

Creativity, innovation and smartness in destination branding

Lino Trinchini

Manchester Metropolitan University,
e-mail: lino.trinchini@stu.mmu.ac.uk

Nataliia A. Kolodii

Tomsk Polytechnic University,
e-mail: kolna@tpu.ru

Natalia A. Goncharova

Tomsk Polytechnic University,
e-mail: natg@tpu.ru

Rodolfo Baggio

Carlo F. Dondena Centre for Research on Social Dynamics and Public Policy,
Bocconi University
and Tomsk Polytechnic University,
e-mail: rodolfo.baggio@unibocconi.it

=====
2019 International Journal of Tourism Cities, doi: 10.1108/IJTC-08-2019-0116.
=====

Abstract

Purpose – The aim of this paper is to examine the role of creativity and innovation as important attributes of smartness in cities/destination branding.

Design/methodology/approach – A conceptual support to the notion of smart destination branding is provided by discussing the relationship between creativity, innovation and technology as determinants for the smartness concept applied to destination branding and marketing. This paper adopts a qualitative and logical-deductive approach. The case of Milan (Italy) and Tomsk (Russia) are presented and compared as smart cities approach to branding within and outside Europe. We emphasise the importance of smart destination branding strategies based on people participation, creativity and innovation as drivers of smart urban development.

Findings – The endogenous ability of cities/destinations to embrace creativity across stakeholders is essential to smart branding strategies relying on advanced Information and Communication Technologies (ICTs). The entwined connection between smart cities/destinations creative initiatives and innovation underpins innovative branding strategies.

Research limitations/implications – The paper is conceptual, and the findings cannot be generalised to other destinations, even if a couple of examples are briefly discussed. The authors intend to provide a basis for future research concerning smart destination branding.

Originality/value – The technological, human and institutional dimensions of smart cities and smart tourism destinations have been increasingly addressed by scholars and practitioners. Despite the reference and attention to human factors is not new, there is still a lack of extensive focus on creativity as crucial driver of innovation in smart destination branding. This article aims to fill such gap by

focusing on the implications of urban smartness driven by creativity and innovation in destination branding and marketing.

Keywords: Creativity, Innovation, Urban smartness, Branding, Smart destinations, Human smart cities, Milan, Tomsk.

Introduction

Creativity and innovation have been widely recognised as essential to cities attractiveness and competitiveness. Cities are increasingly relying on their capability to attract visitors and investors as well as talented and creative people, while fostering innovation for the benefit of all stakeholders involved. To gain competitive advantage, such value of creativity and innovation for cities is usually translated into promotional marketing strategies by exploiting the so-called human and social capital resources. Marketers tend to brand or re-brand cities as creative, intelligent and innovative cities (Hospers, 2008), according to their peculiar attributes. With the emergence of smart destinations, this also holds true for those cities branding themselves as ‘smart’ to convey an attractive, innovative and sustainable image. The ‘smart’ brand, therefore, will be likely “added to the brand soup of contemporary cities” (Yigitcanlar, 2018 p. 3), before experiencing the potential value of smart cities. Despite its popularity, in practice, the ‘smart’ concept should be still deemed as ‘very fuzzy and often used to drive specific political agenda and to sell technological solutions’ (Gretzel *et al*, 2015a p. 180).

The Human-centred Smart City (HSC) concept has emerged alongside the common technology-led discourse over smart urban development (Concilio and Rizzo, 2016), in order to stress the growing attention to the human and social dimensions (Caragliu *et al*, 2011; Boes *et al*, 2015). Urban smartness has similarly evolve towards a more comprehensive, balanced and humanised notion (Lara *et al*, 2016). In the light of smart urban ecosystems complexity, creativity can also play a crucial role in driving the socio-economic development of smart destinations (Baggio and Moretti, 2018), particularly for its ability to trigger innovation (Baggio, 2014).

Adopting a conceptual approach, this paper aims to discuss creativity as determinant of innovation in smart destinations branding strategies and how the intertwined relationship between creativity and innovation may enrich and enhance the notion of smartness applied to cities. After introducing the context and complexity of smart urban ecosystems, the human and social attributes of cities will be explored with attention to endogenous creativity enabling innovative practices to create the destinations image and branding. The case of Milan and Tomsk branding strategies will be presented according to their respective approach to smartness. The final remarks concern the connection between creativity, innovations and urban smartness in terms of socio-economic development, inclusiveness, including indications for future research needs.

The context: smart cities, smart destinations, smart places

In the last decades, the ‘smart’ term association to urban contexts has become very common among scholars, city managers and practitioners. The “smart” transformation of cities and tourist destinations can be distinct and still highly interrelated. Whereas smart cities focus on local residents and business (Caragliu *et al*, 2011), smart destinations are special cases of smart cities concerning local stakeholders as well as tourists (Gretzel *et al*, 2015a). Smart destinations clearly adopt a smart city approach based on an expanded notion of smartness encompassing technology, people and institutions (Nam and Pardo, 2011). In a Hegelian attempt at preserving, changing and advancing (*Aufhebung*) the view of urban

smartness, technology is no longer the prominent feature. Most recent conceptualisations of smart cities, in fact, have moved towards a socio-technical (Kopackova and Libalova, 2017), sustainable (Romanelli *et al*, 2019) and multidimensional perspective (Yigitcanlar *et al*, 2018), without discarding the significant role of technology. Smart technologies impose structural changes across social, physical, economic and governance of cities. The integration of advanced Information and Communication Technologies (ICTs) into infrastructure is blurring digital-physical boundaries through ubiquitous computing and augmented reality. Such virtual-real environment entails people and communities, empowered in terms of easier access to real-time information, collaborative interactions and participation. A higher level of synchronisation and interconnectivity between things, people and organisations enables value co-creation and dynamic stakeholders' engagement, with implications for entrepreneurship innovation, competitiveness and participatory governance. So, being a smart city goes beyond the mere use, combination or integration of advanced ICTs or reengineering the large amount of data thereof. This is evident in the early definition of smart destinations as a tourism systems encompassing the human and social dimensions (Buhalis and Amaranggana, 2014), alongside subsequent diverse connotations discussed in literature. Boes *et al* (2015) distinguish between hard smartness (infrastructure) and soft smartness (human capital, social capital, innovation and leadership) by stressing their combination to gain competitiveness. Del Chiappa and Baggio (2015) address knowledge sharing and learning processes as key to smart destinations developments. Likewise, Buonincontri and Micera (2016) recognise the importance of the co-creation of tourism experiences in smart destinations, as the outcome of interactions with tourists, active participation and sharing between tourists. Further, Romão *et al* (2018) highlight the tension between tourists and residents' social determinants of sustainability in smart urban attractiveness.

