# **Bridging The Gap Between Reality and Utopia:** How to provide empathetic services to citizens

Suvi Hyökki<sup>†</sup> Finnish Institution for Health and Welfare Helsinki, Finland suvi.hyokki@thl.fi Kati Pääkkönen City of Kajaani Kajaani, Finland kati.paakkonen@kajaani.fi

## ABSTRACT

Finnish cities attract people from different social, economic and cultural backgrounds thanks to their job market and infrastructure. As cities become diverse, policy-makers and researchers should consider various stakeholders in the community when designing services. On the other hand, growing diversity also triggers unexpected or new challenges for the city and its members.

Authors view incomparable benefits of service design for developing and delivering utopian services to citizens. In fact, bigger cities such as Helsinki and Espoo have already established solid design strategies at practical levels. In this context, our first research goal is to investigate the current strategies for tackling ongoing challenges in cities and to identify differences.

Additionally, given that every city has its character and different challenges, designing services must be customized to its citizens. Customizing the city's services requires an empathetic attitude toward its members. Therefore, this study highlights the necessity of empathetic design to build a utopian Finnish city.

## CCS CONCEPTS

• Interaction design • User characteristics • Cross-computing tools and techniques

### **KEYWORDS**

Service design, Public services, Empathetic design, Digitalized service prototyping

#### 1 Introduction

The United Nations (UN) Agenda 2030 has defined 17 sustainable development goals (SDGs) [1]. SDG 11 calls for making cities and human settlements inclusive, safe, resilient and sustainable. The ageing population, the dependency ratio, the birthrate and the municipal economy urge us to develop new digital ways to deliver equal services [2]. As we know, rapid digitalization, changes in the population structure and technological advancements create globally new requirements for citizen services and organizing public services to meet the needs of the different stakeholders in

Kiwoong Nam Faculty of Art and Design University of Lapland Rovaniemi, Finland ki.nam@ulapland.fi Satu Miettinen Faculty of Art and Design University of Lapland Rovaniemi, Finland satu.miettinen@ulapland.fi

Finnish cities [3]. Digitalization has already changed the structure of the services delivered in Finnish municipalities [4]. Hyysalo et al. [5] argue that design can transform a city into a more citizenoriented organization.

Finnish cities vary widely in profile from large to small scale (e.g. demographics, industry). The resources are not divided evenly since, for instance, tax income for municipalities is generated per capita or industry. The solutions used in the bigger cities, such as Helsinki and Espoo, might have to be adapted and customized in order to be able to be implemented in the smaller cities. It is typical for small communities that the experts who deliver services must work in a multi-disciplinary team and even operate in multiple roles when delivering or co-producing services [6]. In addition to professional differences, there are at least three management levels (operational, tactical and strategic level), which affect service design processes and vary depending on the size of the city [7].

In this paper, we argue that two main categories of challenges hinder the designing of novel services for Finnish cities: 1) humanrelated challenges and 2) technology-related challenges. These challenges create a gap between the reality and the vision (or utopia) we want to achieve. In this paper, human challenges refer to attitudes, skills and abilities, resources (not enough people, time), and training in service development [8]. On the other hand, technological challenges address the technological limitations, resources (outdated tech, economy), and data flows in the context of delivering services [9]. In short, there is a gap between large and small cities regarding resources which municipalities utilize in designing their services.

The outcome of this paper is to compare the service design practices of different cities and benchmarking websites, blogs and strategies that address service design practices of selected Finnish cities: Helsinki, Espoo, Turku, Tampere, Oulu [10]. These cities were chosen because of the differences between their design maturity levels and differences in general profiles. In doing so, the paper aims to identify existing challenges that service designers do to bridge the reality and the vision for public service production and propose related philosophies and methods.

#### 2 The Benchmark

11th International Conference on Communities & Technologies, June 2023, Lahti, Finland

Finnish cities are generally considered technologically competent [11]. The five benchmarked cities, nearly without exception, address the global and complex issues, such as sustainability, digitalization, equality and SDGs in their strategies [12, 13, 14, 15, 16]. Also, various applications and methods have already been implemented for designing more citizen-centric services, such as gamification, co-creation and participatory design [5, 17, 18].

In the context of service design, the city can be investigated from various perspectives. For instance, the city can be seen as a service, organization, ecosystem, or platform [5, 18, 19]. Helsinki and Espoo utilize service design already on a strategic level [12], but Turku, Tampere and Oulu are moving towards catching up with frontrunners. This study chose five different cities in Finland; Helsinki, Espoo, Turku, Tampere and Oulu. These five cities allowed researchers to contemplate their service strategies depending on their varieties in size, demographic information, and design maturity levels. In addition, each city's strategy document was reviewed to understand the design method, levels of design contribution, common drivers, and challenges. After benchmarking and discussing service design practices, insights were organized in the following table.

