119***	0.027***	0.014***	0.030***	0.027***	0.017***
	(0.093)	(0.053)	(0.041)	(0.029)	(0.012)	(0.011)	(0.017)	(0.015)	(0.013)
Var(residual)	5.252***	3.859***	3.859***	3.651***	2.592***	2.592***	3.981***	3.269***	3.268***
	(0.115)	(0.085)	(0.085)	(0.080)	(0.057)	(0.057)	(0.087)	(0.072)	(0.072)
ICC	0.089	0.066	0.047	0.031	0.010	0.005	0.007	0.008	0.005
No. of obs./groups	4,296/93	4,242/93	4,242/93	4,296/93	4,242/93	4,242/93	4,296/93	4,242/93	4,242/93

Notes: The dependent variable is trust in the municipal mayor, local politicians, or members of parliament. Reported are unstandardized coefficients with standard errors in parentheses. * $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$. The ten municipalities with chaotic coalition formation processes are Allerød, Helsingør, Rebild, Frederikshavn, Nordfyns, Syddjurs, Randers, Kerteminde, Holstebro, and Lyngby-Taarbæk.

Source: Danish Local Democracy Survey 2013.

But how about the four variables at the municipal level? Table 2 demonstrates that our first and second hypotheses can be rejected without much further discussion. There is no statistically significant correlation between municipal size or municipal mergers and trust in the local politicians, regardless of whether it is trust in the councilors or in the mayors.

As for the size of the mayoral coalition—hypothesis 3—the results are not conclusive, but it is demonstrated that if the mayor can form a very broad coalition including the entire council (this actually sometimes happens in Denmark) he or she will gain more trust from the citizens. However, the causal mechanism here cannot be established, since a very trustworthy mayor probably has better chances to form a broad coalition.

This leaves us with the chaotic coalition formation processes—Hypothesis 4—and here the results are very clear. As Table 2 demonstrates, trust in local politicians is—even three years after the events— lower in municipalities where the mayoral coalition was formed under very chaotic and politically "bloody" circumstances. In the municipalities where some of the politicians violated done deals, shifted party, and behaved disloyal to their political allies, the citizens trust their politicians less than in municipalities where everybody played by the rules and where the government formation was conducted, as they usually are, in a calm, orderly manner.

The lower level of trust is clearer regarding trust in the mayor than regarding trust in the councilors. The mayor who wins the mayoralty in a process characterized by tumult pays a price in terms of lower trust, but also the councilors in general are punished when the citizens afterward evaluate how trustworthy they are. In Table 2, the same models are also run with trust in MPs as the dependent variable, and it is seen that, as hypothesized, this trust is not affected by the chaotic coalition formations, which strengthen the finding.

As a robustness check, we have also run the models with the difference in trust of politicians at the local and national level as the dependent variable. This analysis is therefore targeted on the difference in trust—who is it who trusts their local politicians relatively more than their national politicians? In these analyses a few of the findings from Table 2 are moot, but most of the findings are repeated in this relative analysis, not least of which is that the degree of satisfaction with the municipal service is

still important to the level of trust. If local councilors and mayors would like to have their constituents to trust them, they should focus on the delivery of municipal services. And then there is the issue of chaotic coalition formations, a variable in this model that is highly statistically significant. And the negative effect is still greater on the trust in mayors than on the trust in councilors. The chaotic coalition formation processes have given the mayor the office, but not without costing them the trust of the citizens. The citizens trust the mayors who conquered mayoral office in an atmosphere of tumult less than mayors who avoided this chaos, and the councilors in these municipalities also pay a price for being partakers or at least bystanders in the chaotic processes.

CONCLUSION: INCREASING CITIZEN TRUST IN LOCAL GOVERNMENTS

This article has demonstrated that the citizens trust their local politicians—mayors and councilors—more than they trust their national politicians in the country of Denmark. This is not very surprising since this is in accordance with the general perception that trust increases when the level of government decreases. Therefore, we have also devoted a part of this article to analyze citizen trust across municipalities; even though the trust in local politicians is relatively high compared to other levels of government, it is not equally high in every municipality. Several variables at the individual level have been included in the analyses together with a number of variables at the municipal level, namely size, merger status, coalition breadth, and chaotical coalition formation.

The findings are that trust in local politicians is affected by the experienced level of satisfaction with services delivered by the municipality (the more satisfied, the more trust) and then, more surprisingly, by how the coalition formation process was conducted (if chaotic, then less trust).

This indicates, that if trust in local governments is to be increased, there are at least two important ways to do so. First, results matter and therefore the municipality should focus on delivering the highest quality of service. In Denmark, the municipalities are in charge of, for instance, day care, primary schools, social services, elderly care, housing, planning, and water/sewage, and they should focus on these

tasks. This goes for the politicians themselves who are involved in many of the decisions—especially the more detailed ones—through their seats on committees. And it also applies to the administrative officers and the people employed at the municipality; local government administration should optimize delivery of municipal services so that the municipality and the politicians will be trusted.