Cities are clearly the practical context for the application and understanding of smartness, considering the concentration of knowledgeable and creative people, infrastructure, services and the high density of businesses and tourists. This view is consistent with the widespread use of urban places as "living laboratories" or testbeds for smart initiatives to address socio-demographic, economic and technological challenges as well as to create a positive destination perception. The global competition among destinations is enforcing cities to look smart, and to be recognised as such, to attract tourists, knowledgeable people and investments. At the same time, smartness has been increasingly regarded as the solution to the major issues presented by rapid urbanisation and "overtourism". Problems concerning mobility, overcrowding and effective allocation of local resources, to name a few, could depend on the successful development of smart destinations, in line with implementation of smart urbanism (Azzari *et al*, 2018). Cities, and specifically tourist destinations, need to be capable of taking advantage of smart technology, big data and knowledge sharing to foster innovation and sustainability in both services and society. But they are also exposed to the hype surrounding the smart concept. Scholars widely agree upon the importance of a holistic and networked view of smart destinations (Nam and Pardo, 2011; Buhalis and Amaranggana, 2014), with emphasis on phenomena and perspectives that are not new. The early view of the city as a network of networks connecting individuals, communities and organisations (Craven and Wellman, 1973) has gradually evolved towards the view of the networked city and society transformed by pre-internet computer-aided communication technology (Turoff and Hiltz, 1978; Dupuy and Tarr, 1988). As digital interactive ICTs developed, from internet/web to wireless and social media, networked cities and technology dialectic coevolved in the light of the profound transformations of urban structures and processes (Castells, 1994; Graham and Aurigi, 1997; Monstadt, 2009; Cassandras, 2016). The power of flows articulated in the form of travel hubs and nodes is shaping destinations as loci and foci of technology-mediated experiences within a shared space. In this respect, it is not possible to ignore the socio-physical dimensions of smart destinations as well as the limitations brought by the immoderate technology dependence. Considering the scale and diversity of urban transformations over

time, the challenges of understanding and defining smart destinations can be seen in the light of the inherent complexity of urban ecosystems.

The complexity of urban ecosystems

Being open to many different interpretations, the smart city concept epitomises the difficulties in finding an agreed definition of contemporary urban ecosystems. Indeed, complex systems are elusive and resistant to any exhaustive definition. If a system is commonly defined by the structured interactions of its components keeping the functions stable around an equilibrium (Waldrop, 1992), complexity denotes high-level phenomena emerging from configurations, processes, interactions and patterns far from stable and predictable behaviours (Batty, 2005). Thus, Complex Adaptive Systems (CAS) are defined by non-linear processes and interactions as well as non-proportional relationships between effects and causes. Any sort of ecosystem, including cities, has also been recognised as a typical example of CAS. Provided that an ecosystem entails the aggregation of living organism dynamically interacting with their physical habitat within specific boundaries (Tansley, 1935; Likens, 1992; Chapin *et al*, 2002), cities can be seen as ecosystems because of those networked interactions among their biotic (living) and abiotic (non-living) components, such as roads, building and other geophysical elements (e.g. Newman and Jennings, 2012).

The socio-economic and technical transformations embraced by smart cities cannot be understood or acted upon without adopting a holistic approach. With advanced ICTs as common attribute (Harrison and Donnelly, 2011), the most recent views of cities as smart urban ecosystems take in the attributes of CAS (Batty, 2005). In destinations permeated by intense and dynamic interactions among local authorities, residents, tourists and firms (Jovicic, 2019), stakeholders tend to respond to internal and external stimuli in unpredictable and non-linear ways (Sainaghi and Baggio, 2017). Aside from such characteristics of CAS, smart destinations augment the complexity of smart urban systems experiencing additional flows of resources and people generated by the influx of tourists. In line with the constant attention to tourist destinations as complex systems (McKercher, 1999; Russell, 2005; Hartman, 2016), the view of smart destinations as ecosystems has been commonly accepted by tourism scholars (Boes *et al*, 2016). Accordingly, the growing attention to the human dimensions of smart cities/destinations is consistent with the disruption of abiotic/non-abiotic networked interactions placed by smart technologies.

The people-centred smart city

The integrated ecosystem view of smart cities cannot ignore the human and social components in relation to the physical and digital infrastructure. To counterbalance the technological determinism of smart city, people-oriented approaches have recently gained attention among scholars focusing on the importance of participation, needs and quality of life of citizens. The participatory approach identifies citizens interaction and engagement with local government bodies as driver of sustainable development, urban planning and effective governance (Castelnovo *et al*, 2016; Lara *et al*, 2016). Through an effective collaboration with local authorities, citizens can participate in co-designing or co-creating services and solutions meeting common needs and interests. So, residents taking part in public decision-making can actually influence practices and policies ranging from municipal budget to environmental or community-led projects in their neighbourhood. For this reason, the involvement of citizens has been deemed as essential to sustainable city management and development thanks to a broader participation encompassing all stakeholders, the exchange of information, and a fairer distribution of political power, resources and decentralised decision-making processes (Fischer, 2012).

Concerning active citizens' participation, the complex relationship between government and society has evolved alongside societal, economic and technical changes over time. Putting aside that Rousseau and

Mill's thinking of citizen participation in public decision-making was purely theoretical, as well as the emphasis on 'formal and electoral participation and competition' by Dahl and Schumpeter (McNulty and Wampler, 2015 p. 3), the contemporary direct citizen intervention in policymaking and public services design for the common good at any level of government presents limitations and challenges affecting governance. Individual and collective participation, for instance, can be diluted or ineffective in large and complex administrative cities within which diverse group of people and communities coexist and bring forward different needs and wants (Roberts, 2004). Even if such limitations of scale can be overcome by ICTs facilitating interactions and direct involvement of all, including minorities, the new forms of digital communication require access to technology and skills that are not equally distributed across stakeholders. Also, the divide affecting citizen involvement extends beyond the use of ICTs and includes time, learning and knowledge needed to decide and deliberate over complex urban issues, such as municipal budgeting, waste management or public health. Addressing and removing these challenges and barriers is vital to implementing participatory governance, which is one of the most salient concept underpinning smart city development (Azzari *et al*, 2018). Given the complexity of governing shared decision-making processes across all stakeholders, it is fair to say that there is no silver bullet for effectively managing citizens' direct involvement and appropriate response to their wants and needs. As powerful enabler of collaborative and citizen-centric forms of governance, in fact, advanced ICTs can also bear risks when their long-term effects and hidden costs are not taken into account. Castelnovo *et al* (2016 p. 736) advocate the need of focusing on 'the city's capability to generate and manage public value' as well as adopting 'the appropriate instruments for checking whether we are going into right direction' to avoid technological lock-in. In contrast to e-governance, based on the use of ICTs by local government to improve citizen centricity, service and administrative efficiency, smart governance should be implemented through a holistic approach to people participation in decision making resulting from complex negotiations and collaborations (Azzari *et al*, 2018).

