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INTRODUCTION TO SECTION 8
Smart sustainable city initiative and its social and economic implications

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The contributions to this book section engage with and reflect upon the social and economic implications of smart city initiatives. Today, more than half of the world's population lives in urban areas. By 2050, two out of every three people are likely to be living in cities (United Nations, 2018). Global urbanisation challenges both environmental and social sustainability (OECD, 2012). The process of urbanisation exacerbates urban problems such as traffic congestion, pollution, shortage of resources, and social exclusion. However, there is a pervasive perception that new emerging technologies can provide new solutions to urban problems and challenges (Bibri, 2018; Ibrahim et al., 2018; Kumar et al., 2020). Currently, new technologies are significantly disrupting and transforming cities, the built environment, and everyday life. This section introduces five chapters that consider the various impacts of deploying new technologies in cities around the Pacific Rim. The authors utilise different theories and review several cases to understand the social and economic implications of smart cities, particularly in providing service for residents.

"Smart city" is a relatively new concept that refers to the pervasive usage of various advanced Information Communication Technologies (ICTs) such as the Internet of Things (IoT), Artificial Intelligence (AI), Big Data, and Digital Twinning in cities. However, there is no globally accepted definition of the smart city. Vanolo (2014) argues that the two planning narratives of "smart growth" and the "intelligent city" have a strong influence on the development of the smart city concept. Smart growth was theorised by the New Urbanism movement in the 1980s and aimed at "improving the urban environment and the quality of life in cities by promoting communitarian ideas and limiting urban sprawl, land consumption and the proliferation of forms of development inspired by the logic of the automobile and personal mobility" (Vanolo, 2014, p. 887). Following significant ICT infrastructure progress in the 1990s, an intelligent city's concept refers to utilising technology in urban space (Hollands, 2008). Drawing from the 2008 speech of IBM Chairman Samuel J. Palmisano – "A Smarter Planet: The Next Leadership Agenda" – the smart city concept has become well established in both academia and practice. Palmisano argues that the world and its cities must become smarter to become more sustainable and economically efficient (Söderström et al., 2014, p. 311). Caragliu et al. (2011, p. 70) believed "a city is smart when investments in human and social capital and traditional (transport) and modern (ICT) communication infrastructure fuel sustainable economic growth and a high quality of life,

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with a wise management of natural resources, through participatory governance." Their definition embeds in the six intertwined dimensions of smart city: smart mobility, smart environment, smart living, smart people, smart economy, and smart governance (Bibri & Krogstie, 2017). However, residents are perceived as one of the main dimensions of the smart city. By analysing the literature on smart cities, Meijer and Bolívar (2016, p.396) classified "three different types of ideal-typical definitions: smart cities as cities using smart technologies (technological focus), smart cities as cities with smart people (human resource focus) and smart cities as cities with smart collaboration (governance focus)." This book chapter considers all three dimensions including technological advancement, governance, and people who shape a smart city. The smart city discourse is often associated with the concepts of sustainability and sustainable development (Bibri, 2018; Bouzguenda et al., 2019; Ibrahim et al., 2018; Vanolo, 2014). Since the mid-2010s, the smart sustainable city concept has been developed as a holistic approach in urban management, planning, and design (Bibri & Krogstie, 2017). Yigitcanlar et al. (2019, p. 348) argued that "little evidence exists on how sustainability outcomes are incorporated or achieved within the smart city initiatives." The book chapters investigate the smart sustainable cities' (potential) impacts on people and their everyday life in cities.

Cities worldwide, particularly in the Pacific Rim, face various social, economic, and environmental challenges such as increasing population, socio-spatial inequality, shortage of affordable housing, traffic congestion, environmental pollution, and climate change. The deployment of new technologies will not necessarily improve urban conditions. "Cities can only be considered smart when they invest in the growth of human, social and environmental capitals that generate sustainable urban development" (Yigitcanlar et al., 2019, p. 349). The concept of sustainability was coined from the realisation that the predominant paradigm of social, economic, and urban development causes ecological and social deprivation and imperils future life (Bibri & Krogstie, 2017). Since the late 1980s, the concept of sustainable development has been globally used in policymaking, planning, and urban design to mitigate the adverse side effects of rapid urbanisation and industrial capitalism. After several years of collaborations and negotiations between nations, in 2015, the United Nations (2015) published a new agenda for sustainable development that defined 17 Sustainable Development Goals (SDGs) with 169 targets achieved by 2030. The SDGs cover a set of intertwined thematic issues, including water, energy, climate, oceans, urbanisation, transport, science, and technology. This book's chapters investigate the implications of smart sustainable cities' social, economic, and environmental impacts against the UN SDGs and targets. The heart of the SDGs is the pledge that "no-one will be left behind," which puts people at the centre of sustainable plans and policies. The book chapters consider that 'no-one' should remain behind through the process of urban digitalisation and its consequences on the contemporary cities.

