ORIGINAL ARTICLE

Smart cities in the new service economy: building platforms for smart services

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Received: 15 October 2012/Accepted: 23 April 2013 © Springer-Verlag London 2013

Abstract Recent changes in service environments have changed the preconditions of their production and consumption. These changes include unbundling services from production processes, growth of the information-rich economy and society, the search for creativity in service production and consumption and continuing growth of digital technologies. These contextual changes affect city governments because they provide a range of infrastructure and welfare services to citizens. Concepts such as 'smart city', 'intelligent city' and 'knowledge city' build new horizons for cities in undertaking their challenging service functions in an increasingly cost-conscious, competitive and environmentally oriented setting. What is essential in practically all of them is that they paint a picture of cities with smooth information processes, facilitation of creativity and innovativeness, and smart and sustainable solutions promoted through service platforms. This article discusses this topic, starting from the nature of services and the new service economy as the context of smart local public services. On this basis, we build an overall framework for understanding the basic forms and dimensions of smart public services. The focus is on conceptual systematisation of the key dimensions of smart services and the conceptual modelling of smart service platforms through which digital technology is increasingly embedded in social creativity.

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Keywords Smart city · Smartness · Service economy · Service platform · e-Platform · Platform governance · Sustainability · Social inclusion

1 Introduction

A range of contextual changes of public administration, such as unbundling services from production processes ('servicisation'), growth of the information-rich economy and society ('informatisation'), the search for creativity in service production and consumption ('creativisation'), and continuing growth of digital technologies ('digitalisation'), have changed the preconditions of public service production and consumption. These changes affect among others city governments, which have a responsibility to provide a range of infrastructure and welfare services to citizens. There is a wide variety of city conceptions that have built a new horizon for cities in their challenging tasks in an increasingly cost-consciousness, competitive and environmentally oriented setting. Irrespective of whether the concept is smart city, intelligent city, sustainable city, knowledge city, creative city, innovative city, ubiquitous city, digital city or city 2.0 (e.g. Komninos 2002; Aurigi 2005; Carillo 2006; Hollands 2008, 305), they all paint a picture of a modern city with smooth information processes, facilitation mechanisms for creativity and innovativeness, and smart and sustainable service solutions and platforms. Such features of envisioned new urban governance imply profound changes in the production, delivery and consumption of local public services.

Smart service solutions have been discussed from various points of view. Since the late 1990s, the key issue was