Linking creativity and innovation

To be smart, cities need to nurture people "smartness". The "smart" aspect of people has been clearly discussed by scholars as an intrinsic and crucial component of smart cities. Within the society domain of the Smart City Wheel model developed by Cohen (Smart Circle, 2013), the smart people characteristic encompasses attributes ranging from education to continuous learning. A mere reference to the level of qualification or learning skills of citizens cannot describe the articulated notion of smart people. Factors like creativity, flexibility, ethnic plurality, open-mindedness or cosmopolitanism (Shapiro, 2006; Caragliu *et al*, 2011; Albino *et al*, 2015), talent and tolerance (Florida, 2003) and citizen participation (Romanelli *et al*, 2019) have also been identified as essential indicators of smart people in combination with smart living, smart governance, smart mobility, smart environment and smart economy dimensions. The response to people's needs and public value creation through innovative solutions cannot ignore the "smart" combination of endowments and activities of self-decisive, independent and aware citizens' (Griffinger *et al*. 2007 p. 11). Smart people factors are commonly aggregated under the human capital concept to denote changes in persons' knowledge and capabilities 'making them able to act in new ways' (Coleman, 1988 p. 100). Likewise, social inclusion and public life participation attributes are termed as social capital (Albino *et al*, 2015), with reference to the relational capital emerging from urban communities, abilities to maintain the social 'network of more or less institutionalized relationships' through intrinsic reciprocity and trustworthiness norms (Bourdieu, 1986 p. 249; Putnam, 1995; Caragliu *et al*, 2011). The amalgam of the human and social capital, as said, is essential to smart cities sustainable urban development. Caragliu and Del Bo (2019), for instance, identify the interplay of local knowledge production functions and innovation processes in smart cities policies, while Dameri and Ricciardi (2015) assess the adoption of Intellectual Capital (IC) for smart cities innovation systems management. Bearing in mind that IC can influence radical and incremental

systemic innovations, human capital has positive implications upon social capital and vice versa. Smart cities are, therefore, the context in which residents and tourists can be generators of creative and innovative ideas, solutions and services, rather than passive users (Haque, 2012) thanks to the availability of physical and digital infrastructures allowing the connection of people as well as the intense exchange of information and knowledge (Del Chiappa and Baggio, 2015). The adoption of the creative city paradigm in smart cities, with a prominent focus on the attraction of highly skilled and creative people, might present limitations that affect innovation process and outcomes. The strong reliance on human capital, in the form of an external or distinct class of creative people (Florida, 2003; Richards, 2014), can arguably be problematic in terms of increasing the tension between local communities and tourists, with negative outcomes for residents and the image of destinations (S raphin *et al*, 2019). The best configuration of a creative and innovative system, ideally, requires an appropriate combination of strong and weak ties across networked communities, which can benefit from an efficient exchange of non-redundant peripheral information and ideas (Granovetter, 1973; Baggio, 2014). Following this line of thoughts, it is clear that creativity, as powerful enabler of innovation, plays a fundamental role in the definition of urban smartness.

Creativity as attribute of urban smartness

Urban smartness can take great advantage of creativity in triggering diverse forms of innovation for the benefit of all stakeholders. The ability of individuals and communities to combine and recombine ideas in new and unexpected ways contributes to the social construction of smartness in cities and destinations. This assumption is coherent with HSC view based on participatory governance, smart people and social innovation (Concilio and Rizzo, 2016), along with the importance of human and social capital (Coleman, 1988; Boes *et al*, 2015). Rather than a “soft” component of urban smartness, creativity is considered here as the socially constructed “thick” attribute of urban ecosystems connoting smart destinations identity and socio-economic development.

To contextualise the role of creativity in urban smartness, and reduce the ambiguity of both concepts, it is essential to acknowledge that the generation, elaboration, promotion and implementation of novel ideas is closely related to the human, social, technological and structural factors of smart destinations. As CAS, smart destinations embody uncertainty and asymmetries at different levels. While uncertainty is intrinsically linked to the unpredictable self-organising nature of smart ecosystems (Gretzel *et al*, 2015b), structural asymmetries can be found across the socio-physical and economic urban layers influenced by market-driven technological innovations (Anttiroiko, 2014). Rather than limiting smart destinations variability to facilitate predictability, creative capabilities are essential to deal with the inherent uncertainty of smart urban ecosystems. It is clear that the pervasiveness of smart technology has raised the level of complexity of urban life (Yigitcanlar *et al*, 2018), by increasing the physical-digital gaps and bridges and blurring roles of stakeholders across diverse overlapping systems (Gretzel *et al*, 2015a). The additional complexity and uncertainty of smart destinations lies in the tourism-“non tourism” entwined systemic relationship. Provided that complexity is the main source of uncertainty, the self-adjusting nonlinear dynamic processes within smart destination ecosystems tend to reduce spontaneously the level of uncertainty until it raises again, in cyclical ways, through unpredictable and emergent innovations. Similarly, creativity can arise from indirect mechanisms of collaborative interactions among agents of a smart ecosystem (individuals, ideas, communities) producing synergistic effects (Corning, 2002). It is, therefore, possible to engage with such emergent processes through collective creative capabilities for the endogenous and sustainable generation of innovative outcomes. Hence, the reference to serendipitous discovery as an integral component of human creativity driving innovation and making destinations smarter (Baggio and Moretti, 2018; McKenna, 2018). In essence, the peculiarity of collective creativity dwells in the potential capability of people to make destinations

smarter through emergent innovation and sustainable approaches to uncertainties and asymmetries as attributes of the urban smartness composite concept (Table 1).

Table 1 - Theoretical underpinnings of people-centred urban smartness (source: the authors)

| | Theoretical arguments (concepts) | Description | Authors |
|---------------------------------|--|---|--|
| The Context | Smart cities/destinations as Complex Adaptive Systems (CAS) | Smart cities/destinations are typical example of self-organising ecosystems and CAS characterised by non-linear processes and networked interactions, asymmetries and uncertainties | Batty, 2005; Newman and Jennings, 2012; Hartman, 2016; Sainaghi and Baggio, 2017 |
| | Human Smart Cities (HSC) focusing on people-driven smartness | HSC concept focuses on people as the “true” actors of urban smartness, rather than technology. Citizen participation and interactions with government are key to HSC development. | Concilio and Rizzo, 2016; Lara <i>et al</i> , 2016 |
| Creativity – Innovation drivers | Participatory governance (smart governance) | Effective collaboration with local authorities, citizens can participate in co-designing or co-creating services and solutions to meet common needs and interests. | Hospers, 2008; Fischer, 2012; Castelnovo <i>et al</i> , 2016; Azzari <i>et al</i> , 2018 |
| | Collaborative interactions | People engagement and interactions for collaborative purposes can facilitate the flow of ideas and active participation in smart urban developments | Corning, 2002; Paulus <i>et al</i> , 2003; Cohen <i>et al</i> , 2016 |
| | Knowledge and learning | The sharing of knowledge and learning processes foster creativity and innovations, as well as human and social capital | Nam and Pardo, 2011; Del Chiappa and Baggio, 2015; Caragliu and Del Bo, 2019 |
| | Human and social capital | Human capital has positive implications upon social capital and vice versa. The combination of human and social capital is essential to smart cities sustainable urban development | Coleman, 1988; Shapiro, 2006; Albino <i>et al</i> , 2015; Boes <i>et al</i> , 2015 |
| | People-oriented innovation (social innovation) | Residents and tourists as active generator of novel and creative ideas for better urban living | Griffinger <i>et al</i> . 2007; Gascó <i>et al</i> , 2016; Romanelli <i>et al</i> , 2019 |
| | Emergent innovations | The spontaneous and self-organising transformations (emergent processes) of smart urban ecosystems produce endogenous innovative outcomes | Batty, 2005; Fleming and Marx, 2006; Gretzel <i>et al</i> , 2015b; McKenna, 2018 |
| | Serendipity | As accidental discovery and random encountering, serendipity can foster knowledge, creativity, innovation and smartness | McKenna, 2018; Baggio and Moretti, 2018 |
| | Holistic approach | A comprehensive view of smart cities/destinations including people/communities, technologies and endogenous/exogenous resources. | Nam and Pardo, 2011; Castelnovo <i>et al</i> , 2016; Yigitcanlar <i>et al</i> , 2018 |

Creativity and innovation in smart destinations

Cities are bearer of emergent innovations and creativity. Depending on the urban design and planning adopted, different approaches to creativity can lead to equally diverse innovative outcomes, with impact on branding strategies. The examples of Milan and Tomsk will be hereafter discussed with attention to people-centred smart urban innovation and creative practices in relation to respective branding strategies. The cities were purposely selected to address their different approach to smart urban development and destination branding.