New emerging technologies are significantly transforming all cities across the globe, regardless of whether or not they invest in new technologies or incorporate the smart city concept into their projects, plans, and policies (Ruhlandt, 2018). However, the local social, economic, and political contexts play a significant role when using new technologies in cities, society, and the built environment. Governments and their agencies often collaborate with the private sector, including individual stockholders, communities, and non-government organisations (NGOs), to prepare smart city initiatives, projects, plans, and policies that utilise new technologies to address urban issues. Sharing experiences in different local contexts is crucial to attaining the highest benefit and mitigating the adverse outcomes of smart technologies deployment in cities. Researchers are increasingly investigating smart

initiatives, projects, and plans in different countries (Dowling et al., 2019; Hu & Zheng, 2020), continents (Caragliu et al., 2011; Joo, & Tan, 2020; Mboup & Oyelaran-Oyeyinka, 2019), and geographical regions (Martin et al., 2018). This section includes five chapters that review smart cities and the implications of new technologies around the Pacific Rim. However, cities in the Pacific Rim are significantly different regarding their size, demography, and social, economic, and political contexts. In general, however, the cities are facing similar urban challenges and problems including, but not limited to, widening socio-spatial inequality, environmental pollution, and climate change. Governments and private sectors are currently developing smart initiatives, projects, and plans to tackle Rim's urban problems.

The smart city's implications are not limited to technological advancements (Bibri, 2018; Yigitcanlar et al., 2019). New emerging technologies such as 'Autonomous Vehicles', 'Artificial Intelligence', 'Augmented Reality', 'Internet of Things', and 'Digital Twinning' are radically transforming cities, changing our everyday lives, and reshaping the built environment and production mode. The chapters in this section do not only examine urban smart technologies; instead, they review the social and environmental impacts of these technologies on urban space and people's everyday life. Lefebvre (1991, p.26) argued that

> space is a product … If space is a product, our knowledge of it must be expected to reproduce and expound the process of production. The object of interest must be expected to shift from things in space to the actual production of space.

Lefebvre developed his unitary theory to conceptualise what space is based on the integrated three "realms" – the mental, social, and physical. This book section follows Lefevre's "unitary theory," in which he argues,

> The theory we need … might well be called, by analogy, a "unitary theory": the aim is to discover or construct a theoretical unity between "fields" which are apprehended separately.… The fields we are concerned with are, first the physical … second, the mental … and thirdly, the social.
>
> *(Lefebvre, 1991, p. 11–12)*

Lefebvre developed "unitary theory" to "reading the complexity of the modern world through the lens of space" (Biagi, 2020, p.121). Lefebvre's theory is inherently transdisciplinary, advancing the theory of space beyond traditional disciplinary boundaries such as architecture, landscape architecture, urban planning, urban design, geography, and sociology. Following Lefebvre, the five chapters' authors are from different academic backgrounds, including urban economics, urban design, urban planning, engineering, and architecture. They investigate the impact of smart cities from different, but intertwined perspectives.

The first chapter maps smart city initiatives in different social, economic, and political contexts in the Pacific Rim. Researchers have conceptualised different terms such as smart city, digital city, cyber city, intelligent city, innovative city, and future city to explain the pervasive use of new technologies and their role in shaping future cities. However, the term "smart city" has gained the most attention compared with other terms and concepts such as intelligent city, cyber city, and digital city. The smart city is an empty signifier which strictly means "a signifier without the signified" (Laclau, 1996, p. 11). The definitions and meaning of the smart city should be continuously revised, "as the diverse phenomena that it unifies will forever be slipping out from any fixed conceptual understanding of the term. In this way, due to its lack of specific content, it can incorporate diverse agents within the

planning process" (Brown, 2016, p. 117). The smart city's divergent meanings refer to the broader range of smart technology applications within cities as well as their local social, economic, cultural, and political contexts. Camero and Alba (2019, p.84) argued that "there is no consensus of what exactly is a smart city, and academic research is, at best, building applications in numerous silos." The smart city concept is largely used to explain the impacts of smart technologies on particular aspects of cities, such as urban economics, transportation, and sociology. Smart city as an empty signifier is often conceptualised and used in various ways based on the dominant norms, values, terminologies, and theories of the disciplines such as smart/digital economy. However, the pervasive usage of ICTs in cities is perceived as the smart city's common definition. Based on Lefebvre's theory of space, this book section mainly considers the smart city a new technological advancement that significantly transforms urban space mentally, socially, and physically.