Second, the paper has demonstrated that the very chaotic coalition formation processes seen in a tenth of the Danish municipalities at the 2009 elections were not without costs. The political game can be muddy, bloody, and chaotic and it produces political winners and losers when the game is over and the prizes are distributed (not least, in the mayoral office). The politicians are, of course, very involved in these processes and they will go to great length to secure themselves the best rewards. But it seems that councilors and prospective mayors can also be too tactical and too determined to achieve power. If they break done deals or are disloyal to their own party, it comes at a cost since the citizens do not like this kind of game and lower their level of trust in politicians acting in this way. The message is clear for councilors and prospective mayors: Follow the rules and avoid chaos because your constituents are watching, and their trust is at stake.

REFERENCES

Bache, Ian and Flinders, Matthew (eds.) (2004). *Multi-Level Governance*. Oxford: Oxford University Press.

Barber, Benjamin (2013). *If Mayors Ruled the World*. New Haven: Yale University Press.

Berg, Rikke and Kjaer, Ulrik (2009). "Facilitation in Its 'Natural' Setting: Supportive Structure and Culture in Denmark" in James H. Svara (ed.) *The Facilitative Leader in City Hall: Reexamining the Scope and Contributions*, pp. 55-72. Boca Raton: CRC Press.

Bianco, William T. (1994). *Trust – Representatives and Constituents*. Ann Arbor: Michigan University Press.

Cole, Richard L. and Kincaid, John (2001). "Public Opinion and American Federalism: Perspectives on Taxes, Spending and Trust," *Spectrum: The Journal of State Government* 24: 14-18.

Dahl, Robert A. and Tufte, Edward R. (1973). *Size and Democracy*. Stanford: Stanford University Press.

Denters, Bas (2002). "Size and political trust: Evidence from Denmark, the Netherlands, Norway, and the United Kingdom," *Environment and Planning C Government and Policy* 20: 793-812.

Denters, Bas, Goldsmith, Michael, Ladner, Andreas, Mouritzen, Poul Erik and Rose, Lawrence E. (2014). *Size and Local Democracy*. Cheltenham: Edward Elgar.

Easton, David (1965). *A Systems Analysis of Political Life*. New York: Wiley.

Elklit, Jørgen and Kjaer, Ulrik (2013). *KV09. Analyser af kommunalvalget 2009*. Odense: University of Southern Denmark Press.

Hansen, Sune Welling (2013). "Polity Size and Local Political Trust: A Quasi-experiment Using Municipal Mergers in Denmark," Scandinavian Political Studies 36: 43-66.

Jennings, Kent M. (1998). "Political trust and the roots of devolution" in Valerie Braithwaite and Margaret Levi (eds.) *Trust and Governance*. New York, Russel Sage Foundation.

Kjaer, Ulrik and Mouritzen, Poul Erik (2003). *Kommunestørrelse og lokalt demokrat*i. Odense: University of Southern Denmark Press.

Lijphart, Arend (1975). "The Comparable-Cases Strategy in Comparative Research." Comparative Political Studies 8: 158-177.

Levi, Margaret and Stoker, Laura (2000). "Political Trust and Trustworthiness," *Annual Review of Political Science* 3: 475-507.

Levinsen, Klaus (2003). "Kommunalpolitisk tillid" in Ulrik Kjaer and Poul Erik Mouritzen (eds.), *Kommunestørrelse og lokalt demokrati*. Odense: University of Southern Denmark Press.

Manin, Bernard (1997). *The Principles of Representative Government*. Cambridge: Cambridge University Press.

Miller, Arthur H. (1974). "Political issues and trust in government: 1964-1970," *American Political Science Review* 68: 951-972.

Miller, Arthur. H. and Listhaug, Ola (1999). "Political performance and institutional trust" in Pippa Norris (ed.) *Critical Citizens: Global Support for Democratic Governance*, pp 204-216. Oxford, Oxford University Press.

Norris, Pippa (ed.) (1999). *Critical Citizens: Global Support for Democratic Governance*. Oxford, Oxford University Press.

Petrzelka, Peggy, Marquart-Pyatt, Sandra T. and Malin, Stephanie A. (2013). "It is not just scale that matters: Political trust in Utah," *The Social Science Journal* 50: 338-348.

Piattoni, Simona (2010). *The Theory of Multi-level Governance – Conceptual, Empirical, and Normative Challenges*. Oxford: Oxford University Press.

Przeworski, Adam, Stokes, Susan C. and Manin, Bernard (1999). *Democracy, Accountability, and Representation*. Cambridge: Cambridge University Press.

Rahn, Wendy M. and Rudolph, Thomas J. (2005). "A tale of political trust in American cities," *Public Opinion Quarterly* 69: 530-559.

Reitan, Marit, Gustafssona, Kari and Blekesaunea, Arild (2015). "Do Local Government Reforms Result in Higher Levels of Trust in Local Politicians?", Local Government Studies 41: 156-179.

Trounstine, Jessica (2010). "Representation and Accountability in Cities," *Annual Review of Political Science* 13: 407-423.

SUNE WELLING HANSEN, PHD
Associate professor at the Department of Political Science and Public Management, University of Southern Denmark. He heads the research section on Public Administration. His main fields of expertise are local finances and local democracy. (swh@sam.sdu.dk).

ULRIK KJAER, PHD
Professor of political science at the Department of Political Science and Public Management, University of Southern Denmark. He serves extensively as a consultant for the Association of Local Governments in Denmark. His main fields of expertise are local elections, local democracy, and mayoral leadership. (ulk@sam.sdu.dk)