Milan

Smart destination profile

Milan is one of the most famous cities in Italy and internationally renowned destination leveraging on its high-profile reputation in business, education, fashion and design to attract tourists, scholars and investors. The city of Milan and its Municipality represent the core of a large metropolitan area in which several administrative units are conurbed with the main urban centre. Despite being the Italian smartest city (Forum Pa, 2018), the Municipality of Milan has only recently driven its efforts towards the development of a strategy centred on its citizens and an open innovation approach (Gascó *et al*, 2016). Since 2012, the Smart City strategy is promoted by the Municipality of Milan and its Chamber of Commerce, which deployed a plan based on coordination, with the involvement of internal (within Municipality) and external (local stakeholders, including citizens). In contrast to technology-led

approaches in other European cities, Milan has adopted a ‘model of participatory governance based on [the] facilitation of co-creation and shared decision processes’, with proposals provided by many citizens who attended several working groups (Bonduel, 2018). Milan participated in EU funded projects (Horizon 2020 programme), with a specific focus on solutions reducing social and geographical gaps, improving energy efficiency and enhancing transportation services. Such emphasis on the human/social dimension is consistent with the participation in European projects (2010-2012) aimed at strengthening social ties and interactions (*MyNeighbourhood*) as well as urban planning and design through inclusive participatory governance and co-creation (*Periphèria*). Yet, the smart interventions realised ‘are at an embryonic stage of the path towards smartness’ and their effect ‘on tourism represents a derivation rather than a primary purpose’ (Della Corte *et al*, 2017 p. 16).

Destination branding approach

The perception of Milan as destination is mainly associated with the prominent image of an international city of design, business, and high fashion and shopping. Such view has been supported and branded through the *Fashion Week*, the annual furniture exhibition, trade-fairs and other international major events, such as the World Expo in 2015, which attempted to broad the traditional image of Milan by focusing on sustainable development and food. Despite some attempts to link events and business-related projects into the smart city strategy (Gascó *et al*, 2016), Milan is still far from embracing appropriate participatory governance and translate its potential into branding strategies by including overlooked existing attributes. The potential to diversify the image of the city is very high, but underestimated in terms of promotional opportunities. A large amount of Milan’s artistic heritage and cultural resources have not been fully publicised, or mentioned at all, by entitled public institutions, such as the city council, the Province of Milan and the Lombardy Region (De Carlo *et al*, 2009). This is actually reflected in the gap between the stereotypical and experiential perceptions of Milan as a place to visit and live, with a positive distinction in favour of actual visitors against potential ones. In addition to cultural resources, the city has also a strong educational reputation built upon high quality universities, which are ‘able to support business innovation, foster entrepreneurship and attract talented people’ (De Noni *et al*, 2014 p. 224). Creativity is an equally important and often neglected attribute in the city branding. Apart from fashion and design mainstream initiatives, as for the “Fuorisalone” socio-cultural events across the whole city during the annual furniture exhibition fair, Milan’s has long been experiencing grassroots creativity ranging from the reconversion of peripheral dismissed industrial facilities into creative public places for citizens to the informal creation of coworking spaces and community gardening. Since the City of Literature designation within the UNESCO Creative Cities Network in 2017, Milan has integrated its historical and rich literary heritage into the Smart City Strategy (<https://en.unesco.org/creative-cities/milan>). The combination of the tangible and intangible attributes of the city with core values (innovation, creativity and knowledge) is key to brand Milan as smart destination.

Tomsk

Urban profile

As capital of the eponymous region, Tomsk is one of the oldest Siberian towns. With high-ranking universities, research hubs and historical heritage, the city is a distinguished scientific and cultural centre on the Trans-Siberian Railway route. A Special Economic Zone (SEZ “Tomsk”) has been recently created to foster cultural, scientific and educational potential, in line with the strategic socio-economic development of the entire region until 2030 (<https://tomsk.gov.ru/ctrattegija-sotsialno-ekonomicheskogo-razvitija>). Within the SEZ, innovation centres and several business incubators have been set up through a collaborative approach between universities, organisations, businesses and local government (the so-called Triple Helix). Despite ‘the willingness of local universities to act as

generators of ideas', the cooperative approach and the transformation of new ideas into innovations has been limited by the strong governmental interventions preventing 'effective interactions between enterprises and the universities' or local communities (Oplakanskaia *et al*, 2019 p. 44). For the same reason, the creative industries clustering processes did not reflect the potential of many and different cultural initiatives (e.g. interactive art exhibitions, music folk festivals in former factories and museums' nights) that could instead benefit from urban activism and civic engagement. As promoted by the local municipality since 2012, the smart city strategy (Tomsk 3.0) has focused on the development of a creative, efficient, comfortable and competitive place through intensive knowledge transfer clustering, city incubators and design workshop (Goncharova *et al*, 2014). The smart city project did not evolved from its initial implementation of technology-led solutions and top-down urban planning, as perceived by the city community.

Place branding approach

Tomsk is a well-established cultural and educational city in which creative and innovative clustering strategies have been adopted to attract knowledgeable people and businesses. Since tourism is not a crucial element of the strategic development of the city, destination development activities are carried out at regional level within the Department of Culture and Tourism administration, with limited resources and without the involvement of other private or public tourism stakeholders (Tomsk Region, 2014). In addition to such fragmented destination governance, tourism strategies in the region tend to rely on the 'spin-off from other socio-economic activities, mainly innovation or cultural activities, rather than a primary goal of public policy (Halkier *et al*, 2019 p. 277). This applies to the city itself, too, with impact on its branding strategies. In the light of cultural and educational peculiarity, Tomsk city has been commonly associated with the long-standing image of "Siberian Athens". To position the city at international level, the 2010-2020 strategy development for the whole region has envisioned Tomsk rebranding initiatives including tourism and hospitality concepts as well as "creative" and "smart" city attributes (Keksel *et al*, 2016). The attempt to change the "Siberian Athens" perceived image failed, as resulted from the 2015 "competition for the best conception of visual and verbal style of territorial brand of Tomsk Region" contest proposed by the Tomsk Region Administration in association with some private organisations and involving both residents and visitors (Skripnik and Kornilova, 2016). This is essentially consistent with the socio-economic structure of the city and the large population of students, which are commonly involved in grassroots creative activities and mostly excluded from actual decision-making (Keksel *et al*, 2016). In spite of relying on creative clustering, techno parks or the side-effect of innovative activities as 'a "device" that will create new urban images' (Kolodii *et al.*, 2017), participatory governance, open innovation and human-centred approaches have been recognised fundamental to the smart development of the city as destination to be brand (Halkier *et al*, 2016; 2019)

Creativity, innovation and the smart branding of destinations

Considering the 'evidences' of Milan and Tomsk, effective smart destination branding requires the integration of collective creativity processes and practices into promotional strategies that cannot ignore the city attributes and smart urban development approaches. Yet, differences between top-down (Tomsk) and bottom-up (Milan) approaches to smart city initiatives and urban innovations equally reflects into destination branding strategies.