Phung, Mohammadzadeh, and Chang use a systematic literature review to interpret three specific dimensions of the smart city – chronology, geography, and frameworks – in their quest for a holistic answer to smart city development. The literature offers divergent terminologies of the smart city paradigm, as well as its dimensions, drivers, and goals, which has created controversy in smart city studies (Albino et al., 2015; Caragliu et al., 2011; Dameri, 2013; Hollands, 2008; Silva et al., 2018; Yigitcanlar et al., 2018). The review includes 141 studies of smart cities that were published between 1990 and 2018. Four ranked journals – *Cities*, *Journal of Urban Technology*, *The Computer Journal*, and *Journal of Cleaner Production* – were the largest contributors of journal articles to their ad hoc database. In terms of classifying terminologies, "smart city" proves to be the most popular term used in the collective literature, with 90% of the papers utilising this digital-centric terminology. In terms of the chronological development of smart cities, 57 papers (40%) reflect on the evolution of the smart city, digital city, intelligent city, innovative city, and future city from 1990 onwards by discussing different sequences of events that have ignited smart city development. The three most prominent clusters of smart cities globally are located in East Asia, Northern America, and Europe. More than half of all the smart cities in the world have been developed in the vast geographical area of the Pacific Rim. The research also points out that pre-existing concepts and terms primarily inform smart city initiatives in planning and policymaking, such as smart growth, new urbanism, and sustainable development. International treaties, protocols, and agreements such as the Kyoto Protocol and the SDGs are pivotal in directing smart city initiatives towards smart sustainable cities worldwide, particularly in the Pacific Rim (Kutty et al., 2020). The second chapter reviews one of these smart sustainable cities in the Pacific Rim.

Chapter 52 shows smart city concepts, and emerging disruptive technologies have been extensively deployed to tackle various urban issues since the 1990s. This chapter focuses on how the smart sustainable concept is utilised in the context of Jakarta, Indonesia. There is no general formula nor platform for developing a smart city (Weisi & Ping, 2014). Berawi, Susantono, Sari provide an understanding of smart city initiatives in Indonesia based on the deployed definition of smart city in Indonesia and its six elements: smart people, smart governance, smart economy, smart living, smart environment, and smart mobility.

> These six dimensions connect with traditional regional and neoclassical theories of urban growth and development. In particular, the dimensions are based on theories of regional competitiveness, transport and ICT economics, natural resources, human and social capital, quality of life, and participation of citizens in the governance of cities.
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> *(Lombardi, et al., 2012, p. 138)*

Berawi, Susantono, and Sari also review a set of digital technologies that shape smart cities, including Information and Communication Technology (ICT), Internet of Things (IoT), Big Data, Cloud Computing, and Artificial Intelligence (AI). The authors investigate three case studies representing near-zero-energy building, smart integrated workspace design, and disaster management, which foster a smart environment, smart living, and smart economic aspects of the smart city. A smart environment deploys new technologies to mitigate a city's ecological footprint without harming the city's quality of life, economic productivity, or mobility. Smart living aims to develop intelligent ways of living through connected devices and IoT that do tasks more comfortably, faster, safer, and cheaper than existing technologies. However, there is not any commonly accepted definition of a smart economy. Arroub et al. (2016) define the smart economy as an innovative, digital, competitive, green, and socially responsive. These smart city elements are aligned with the United Nations Sustainable Development Goals (SDGs) (The United Nations, 2015). Zero-energy building and smart integrated workspace design may help meet Goal 7 (Affordable and clean energy), mainly to achieve Target 7.3, which aims to double the global rate of improvement in energy efficiency by 2030. Smart integrated workspace design also aims to improve user productivity, which supports Goal 8 (Decent work and economic growth). Target 8.2 also seeks to facilitate higher economic productivity levels through technological upgrading and innovation. Data-driven disaster management supports Goal 3 (Ensure healthy lives and promote well-being for all ages), particularly by strengthening the capacity of all countries in terms of early warning, risk reduction, and national and global management of health risks (Target 3.D). The chapter concludes that smart city projects have supported Indonesian cities to attain the SDGs and targets.

