Chapter 15
Smart Culture and Heritage, the "Rare" Category of SSC Classifications:
A Core Domain for the Smart Sustainable Cities Evolution

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ABSTRACT

ISO and ITU propose some classifications regarding the smart sustainable cities services: energy, transport, health, tourism, education, safety, environment, governance, commerce, buildings, community. Culture and heritage is a rare category in these classifications, despite the fact they have to be always been included in an SSC ecosystem. They could play a key role in achieving the 17 SDGs due to some critical reasons: their deep roots in humanity, their wide spread across city life and environment, hence their horizontal connections with all the other SSC categories. There are many options of SSC structures, which have the potential to be dedicated on culture and heritage. QR codes, GIS., VR, apps, IoT, virtual events are some of them, widely implemented by cities. Via these ways, culture and heritage could 1) contribute to the humans' welfare index and 2) interact with the other sectors of the city ecosystem. Their added value to the sustainability process creates the necessity to be a distinctive category in international SSC classifications.

DOI: 10.4018/978-1-7998-7785-1.ch015

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1. INTRODUCTION

Smart Sustainable Cities Definitions

According European Commission, a smart city is a place where traditional networks and services are made more efficient with the use of digital and telecommunication technologies for the benefit of its inhabitants and business. A smart city goes beyond the use of Information and Communication Technologies (ICT) for better resource use and less emissions. It means smarter urban transport networks, upgraded water supply and waste disposal facilities and more efficient ways to light and heat buildings. It also means a more interactive and responsive city administration, safer public spaces and meeting the needs of an ageing population (European Commission, 2021).

International Telecommunication Union (ITU) Focus Group Technical Report (ITU-T, 2014) on 2014, was aimed to establish a concrete definition for Smart Sustainable Cities, able to be used worldwide, because despite the abundant literature, there were no standardized, commonly accepted terminology to describe a "Smart Sustainable City" (SSC). Such a standardized definition would help create a more defined structure in relation to ICT infrastructure, Key Performance Indicators (KPIs), metrics and policies for SSC as viewed by ITU.

Some common criteria was used as a guideline, based on key attributes:

(1) sustainability, (2) quality of life, (3) urban aspects, (4) intelligence or smartness.

Core themes for SSC include:

(1) society, (2) economy, (3) environment, (4) governance.

116 definitions of SSC, from academia - research communities, government initiatives, international organizations, corporate - company profiles, user centric definitions, trade associations, standards development organizations (SDOs), were studied.

- Key categories or groups:
  - quality of life and lifestyle
  - infrastructure and services
  - ICT, communications, intelligence and information
  - people, citizen and society
  - environment and sustainability
  - governance, management and administration
  - economy and Finance
  - mobility
- Categories based on key indicators
  - smart living
  - smart people
  - smart environment and sustainability
  - smart governance
  - smart mobility
  - smart economy
- Terms included in the standardized definition
- ICT
- Adaptable

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