The problematic view of the city as *product* to brand has been widely addressed in literature (Kavaratzis and Ashworth, 2006; Govers, 2013). Within the broad notion of place marketing, city branding and destination branding main problems concern the translation of corporate branding theories and models to urban locations (Kavaratzis, 2009). Despite the fact that destinations are difficult to be marketed and communicated as a single entity through a brand (Anholt, 2007) and the competing interests of the different stakeholders against such branded entity (Houghton and Stevens, 2011), the reference to

corporate branding is merely supported by the shared similarities that can also be found in destination branding being dissimilar to product branding (Kavaratzis, 2009). Instead of promoting each product/service of an organisation to targeted consumers and audiences, corporate branding aims at shareholders and stakeholders, too. Corporate branding embodies all products/services into the unique brand of the whole organisation. In the same fashion, urban destination branding integrates all diverse tangible and intangible attributes of the place into a city-brand to attract tourists and investors. To differentiate and compete at global level, organisations construct a distinctive brand as combination of the respective core values and strategic purpose (corporate identity) to be positioned among competitors and proposed in a verbal/visual way (brand image) to influence the perception and choices of consumers (Kavaratzis, 2009). As an intangible corporate asset, the successful relationship between the brand and the consumer can even be valued and measured through “brand equity” (Aaker, 1992). For several interrelated reasons, however, corporate branding strategies cannot be applied *sic et simpliciter* to tourist cities. First and foremost, the digital business ecosystem of cities is not comparable to any sort of organisation, whether small or big. Being a place for people to live, work, invest and visit, the city as a destination comprise a large array of tourist product/services, overlapping with non-tourist ones, produced and consumed by a heterogeneous and ever-changing (in role, location and number) amalgam of stakeholders. Even if unified under a unique brand, the multiple of tourist brands aiming at people that plan to visit the destination tend to “conflict” one another and with non-tourist organisation city branding or the existing image of the city (name and logo). Second, the potential tourists are confronted with the intangible and experiential nature of tourist product and the destination as a whole, with impact on all components of the brand construct (identity, positioning and image). In contrast to other product/service functional utility and customer journey, which implies a shorter purchase and consumption time span, the benefits of travelling to a destination for hedonic reasons can be appreciated after spending time and actually experiencing the place. Destination brand-tourists relationship is consequently more core complex and less straightforward. Third, the intangible and tangible attributes (e.g. heritage and attractions) underpinning the brand identity of the destination cannot be easily changed or reshaped to meet consumers’ needs and wants. Hence, the complexity in positioning a ‘competitive identity’ and the common stress on the ‘development of a visual identity’, which is expressed through ‘logos, taglines, communication campaigns, touristic routes with their websites, applications, brochures and signs’ (Deserti, 2016 p. 66).

It is beyond the scope of this work to re-examine the vast literature on corporate branding and product branding in relation to destinations, but to address the implications of smartness on destination branding. Provided that city branding strongly relies on place identity as perceived and valued by both residents and visitors (Kavaratzis and Ashworth, 2006), the smartness of a tourist destination has also a significant impact on its branding strategies (Romão et al, 2018). Being a crucial part of the process, the brand identity of a smart destination is the intangible construct arising from the integration of all “smart” attributes into a brand built, recognised and delivered through the destination image by all stakeholders involved. With the support of advanced ICTs embedded in municipal infrastructures, in fact, the core urban smartness components centred on people (human capital, social capital, entrepreneurship and innovation) can enhance the relationship between the brand and targeted tourists as well as local residents. A destination branded as “smart” should possess the capability to attract knowledgeable, skilled and competent people (Caragliu *et al*, 2011), along with tourists, without affecting the co-creation of socio-economic well-being (Romão *et al*, 2018). To achieve this, destinations need to develop a branding system combining the human capital (internal and external) with market forces, *network capital* and social capital (Coleman, 1988; Beritelli and Laesser, 2011) to co-create a brand through the participation of tourists and locals (Kavaratzis and Kalandides, 2015). To serve as a reputational tool driven by socio-economic benefits, rather than financial or economic gains (Anholt, 2016), a brand

defined by such smart attributes also requires a collaborative urban environment in which open innovation is fostered by entrepreneurs interacting and exchanging knowledge and ideas with local people and tourists (García *et al.*, 2012; Cohen *et al.*, 2016). A people-centred smart city approach can, therefore, sustain successful branding strategies aligned with the urban development of the destination. With positive impact on intrinsic components of destination identity, innovative solutions stemming from collective creativity, and particularly social ones, can help to bridge the digital (e.g. access and use), spatial (e.g. central vs peripheral) and socio-economic (e.g. income, education, private/public services) divide hindering social and human capital, participatory governance and entrepreneurship (Anholt, 2007; Deserti, 2016). Destination branding can be more effective in conveying and maintaining the promise of a memorable urban experience through creativity-based innovations improving the quality of life (i.e. accessibility, mobility, connectivity, liveability and environment) of residents and tourists (Deserti, 2016). This approach to innovation is highly important for the incorporation of the socio-technical smartness attributes in branding strategies to avoid the negative externalities of urban mass tourism or the so-called overtourism. Although it is not the guilty party for potential conflicts between local residents and tourists/new residents (Romão *et al.*, 2018), the experiential gap between destination identity and its perception by an increasing number of people attracted through a branding image not reflecting the reality is the reason why overcrowded cities and busy tourist destinations rely on creativity, innovation and “smart” attributes to reposition/rebrand themselves (Séraphin *et al.*, 2019). So, a smart approach to branding requires a holistic and integrated view of a destination combining endogenous and exogenous resources to mitigate social tensions, uncertainties and asymmetries. In this respect, creativity arising from endogenous urban smartness has greater positive impact on branding than exogenous factors (Meroni, 2007; McKenna, 2018), which are often used to support the imagery of the creative city as much as smart cities are labelled “smart” (Florida, 2003; Vanolo, 2008; Richards, 2014). New smart cities built and branded as ‘creative clusters, research and innovation labs and living urban showrooms’ have been acknowledged as particular cases raising questions concerning the potential for citizens to ‘adopt a more active role in adding more authenticity and human value to the smart environments they live in’, rather than being ‘mere users of smart environments’ (Kolotouchkina and Seisdedos, 2018 p. 121-122).