There is a pervasive expectation that new emerging smart technologies and digital platforms generate new economic opportunities for cities and assist them in attaining the SDGs (Kumar & Dahiya, 2017; Mboup & Oyelaran-Oyeyinka, 2019; Zhao, 2016). Joseph Schumpeter, one of the most influential economists of the 20th century, predicted that competition from the new commodity, the new technology, the new source of supply, and the new type of organisation would be more relevant than perfect competition. Schumpeter (2002, p. 3) described this as a competition which "strikes not at the margins of the profits and the outputs of the existing firms but at their foundations and their very lives." His prediction has certainly come true due to smart technologies that profoundly transform economic mechanisms, change social relations, and subsequently reshape everyday life. Many researchers have conceptualised various terms and concepts such as the gig economy (Woodcock & Graham, 2019; Zhuravleva et al., 2019), the platform economy (Duan et al., 2020), the access economy (Arcidiacono & Duggan, 2019), the sharing economy (Chandler, 2016) and collaborative consumption (Roelofsen, 2020), and the digital economy (Bahmanteymouri & Haghighi, 2020) to investigate the impacts of smart technologies on the economy. In Chapter 53, Bahmanteymouri investigates how the emerging digital economy potentially transforms land use, resulting in the transformation of socio-economic relations in contemporary cities. Hillary Angelo and Boris Vormann (2018, p. 787) argue that "technological revolutions change the spatial dynamics of urbanisation. Focusing on these spatial logics helps us better understand the underlying patterns of the different social and economic crises." This chapter provides an understanding of the impacts of digital platforms – which are the results of and simultaneously the solutions to economic crises – on urban patterns and land use planning in both the global and local context of New Zealand. Wiig (2015, p. 259) observes that cities that deployed the smart city initiative were "able to present an image of competitive, creative and strategic governance immediately following the global financial crisis, a time when municipal budgets were cut by shrinking tax revenues." Bahmanteymouri argues that the global financial crisis

in 2008 has been one of the main drivers of the widespread use of smart technologies and digital platforms that aim to overcome economic crises through technological advancements, intelligent technology, new skills, and economic and social relations. For example, digital platforms such as Airbnb and Uber contributed significantly to economic growth in the pre-COVID-19 period because of globalisation. By investigating these digital platforms in the UK, the EU, and Christchurch and Queenstown in New Zealand, the author argues that these platforms have significantly changed pre-existing socio-economic conditions. However, these platforms' impacts are ephemeral, particularly since the start of the COVID-19 pandemic. The author discusses three digital platform evolution stages: 1– emerging, 2 – growing and popular, and 3 – diminishing return and evaporating. There is a general perception that smart technologies and digital platforms will assist in attaining the UN SDGs, particular Goal 1 (End of poverty), Goal 8 (Promote sustained, inclusive, and sustainable economic growth, full and productive employment, and decent work for all), and Goal 12 (Ensure sustainable consumption and production patterns). However, new digital platforms appear to be helping cities accomplish their SDGs by contributing to their economic growth, generating new job opportunities, and mitigating poverty. The chapter suggests that these digital platforms' impact is temporal; thus, their functions should be reconsidered from a longer perspective.