#### Table 1. Benchmarking results for five Finnish cities

City	Method	Service design in the strategy	Common drivers	Human challenges	Tech challenges
Helsinki	Participatory design, co- design/creation	Yes	SDGs, sustainable urban development, functionality, internationality, equality	Aging workforce, socio- economical differences, pandemic recovery	
Espoo	Cooperation & co-creation, customer- and resident- oriented	Yes	SDGs, digitalization, internationality, sustainability, fairness	Aging, population, pandemic recovery	Technological literacy
Turku	Co-creation with residents	Not clear	SDGs, sustainability, internationality, meaningful life, Vision of Competence 2040		
Tampere	Doing together, interaction and participation	Not clear	SDGs, internationality, sustainability, equality		
Oulu	Doing together humanely	Not clear	Sustainability, internationality, safety, European Capital of Culture 2026		Technological literacy

#### **3** Findings

The strategies of the benchmarked cities emphasize the human perspective – they want to provide easy-access services and support

for people in all stages of life. Services seem to be seen almost as individual experiences in many cities (Tampere and Turku). All the benchmarked cities want their services to be easily accessed and interactive, even proactive. For instance, Turku and Espoo actively use service data for developing the services. However, depending on their size and structure, they appear to operate on different management levels (operational, tactical and strategic) [7, 12, 13, 14, 15, 16]. Helsinki does the most profound analysis of the affecting drivers. However, common drivers for all cities are SDGs, internationality, sustainability, ageing population and equal life. Challenges also vary in size and type. For instance, in Helsinki, the ageing workforce affects more than it might in other smaller benchmarked cities. It indeed seems that the size of the city matters. Early childhood education and basic education are important in every city as a bedrock for sustainable growth and good life. Cooperation and co-creation appear to be adopted quite well, and the trend is toward empathy and individual experience. [12, 13, 14, 15, 16]. The missing information in Table 1 indicates a lack of profound understanding of specific challenges or not addressing them clearly in the strategy documents. However, from the design point of view, understanding the problem and clearly recognizing key challenges is a crucial starting point. Lack of design strategies, on the other hand, urges researchers and practitioners to investigate innovative ways to promote their services.

Then, how can a city design its services to get the level from the ordinary to the dream world? Innovative changes require resources. With the help of service design, it is possible to formulate and make a roadmap between the dream world and reality. Since a city is a socioeconomic network of people [20], we need more systemic information on resources, differences, challenges and possibilities related to service design in the public sector. Furthermore, service design methods provide inexpensive ways to develop services with various stakeholders [21]. As we identified in Table 1, all benchmarked cities implement co-design or participatory design methods for creating services. In sum, cities have started new ways to develop services together with municipal citizens.

However, it is essential to clarify whether service design tools and methods are executed to reflect the practical needs of citizens. For example, Jyrämä and Mattelmäki [22] argue that the possibilities of individual designers to influence public sector operations are still limited. In other words, design tools and methods must be more inclusive and relevant to the city's strategic focus [23, 24].

To get to the strategic level with design tools, we should strengthen our understanding of service design and the importance of empathy. The empathetic design of a city enriches citizens' everyday experiences [25]. Developing a service culture and preparing for the future requires customer understanding and empathy from municipal organizations. Korpikoski describes how organizations can develop empathy and the importance of empathy in organizations or communities [26]. For example, the technological literacy challenge in Table 1 alerts us not to assume citizens' technological literacy. There might be more co-design participants who need technical support.

Changes require management and learning a new way to codevelop with customers/citizens. We should create a vision of utilizing these resources regarding service design and empathy. Bridging The Gap Between Reality and Utopia: How to provide empathetic services to citizens

Through empathetic vision, a change in mindset can occur, which can be seen practically.

#### ACKNOWLEDGMENTS

This work was supported by Business Finland (Empathy Business project, grant number:7784/31/2022).