Conclusions: furthering smart destinations branding

The drivers of creativity and innovation, as presented in Table 1, play a key role in smart destinations branding strategies. The different approaches to smart city developments and destination branding of Milan and Tomsk showed that top-down initiatives fostering urban innovation and creativity cannot ignore effective participatory governance and the HSC perspective. Even if the effectiveness of branding smart cities for tourists has not been fully treated here, it can be seen as part of the challenges, solutions and strategies involving residents and tourists. As an integral part of the smart development of tourist cities, branding should embrace a participatory governance approach to avoid city-destination image conflicts and residents-tourists tensions. Several studies have suggested the participation of all stakeholders, particularly local residents, in smart city/destination branding strategies. Yet, in addition to the need of further theoretical refinement, very few works have addressed the active role of tourists as “temporary citizens”. Even if branding is not the main cause of overtourism, more critical and in-depth knowledge of their direct and indirect relationship is essential to destination marketers to implement effective and sustainable brands. Future research in this area could range from local government policies to experiential practices shared by tourists and residents, with implications for the creation of the urban place identity. The creation of a destination image in conflict with the existing city image, the gap between the potential of smart cities and their actual status as well as the adoption of creative strategies aimed only at attracting external talents and resources (e.g. knowledgeable people and investments) are all major issues of smart destinations branding. Rather than being mere labels, the

“smart” and “creative” cities/destinations have been increasingly recognised as entwined concepts underpinning the urban place image in promotional strategies. The role that creativity plays in the conceptualisation of urban destinations smartness is connected to the diverse, specific and endogenous attributes of the city fostering open innovation to face the uncertainties and asymmetries of such ecosystems. Given that creativity on its own is clearly not enough to understand such broad and complex field of research, future studies in smart destinations branding could be oriented towards: the assessment/evaluation of the impact of creativity as endogenous enabler of destinations identity; the impact of effectual reasoning and serendipity on the creation of a smart destination image; the role of creativity in the discourse over the authenticity of smart destinations; the expanded view of structural holes within the networked urban ecosystem in relation to the Living Labs methodology, with attention to the so-called “Jacobs spillovers”; the impact of creativity on open innovation in existing/old and new smart cities as destinations; the empirical effect of creativity over smart destinations resilience. Therefore, more research from complexity science, ecology, system theory and human geography is needed besides empirical studies into actual urban living environments. With this in mind, the most important practical implication of this contribution is the focus on the people-centred approach needed to advance smart urban development in regards to branding strategies, rather than technological matters. “There needs to be a re-orientation in how the city is conceived [...] and a re-casting of the epistemology of urban science”, with attention to ethical issues and values of and beyond smart technologies adoption, as suggested by Kitchin (2016 p.11).

Acknowledgement

The research for this paper was carried out with the support in part from the Erasmus+ Programme of the European Union in the framework of Jean Monnet project “Co-creation of EU Human Smart Cities” (project number 600426-EPP-1-2018-1-RU-EPPJMO-PROJECT), and in part from the Ministry of Education and Science of the Russian Federation in the framework of Competitiveness Enhancement Program of Tomsk Polytechnic University. The paper reflects only the views of the authors, and the European Commission cannot be held responsible for any use, which may be made of the information contained therein.

References

- Aaker, D. A. (1992). “The Value of Brand Equity”, *Journal of Business Strategy*, Vol. 13 No. 4, pp. 27-32
- Albino, V., Berardi, U., and Dangelico, R. M. (2015), “Smart cities: Definitions, dimensions, performance, and initiatives”, *Journal of Urban Technology*, Vol. 22 No. 1, pp. 3–21.
- Anholt S (2007), *Competitive identity: the new brand management for nations, cities and regions*. Palgrave Macmillan, London
- Anholt, S. (2016), *Places: Identity, image and reputation*. Springer.
- Anttiroiko, A. V. (2014), “Creative city policy in the context of urban asymmetry”. *Local economy*, Vol. 29 No. 8, pp. 854-867.
- Azzari, M., Garau, C., Nesi, P., Paolucci, M., and Zamperlin, P. (2018), “Smart City Governance Strategies to Better Move Towards a Smart Urbanism”, in Gervasi *et al* (Eds) *International Conference on Computational Science and Its Applications*, Melbourne Australia, 2-5 July, pp. 639-653.
- Baggio, R. (2014), “Creativity and the structure of tourism destination networks”, *International Journal of Tourism Sciences*, Vol 14 No. 1, pp. 137-154.
- Baggio, R. and Moretti, V. (2018), “Beauty as a factor of economic and social development”, *Tourism Review*, Vol. 73 No. 1, pp. 68-81.
- Batty, M. (2005), *Cities and complexity*, Cambridge, MA: MIT Press.
- Beritelli, P. and Laesser, C. (2011), “Power dimensions and influence reputation in tourist destinations: Empirical evidence from a network of actors and stakeholders”, *Tourism Management*, Vol. 32 No. 6, pp. 1299-1309.

- Boes, K., Buhalis, D., and Inversini, A. (2015), "Conceptualising smart tourism destination dimensions", in Tussyadiah, I., and Inversini, A. (Eds.). *Information and communication technologies in tourism 2015*, Lugano Switzerland, 3-6 February, pp. 391-403
- Bonduel L. (2018), "Smart city development: The Milan model", 6 Nov., available at <https://labgov.city/theurbanmedialab/smart-city-development-the-milan-mode/> (Accessed 10 July 2019)
- Buhalis, D. and Amaranggana, A. (2014), "Smart tourism destinations", in Xiang Z. and Tussyadiah L. (Eds) *Information and communication technologies in tourism 2014*, Dublin Ireland, 21-24 January, pp. 553-564.
- Buonincontri, P. and Micera, R. (2016), "The experience co-creation in smart tourism destinations: a multiple case analysis of European destinations", *Information Technology & Tourism*, Vol. 16 No. 3, pp. 285-315.
- Caragliu, A. and Del Bo, C. F. (2019), "Smart innovative cities: The impact of Smart City policies on urban innovation", *Technological Forecasting and Social Change*, Vol 142, pp. 373-383.
- Caragliu, A., Del Bo, C. and Nijkamp, P. (2011), "Smart cities in Europe", *Journal of urban technology*, Vol. 18 No. 2, pp. 65-82.
- Cassandras, C. G. (2016). "Smart cities as cyber-physical social systems", *Engineering*, Vol. 2 No. 2, pp. 156-158.
- Castells, M. (1994), "European cities, the informational society, and the global economy", *New left review*, Vol 204, p. 18-32
- Castelnovo, W., Misuraca, G. and Savoldelli, A., (2016), "Smart cities governance: The need for a holistic approach to assessing urban participatory policy making", *Social Science Computer Review*, Vol. 34 No. 6, pp.724-739.
- Cohen, B., Almirall, E. and Chesbrough, H. (2016), "The city as a lab: Open innovation meets the collaborative economy", *California Management Review*, Vol. 59 No. 1, pp. 5-13.
- Coleman, J. S. (1988), "Social capital in the creation of human capital", *American journal of sociology*, Vol. 94, S95-S120.
- Concilio, G. and Rizzo, F. (Eds.) (2016) *Human smart cities: Rethinking the interplay between design and planning*. Dordrecht: Springer.
- Corning, P.A., (2002). "The re-emergence of "emergence": A venerable concept in search of a theory", *Complexity*, Vol. 7 No. 6), pp. 18-30.
- Craven, P. and Wellman, B. (1973), "The network city", *Sociological inquiry*, Vol. 43 No 3-4, pp. 57-88.
- Dameri, R. P. and Ricciardi, F. (2015), "Smart city intellectual capital: an emerging view of territorial systems innovation management", *Journal of Intellectual Capital*, Vol. 16 No. 4, pp. 860-887.
- De Carlo, M., Canali, S., Pritchard, A. and Morgan, N. (2009), "Moving Milan towards Expo 2015: designing culture into a city brand", *Journal of Place Management and Development*, Vol. 2 No. 1, pp. 8-22.
- De Noni, I., Orsi, L. and Zanderighi, L. (2014), "Attributes of Milan influencing city brand attractiveness", *Journal of Destination Marketing & Management*, Vol. 3 No. 4, pp. 218-226.
- Del Chiappa, G. and Baggio, R. (2015), "Knowledge transfer in smart tourism destinations: Analyzing the effects of a network structure", *Journal of Destination Marketing and Management*, Vol. 4 No. 3, pp. 145-150.
- Della Corte, V., D'Andrea, C., Savastano, I. and Zamparelli, P. (2017), "Smart cities and destination management: Impacts and opportunities for tourism competitiveness", *European Journal of Tourism Research*, Vol. 17, pp. 7-27.
- Deserti, A. (2016), "Design and the Transformation of Cities", in Concilio G. and Rizzo F. (Eds) *Human Smart Cities*, Springer, pp. 63-79.
- Dupuy, G. and Tarr, J.A. (1988), *Technology and the Rise of the Networked City in Europe and America*. Temple University Press.
- Fischer, F. (2012), "Participatory governance: From theory to practice", in Levi-Faur, D. (Ed.) *The Oxford handbook of governance*, Oxford University Press, pp. 457-471.
- Fleming, L. and Marx, M. (2006), "Managing creativity in small worlds", *California management review*, Vol. 48 No 4, pp. 6-27.
- Florida, R. (2003), "Cities and the creative class", *City & community*, Vol. 2 No. 1, pp. 3-19.
- Forum Pa (2018). ICity Rate 2018 – La classifica delle città intelligenti italiane, settima edizione, 17 October, Available at <https://www.forumpa.it/citta-territori/icity-rate-2018-la-classifica-delle-citta-intelligenti-italiane-settima-edizione/> (Accessed 09 July 2019)
- García, J.A., Gómez, M. and Molina, A. (2012), "A destination-branding model: An empirical analysis based on stakeholders", *Tourism management*, Vol. 33 No. 3, pp. 646-661.