"The achievement of the Sustainable Development Goals depends on the determined and innovative pursuit of sustainable transport" (UNDP, 2016, p. 6). New emerging mobility technologies disrupt urban transportation and potentially change all aspects of our everyday life (Borysov et al., 2019; Mohammadzadeh, 2018; Riggs, 2018). Disruptive mobility innovations such as vehicle automation, vehicle electrification, and online sharing platforms may assist cities in tackling some of their wicked problems, including, but not limited to, traffic congestion, air pollution, and transport disadvantage (Kovacs et al., 2020; Mohammadzadeh, 2018; Sheller, 2020; UNDP, 2016). The UNDP (2016) report provides Development Analysis and Policy Recommendations based on the SDGs towards the attainment of sustainable transport. The report suggests that three crucial factors – technological innovations, policy development, and implementation and financing – should be utilised concertedly to make transport sustainable. The fifth chapter primarily focuses on the connections between smart disruptive technologies and policy development and implementation. Based on the scenario-based methodology, the authors' research reveals that the utilisation of smart disruptive technologies may not necessarily result in sustainable transportation, particularly the SDGs' attainment. Chapter 55 considers housing affordability to be a crucial factor in adopting new mobility technologies. The first scenario argues that disruptive mobility technologies such as autonomous electric vehicles (AEVs) may increase suburbanisation, travel times/distance, and traffic congestion. People may prefer to commute a long distance to find affordable housing because the new technologies will significantly mitigate travel costs and provide a more pleasant travel experience for their users. According to this scenario, new mobility technologies may impact negatively on the process of achieving the SDGs, particularly Goal 11 (Make cities and human settlements inclusive, safe, resilient, and sustainable) and Goal 15 (Protect, restore, and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss) (UNDP, 2016). The second scenario is focused on implementing adequate plans and policies that support the new mobility technologies and their capacities to attain the UN SDGs. The new mobility innovations may generate new opportunities for cities, such as reclaiming parking land (Mohammadzadeh, 2019). The reclaimed lands may be used for urban intensification and provide more affordable housing in the metropolitan centres as a Transit Oriented Development (TOD). Disruptive mobility technologies will inevitability

transform the urban environment and landscape. New mobility technologies should be considered a new industrialisation stage that may not inherently result in sustainable development. The utilisation of new disruptive mobility technologies combined with the required planning and policy implementation is crucial to shaping sustainable transportation and its six characteristics: safety, affordability, accessibility, efficiency, resilience, and minimising environmental impacts such as carbon and other emissions (UNDP, 2016).

Walen, Schossberg, and Haley investigate how new emerging technologies potentially transform streets in future cities. The authors also consider the COVID-19 as a driver for changing streets. Transportation technologies have historically been the key factor in shaping cities. The railways were the primary disruptive mobility technology in the 19th century. Over the last century, cars and their movements have been prioritised in planning, designing, and developing contemporary cities (Gehl, 2013; Mohammadzadeh, 2018; Newman, & Kenworthy, 2015; Sheller, & Urry, 2000). The prioritisation of cars has significantly disrupted urban public open spaces and people's everyday lives (Mohammadzadeh, 2021). "Constrained urban spaces need to accommodate growth and competing flows of different sorts of mobility: motorised and non-motorised, individual and collective, fast and slow" (Bertolini, 2020, pp. 734–735). Cities of the 21st century are primarily being reshaped by emerging new mobility technologies, such as Transportation Networking Companies (TNCs), delivery apps, micro-mobility, and autonomous vehicles (AVs), which are gradually transforming urban transportation and consequently changing the built environment. Streets have become a vivid materialisation of the challenges and tensions characterising contemporary urban mobility. Urban planners and designers are increasingly preparing new urban design codes and planning regulations to accommodate the new mobility technologies in cities, particularly on streets (Crum & Brown, 2019; Riggs et al., 2018; Riggs et al., 2020; Ruhl et al., 2018). The COVID-19 pandemic has disrupted everyday life, including the way people use transportation and urban spaces (Arellana et al., 2020; Sharifi, & Khavarian-Garmsir, 2020). "Cities must adjust to this situation and offset some of the more negative long-term effects of the pandemic" (Gutiérrez et al., 2020, p. 1). The pandemic has significantly limited human mobility in cities as densely populated areas (Hamidi et al., 2020). By studying the previous SARS pandemic, Wang (2014) found that fear of infection discourages public transport use. Prior to the current COVID-19 pandemic, public authorities mostly promoted public transport in decarbonisation and mitigated climate change and improved air quality and benefits for public health. Since the start of the COVID-19 pandemic, officials have advised limiting public transport usage as it has been associated with health risks and the fear of contagion. Gutiérrez et al. (2020) point out that people are now noticeably choosing to use their private cars, e-scooters, bikes and motorbikes, and active modes instead of public or shared mobility platforms. The World Health Organization's (2020) guidelines on mobility during the COVID-19 pandemic maintain that governments should provide more spaces for cyclists and pedestrians, especially in densely populated urban areas, thus avoiding public transport overload use of private cars. Urban streets have been transformed to address the new needs, including temporary pedestrianisation, extensions to cycle networks, and road closures. Physical distancing has become compulsory in urban public spaces around the world. Some researchers, such as Barbarossa (2020), have argued that the pandemic has provided an opportunity to shape non-motorised urban environments. Chapter 54 identifies the fundamental values and goals in street design based on the UN SDGs – Goal 9 (Industry, innovation, and infrastructure), Goal 11 (Sustainable cities and communities), and Goal 13 (Climate action). Also important are Goal 10 (Reduced inequalities), Goal 7 (Affordable and clean energy), Goal 5 (Gender equality), and Goal 3 (Good health and well-being). Chapter 6 considers new

mobility technologies and the impacts of the COVID-19 pandemic as disruptive forces that reallocate public space (particularly affecting street design) for community residents.