#### REFERENCES

- UN General Assembly (2015). Transforming our world : the 2030 Agenda for Sustainable Development, 21 October 2015, A/RES/70/1, available at: https://www.refworld.org/docid/57b6e3e44.html [accessed 24 April 2023]
- [2] Valkama, P., & Oulasvirta, L. (2021). How Finland copes with an ageing population: adjusting structures and equalising the financial capabilities of local governments. Local Government Studies, 47(3), 429-452.
- [3] Anttiroiko, A. V., Valkama, P., & Bailey, S. J. (2014). Smart cities in the new service economy: building platforms for smart services. AI & society, 29, 323-334.
- [4] Madhala, P., Helander, N., Raatikainen, M., Rannisto, A., Setälä, M., & Mikkonen, T. (2023). Data-driven value creation in digitalizing public service. In H. Väyrynen, N. Helander, & H. Jalonen (Eds.), *Public Innovation and Digital Transformation* (pp. 92-110). Routledge. https://doi.org/10.4324/9781003230854-6
- [5] Hyysalo, S., Savolainen, K., Pirinen, A., Mattelmäki, T., Hietanen, P. & Virta, M. (2023). Design types in diversified city administration: The case City of Helsinki, The Design Journal, DOI: 10.1080/14606925.2023.2181886
- [6] Palumbo, R. (2016). Contextualizing co-production of health care: a systematic literature review. International Journal of Public Sector Management.
- [7] Best, K. (2006). Design management: managing design strategy, process and implementation. AVA publishing.
- [8] Hecklau, F., Orth, R., Kidschun, F., & Kohl, H. (2017, December). Human resources management: Meta-study-analysis of future competences in Industry 4.0. In Proceedings of the International Conference on Intellectual Capital, Knowledge Management & Organizational Learning (pp. 163-174).
- [9] Kitchin, R. (2014). The real-time city? Big data and smart urbanism. GeoJournal, 79, 1-14.
- [10] Miettinen, S., & Alhonsuo, M. (2019). Service designing a new hospital for Lapland Hospital District. Service design and service thinking in healthcare and hospital management: Theory, concepts, practice, 481-497.
- [11] Ahvenniemi, H., & Huovila, A. (2021). How do cities promote urban sustainability and smartness? An evaluation of the city strategies of six largest Finnish cities. Environment, Development and Sustainability, 23, 4174-4200.
- [12] City of Helsinki (2021). Helsinki City Strategy 2021–2025. https://www.hel.fi/static/kanslia/Julkaisut/2021/helsinki-city-strategy-2021-2025.pdf [accessed 24 April 2023]
- [13] City of Espoo (2021). Valtuuston Asettamat Valtuustokauden Tavoitteet 2021– 2025. <u>https://espoo.oncloudos.com/kokous/2021447-14-90799.PDF</u> [accessed 24 April 2023]
- [14] City of Tampere (2021). The city of action: Tampere city strategy 2030 https://www.tampere.fi/sites/default/files/2022-06/The%20Tampere%20City%20Strategy%202030\_0.pdf [accessed 24 April
- 2023]
  [15] City of Turku (2022). City strategy: Turku in the 2030s. https://www.turku.fi/sites/default/files/atoms/files/turku\_city\_strategy.pdf
   [accessed 24 April 2023]
- [16] City of Oulu (2022). Kaupunkistrategia Oulu 2030. https://www.ouka.fi/documents/52058/29767354/KaupunkistrategiaOulu2030.p df/7f68f04d-a60d-4b1e-843c-a85de771d723 [accessed 24 April 2023]
- [17] Hyysalo, V. (2022). Yhteissuunnittelu ja palvelumuotoilu julkisen sektorin kehityssuuntina: kaupunkilaiset tekijöinä, käyttäjinä ja kumppaneina keskustakirjasto Oodin suunnittelussa.
- [18] Anttiroiko, AV. & Sahamies, K. (2022). Designing City Service Ecosystems: The Case of the City of Espoo in the Capital Region of Finland. In: Streitz, N.A., Konomi, S. (eds) Distributed, Ambient and Pervasive Interactions. *Smart Environments, Ecosystems, and Cities. HCII 2022.* Lecture Notes in Computer Science, vol 13325. Springer, Cham. <u>https://doi.org/10.1007/978-3-031-05463-</u> 1\_10
- [19] Anttiroiko, A-V. (2016). City-as-a-Platform. The Rise of Participatory Innovation Platforms in Finnish Cities. Sustainability. 8(9), 922. https://doi.org/10.3390/su8090922
- [20] Alexander, C. (2019). A city is not a tree. Sustasis Press
- [21] Stickdorn, M., Hormess, M. E., Lawrence, A., & Schneider, J. (2018). This is service design doing: applying service design thinking in the real world. O'Reilly Media, Inc.

- 11th International Conference on Communities & Technologies, June 2023, Lahti, Finland
- [22] Jyrämä, A., & Mattelmäki, T. (2015). Palvelumuotoilu saapuu verkostojen kaupunkiin: verkosto-ja muotoilunäkökulmia kaupungin palvelujen kehittämiseen. Aalto-yliopiston julkaisusarja TAIDE+MUOTOILU+ARKKITEHTUURI 1/2015. Aalto-yliopiston taiteiden ja suunnittelun korkeakoulu. Aalto ARTS Books: Helsinki.
- [23] Bianchini, F., & Parkinson, M. (Eds.). (1993). Cultural policy and urban regeneration: the West European experience. Manchester University Press.
- [24] Stevens, Q., & Franck, K. A. (2015). Memorials as spaces of engagement: Design, use and meaning. Routledge.
- [25] McDonagh, D., Hekkert, P., Van Erp, J., & Gyi, D. (2003). Design and emotion. CRC Press.
- [26] Korpikoski, K. (2022). Towards a more empathic organization: An exploratory case study of a multinational manufacturing corporation. In *Empathy and Business Transformation* (pp. 181-196). Routledge.