- Gascó, M., Trivellato, B. and Cavenago, D. (2016), "How do southern European cities foster innovation? Lessons from the experience of the smart city approaches of Barcelona and Milan", in Gil-Garcia J.R., Pardo T.A. and Nam T. (Eds) *Smarter as the new urban agenda*, Springer, pp. 191-206.
- Goncharova N., Kolodii N., Chayka and Yu. A. (2014), "Cultural-Creative Clustering Strategies and Their Adoption by Russian Cities: Practice of Urban Development", *Proceedings of the 9th International Forum on Strategic Technology (IFOST-2014)*, Bangladesh, Chittagong, 21-23 September.
- Govers, R. (2013) "Editorial: Why place branding is not about logos and slogans", *Place Branding and Public Diplomacy*, Vol. 9 No. 2, pp. 71–75.
- Graham, S. and Aurigi, A. (1997), "Virtual cities, social polarization, and the crisis in urban public space", *Journal of Urban Technology*, Vol. 4 No. 1, pp. 19-52.
- Granovetter, M. (1973), "The strength of weak ties", *American Journal of Sociology*, Vol. 78 No. 6, pp. 1360–1380.
- Gretzel, U., Sigala, M., Xiang, Z. and Koo, C. (2015a), "Smart tourism: foundations and developments", *Electronic Markets*, Vol. 25 No. 3, pp. 179-188.
- Gretzel, U., Werthner, H., Koo, C. and Lamsfus, C. (2015b), "Conceptual foundations for understanding smart tourism ecosystems", *Computers in Human Behavior*, Vol 50 No. 9, pp. 558-563.
- Griffinger, R., Fertner, C., Kramar, H., Kalasek, R., Pichler-Milanović, N. and Meijers, E. (2007). *Smart cities: Ranking of European medium-sized cities, final report*. Vienna TU: Centre of Regional Science.
- Halkier H., Muller D., Anastasiadou C., Kiryanova L.G., Goncharova N. et. Al. (2016), 'Tourist destination dynamics in Russia: Tourism development and public-private partnership in four non-metropolitan destinations'. Aalborg University
- Halkier, H., Müller, D. K., Goncharova, N. A., Kiryanova, L., Kolupanova, I. A., Yumatov, K. V. and Yakimova, N. S. (2019), "Destination development in Western Siberia: tourism governance and evolutionary economic geography", *Tourism Geographies*, Vol. 21 No. 2, pp. 261-283.
- Haque, U. (2012), "Surely there's a smarter approach to smart cities?", 17 April, available at: www.wired.co.uk/article/potential-of-smarter-cities-beyond-ibm-and-cisco (accessed 9 July 2019)
- Harrison, C., and Donnelly I. A. (2011), "A theory of smart cities." *Proceedings of the 55th Annual Meeting of the International Society for the Systems Sciences (ISSS)*, Hull, UK., Vol. 55. No. 1, 17-22 July
- Hartman, S. (2016), "Towards adaptive tourism areas? A complexity perspective to examine the conditions for adaptive capacity", *Journal of Sustainable Tourism*, Vol. 24 No. 2, pp. 299-314.
- Hospers, G. J. (2008), "Governance in innovative cities and the importance of branding", *Innovation*, Vol. 10 No. 2-3, pp. 224-234.
- Houghton, J. P. and Stevens, A. (2011), "City branding and stakeholder engagement", in Dinnie K. (Ed.) *City branding*, Palgrave Macmillan, London, pp. 45-53.
- <https://www.smart-circle.org/smartcity/blog/boyd-cohen-the-smart-city-wheel/> [Accessed on 26 June, 2019]
- Jovicic, D. Z. (2019), "From the traditional understanding of tourism destination to the smart tourism destination", *Current Issues in Tourism*, Vol. 22 No. 3, pp. 276-282.
- Kavaratzis, M. (2009), "Cities and their brands: Lessons from corporate branding", *Journal of Place Branding and Public Diplomacy*, Vol. 5 No. 1, pp.26-37.
- Kavaratzis, M. and Kalandides, A. (2015), "Rethinking the place brand: the interactive formation of place brands and the role of participatory place branding", *Environment and Planning A: Economy and Space*, Vol. 47 No. 6, pp.1368-1382.
- Kavaratzis, M., and Ashworth, G. J. (2006), "City branding: An effective assertion of identity or a transitory marketing trick?", *Place Branding*, Vol. 2 No. 3, pp. 183-194.
- Keksel, O. S., Shtanko, M. A., Azarova, S. V., Sukhushina, E. V. and Ivchik, A. A. (2016), "Development prospects of the brand of Tomsk", *Journal of Environmental Management and Tourism*, Vol. 7 No. 2, pp. 306 - 312.
- Kitchin, R. (2016), "The ethics of smart cities and urban science", *Philosophical Transactions of the Royal Society A: Mathematical, Physical and Engineering Sciences*, Vol. 374 No. 2083), pp. 1–15.
- Kolodii, N. A., Kolodii, V. V. and Chayka, Y. A. (2017), 'Activism and participation: social technologies of cooperation with urban population in the process of "production" of urban space'. *Tomsk State University Journal: Philosophy. Sociology. Political science*, 38, pp. 175-185.
- Kolotouchkina, O., and Seisdedos, G. (2018), "Place branding strategies in the context of new smart cities: Songdo IBD, Masdar and Skolkovo", *Place Branding and Public Diplomacy*, Vol. 14 No. 2, pp. 115-124.