Manfredo argues how new smart technologies and digital communication generate new forms of urban commons in our late network society. Smart mobile phones, coupled with extended digital networks, regenerate urban "space in which content and connection are seemingly available 'everywhere and any time'" (McQuire, 2017, p. 2). The theory of urban commons is well grounded in different academic disciplines. Carr et al. (1996) define urban public spaces as commons in urban planning, urban design, and landscape architecture. In his book *Common Space: The City As Commons*, Stavrides (2016, p. 2) defines common

> as distinct from public as well as from private spaces, 'common spaces' emerge in the contemporary metropolis as sites open to public use in which, however, rules and forms of use do not depend upon and are not controlled by a prevailing authority.

Urban commons, particularly public common space, are inherently complex, contested, and political (Foster, & Iaione, 2015).

> Historically, one can see concern over the public rise in waves; escalation of inequalities and democratisation make it more difficult to find a common denominator for an all-accommodating public space, and may lead to frictions, for the handling of which there are yet no established routines.
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> *(Bodnar, 2015, p. 2095)*

Harvey (2012) argues that public spaces as "urban commons" have always been a highly contested space and the place of socio-political struggles. The social, economic, and political contestations often lead to contingent and ambiguous results that are materialised in urban spaces. Stavrides (2016) categorises common spaces into enclosed and expanding/open common spaces. Enclosed common space, defined through acts of spatial enclosure, can be collective private space such as the outdoor space of gated communities or regulated and controlled "public space" such as the space of a municipal park or a town square. Expanding/open common space explicitly reflects the desire to create new inclusive forms of life in common and a culture of sharing without any authoritarian regulations in the city.

Bodnar (2015) observes that commercialisation and privatisation are the two main trends in transforming public space into common enclosed spaces. Foster and Iaione (2015, p. 286) argue that "the 'commons' is being invoked to lay claim to, and protect against the threat of 'enclosure' by economic elites, a host of urban resources and goods which might otherwise be more widely shared by a broader class of city inhabitants." "Technology and design both serve the increased surveillance of public space: what landscaping, architecture, and the organisation of space cannot achieve, direct policing and legislation" can (Bodnar, 2015, p. 2096). Chapter 51 investigates the changing nature of and relationship between the opposing forces of hegemonic domination and distributed appropriation in the emerging spatialised forms of the *hybrid actual-digital commons*. "Commoning the city in the digital age is therefore described as a hybrid process spanning over from the digital to the physical urban space, online and onland" (Labaeye & Mieg, 2018, p. 1). The opposition of these forces is seen as producing an internal tension in most everyday practices. On the one hand, the pervasion of digital systems unleashes a wide-ranging relational agency and expands the forms of external control that occlude the public sphere. However, these systems create free spaces favouring inclusionary dialogue and political action. Labaeye and Mieg (2018, p. 1)

investigated how a commoning process may involve physical space and data, side by side under smart city discourse and citizens' rights. The chapter concludes by addressing how these changes affect architects and urban planners' role and demand increasing awareness of the ambivalent agency of the emerging spatialities.

Since 2015, cities globally have developed strategies, plans, policies, and visions aligned with the SDGs and their targets. Cities' social, economic, and political contexts and their urban issues significantly inform their plans, policies, and visions; however, they often aim to mitigate climate change, promote social equity, encourage social cohesion, improve safety, and promote economic growth. The following chapters review how the capacities of emerging smart technologies are used around the Pacific Rim to address existing urban issues and problems in line with the United Nations' Sustainable Development Goals (SDGs). The chapters investigate how smart city initiatives and emerging technologies will transform cities in the future. The chapters also review the ability of various smart digital technologies to help cities attain the UN SDGs. Following the Unite Nations' slogan "no-one will be left behind," the chapters indicate that residents and their needs should be the core of any smart initiatives, projects, plans, and policies. Otherwise, the outcomes of deploying smart technologies would be detrimental.

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