

# Chapter 19

## The Role of Libraries, Archives, and Museums for Metaliteracy in Smart Cities: Implications, Challenges, and Opportunities

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### ABSTRACT

*The concept of smart cities is gaining popularity within academic, practice, and policy circles. Smart cities are intended to be self-sufficient via cutting-edge technologies, purposive innovations, and inventions. However, while technology is growing at an unexpectedly fast pace, one of the essential components of smart cities 'humans' is lagging behind. The need for and scope of literacies to survive in smart cities pose challenges for their citizens. This study aims to identify the range of literacies required in smart cities and the roles of libraries, archives, and museums (LAM) in supporting citizen literacies for social and digital inclusion. The LAM sector is one of the major stakeholders in the digital transformation sphere. Therefore, the LAM sector must identify the nature of required literacies, the roles and strengths of other stakeholders, and the opportunities to increase its presence in the process. This study systematically identifies and addresses these issues through a conceptual framework process and proposes future research directions for the LAM sector.*

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## INTRODUCTION

Two critical components of the digital age are digitalisation and digital transformation. Digital transformation is leading to the emergence of smart workplaces, homes, and cities. Smart cities aim to bring more ease to people by ensuring their legitimate rights within a sustainable environment through bespoke and user-centred technology (Sánchez-Corcuera et al., 2019). Smart cities are becoming a reality, and more and more nations have started experimenting with smart communities or smart localities on both small and large scales. This concept has evolved from a sector-based approach to a more comprehensive view that places governance and stakeholders' involvement at the core of strategies (Fernandez-Anez et al., 2018). Some emerging smart cities examples are Singapore (Bhati et al., 2017); Kemaman Smart Community, which is the first smart city initiative by the government of Malaysia (Mohd Satar et al., 2021); Vienna (Fernandez-Anez et al., 2018); and various smart communities in Japan (Granier & Kudo, 2016). A smart city is defined as a city that is performing well, in a forward-looking way, in terms of its economy, people, governance, mobility, environment, and living, and is based on the smart combination of endowments and activities of decisive, independent and aware citizens (Chourabi et al., 2012, p. 2290). According to this definition, the components of smart cities include infrastructure, technology, governance, management and organisation, economy, and people and community. This chapter focuses on the last component – people and community. It is also pertinent to reiterate the notion that individuals form communities and several communities together construct cities.

The people, as users and residents of smart cities, are a vital component but are often neglected by smart city developers because their prime focus is on technology, infrastructure, and governance (Arroub et al., 2016). People in the information and communications technology (ICT) age are already facing challenges presented by the digital divide and digital inequalities. However, digital divide discussions have moved beyond access issues. The digital divide domain now considers motivations, access, skills, and usage opportunities (Reisdorf & Groselj, 2017). In addition, skills are not limited to digital skills but include other types of skills or literacy that may assist in obtaining correct information at the right time. Literacy limitations influence users' ability to effectively engage with ICTs in their local communities and smart cities (Muthupoltotage et al., 2021). Therefore, it is necessary to understand the landscape of required literacies and the role of key stakeholders who can provide these literacies to the people and communities.

The emerging practices of smart cities and their modalities have attracted the attention of scholars from various disciplines, including education and libraries supporting digital literacies. Molnar (2021) argued that a separate educational policy is required to develop 'smart citizens' because education and skills training should address the challenges underpinned by multicultural and social interactions within the digital landscape. However, the progression of smart cities, where digital services and tools are being implemented to foster a range of goals, from more inclusive democratic dialogue to more efficient transportation, poses pedagogic and educational challenges for their citizens (Manchester & Cope, 2019). The fundamental questions for the people and communities of smart cities are as follows:

- What do citizens need to learn to be able to understand and live well within these environments as well as to shape their future development (Manchester & Cope, 2019)?
- How does literacy learning shift?
- How do individuals engage in their local environments for learning (Deshler et al., 2012)?

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