- Kopackova, H. and Libalova, P., (2017), "Smart city concept as socio-technical system", *2017 International Conference on Information and Digital Technologies (IDT), Zilina, Slovakia*, pp. 198-205
- Lara, A. P., Da Costa, E. M., Furlani, T. Z. and Yigitcanlar, T. (2016), "Smartness that matters: towards a comprehensive and human-centred characterisation of smart cities", *Journal of Open Innovation: Technology, Market, and Complexity*, Vol. 2 No. 2, p. 8
- Likens, G. E. (1992), "The Ecosystem Approach: Its Use and Abuse". in Kinne O. (Ed.) *Excellence in Ecology*, Ecology Institute, Nordbunte Oldendorf, Germany.
- McKenna, H.P. (2018), "Creativity and ambient urbanizing at the intersection of the Internet of Things and People in smart cities", In: Antona M. and Stephanidis C. (Eds) *Universal Access in Human-Computer Interaction. Virtual, Augmented, and Intelligent Environments (UAHCI)*, 15-20 July, Springer, pp. 295-307.
- McKercher, B. (1999), "A Chaos Approach to Tourism", *Tourism Management*, Vol. 20 No. 4, pp. 425-434.
- McNulty, S.L. and Wampler, B. (2015), "Participatory Governance", in Scott R. A. and Kosslyn S. M., *Emerging Trends in the Social and Behavioral Sciences*, pp. 1-14.
- Meroni, A. (2007), *Creative Communities. People inventing sustainable ways of living*, Edizioni Polidesign.
- Monstadt, J. (2009), "Conceptualizing the political ecology of urban infrastructures: insights from technology and urban studies", *Environment and planning A: Economy and Space*, Vol. 41 No. 8, pp. 1924-1942.
- Nam, T. and Pardo, T. A. (2011), "Conceptualizing smart city with dimensions of technology, people, and institutions", in *Proceedings of the 12th annual international digital government research conference: digital government innovation in challenging times*, College Park, Maryland U.S.A., 12-15 June, pp. 282-291
- Newman, P. and Jennings, I. (2012), *Cities as sustainable ecosystems: principles and practices*, Island Press.
- Oplakanskaia, R. V., Osmuk, L. A., Pogorelskaya, A. and Pomorina, I. (2019), "Post-industrial university towns and the triple helix concept: case studies of Bristol, Sheffield, Novosibirsk and Tomsk", *Bulletin of Geography. Socio-economic Series*, Vol 44 No. 44, pp. 39-46
- Paulus, P. B. and Nijstad, B. A. (Eds.). (2003). *Group creativity: Innovation through collaboration*. Oxford University Press.
- Putnam, R. (1995), "Bowling alone: America's declining social capital", *Journal of Democracy*, Vol. 6 No. 1, pp. 65-78.
- Richards, G. (2014), "Creativity and tourism in the city", *Current issues in Tourism*, Vol. 17 No. 2, pp. 119-144.
- Roberts, N. (2004), "Public deliberation in an age of direct citizen participation", *The American review of public administration*, Vol. 34 No. 4, pp. 315-353.
- Romanelli, M., Metallo, C., Agrifoglio, R. and Ferrara, M. (2019), "Cities, Smartness and Participation Towards Sustainability", in Lazazzara, A., Nacamulli, R. C., Rossignoli, C., and Za, S. (eds), *Organizing for Digital Innovation*, Milan, Italy, pp. 125-133
- Romão, J., Kourtit, K., Neuts, B. and Nijkamp, P. (2018), "The smart city as a common place for tourists and residents: A structural analysis of the determinants of urban attractiveness", *Cities*, Vol. 78 No. 1, pp. 67-75.
- Russell, R. (2005). "Chaos theory and its application to the Tourism Area Life Cycle Model", in Butler R. W. (ed), *The Tourism Area Life Cycle, Vol. 2: Conceptual and Theoretical Issues*, Clevedon, UK, pp. 164-180.
- Sainaghi, R. and Baggio, R. (2017), "Complexity traits and dynamics of tourism destinations", *Tourism Management*, Vol. 63 No. 1, pp 368-382.
- Séraphin, H., Zaman, M., Olver, S., Bourliataux-Lajoinie, S., and Dosquet, F. (2019), "Destination branding and overtourism", *Journal of Hospitality and Tourism Management*, Vol. 38 No. 1, pp. 1-4.
- Shapiro, J. M. (2006), "Smart cities: quality of life, productivity, and the growth effects of human capital", *The review of economics and statistics*, Vol. 88 No. 2, pp. 324-335.
- Skipnik, A. and Kornilova, D. D. N. (2016). "Marketing and cultural components of the image of the city (on the basis of Tomsk, Irkutsk). Part 2. Research of population's awareness about the image of the city". *Vestnik Tomskogo Gosudarstvennogo Universiteta-Filosofiya-Sotsiologiya-Politologiya-Tomsk State University Journal of Philosophy Sociology and Political Science*, Vol. 35 No. 3, pp. 91-98.
- Smart Circle (2013): *Boyd Cohen - the Smart City Wheel*. [online] Available at:
- Tansley A.G. (1935), "The use and abuse of vegetational concepts and terms", *Ecology*, Vol. 16, pp. 284-307
- Tomsk Region. (2014), "Development of Culture and Tourism in Tomsk region in 2015-2020", 12 December, available at: http://depculture.tomsk.gov.ru/ru/programm-project/GP_Kul_Tur_2015-2020/ (accessed on 26 July 2019)
- Turoff, M. and Hiltz, S. R. (1978), *The network nation: Human communication via computer*. Addison-Wesley Publishing.

- UNESCO (2019), "Voices of the city: UNESCO creative cities moving towards the 2030 agenda for sustainable development", available at: https://en.unesco.org/creative-cities/sites/creative-cities/files/16_pages_villes_creatives_uk_bd.pdf (Accessed 06 July 2019)
- Vanolo, A. (2008), "The image of the creative city: Some reflections on urban branding in Turin", *Cities*, Vol 25 No. 6, pp. 370-382.
- Waldrop, M. (1992), *Complexity: The Emerging Science and the Edge of Order and Chaos*, London: Simon and Schuster.
- Yigitcanlar, T. (2018), "Smart city, knowledge city, sustainable city-the brand soup of contemporary cities", *International Journal of Knowledge-Based Development*, Vol. 9 No. 1, pp. 1-5.
- Yigitcanlar, T., Kamruzzaman, M., Buys, L., Ioppolo, G., Sabatini-Marques, J., da Costa, E. M. and Yun, J. J. (2018), "Understanding 'smart cities': Intertwining development drivers with desired outcomes in a multidimensional framework", *Cities*, Vol. 81, pp. 145-160.