



# IESS 2.4

**MUNI** Masaryk University  
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## Fostering citizens' engagement in smart city within digital era

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*Service Science to promote intelligence augmentation*

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## Agenda

- ✓ Preliminary reflections
- ✓ Theoretical background
- ✓ The interpretative lens
- ✓ A possible path for promoting citizens' engagement in the Smart City
- ✓ Conclusions, implications, and future directions for the research
- ✓ Essential References



## Preliminary reflections

Digital instruments and technologies have undergone a transformative evolution, *shifting from an 'instrumental' focus to a 'innovative' orientation and 'strategic' influence.*



Traditional approaches to business management are increasingly *proving inadequate in encapsulating emerging socio-economic trends* driven by digital evolution

It is needed to *rethink consolidated perspectives* through the adoption innovative perspectives

## Preliminary reflections

In such a domain, the *Smart City paradigm* can support the development of new multi and interdisciplinary frameworks and perspectives due it facilitates the proliferation of exponential relations among actors with diverse expectations, needs, and knowledge

Smart City is not merely a renovated, technologically advanced iteration of a traditional city adhering to established rules and pathways.

It represents an entirely novel domain, necessitating fresh approaches, logics, and perspectives to *effectively engage stakeholders and develop appropriate managerial strategies and strategic plans.*



## Theoretical background

Smart City initiatives hold the promise of being the first genuinely *human-centred and technology-driven socio-economy configuration*, poised to exert a substantial impact on both the economy and the lives of citizens



In contrast to the consolidated and outmoded approach to digital transition, which places technologies at the centre of organization-stakeholder interactions, the Smart City concept prioritizes *human beings*

## Theoretical background

Smart Cities have the potential *to elevate value creation and stakeholder engagement by enhancing the three stakeholder engagement dimensions* recognized by Strand and Freeman (2015):

✓ *jointness of interest*

✓ *cooperative strategic posture*

✓ *rejection of a narrowly economic view of the firm.*



## Theoretical background

The core of the Smart City concept lies in the *synergy between technology and people* (Nam & Pardo, 2011).



It is needed to understand

the *technological readiness and addressing the digital gap*

among citizens in the Smart City framework.



the *capacity* of individuals, systems, or organizations to confront a situation and execute a planned set of actions

(Compernelle et al., 2018)



the *willingness* to adopt Advanced Digital Technologies, and inclination toward value co-creation—is crucial

(Camilleri, 2019)

## The interpretative lens



The *systems thinking* serves as a comprehensive interpretative framework focused on analysing how organizations endure over time because of interactions among their components and with the external environment

(Beer, 1984; Espejo, 1994; Golinelli et al., 2010; Barile, 2013)

Inside the systems thinking domain, the *Viable Systems Approach (VSA)* provides a platform for exploring relationships among multiple actors through the three drivers of the *Information Variety Model* (Barile, 2009):

- ✓ *Information Units*: The total amount of data an organization can collect.
- ✓ *Interpretation Schemes*: The ways in which collected data are organized into a usable set, influenced by interpretative rules.
- ✓ *Categorical Values*: The strong beliefs motivating organizations' behaviours and decisions over time.



# A possible path for promoting citizens' engagement in the Smart City

Within the diverse domains exploring the impact of digital technologies and the evolution towards the Smart City, the *concept of citizens' engagement is experiencing an escalating need for innovative explanatory and managerial models* (Caputo et al., 2023)



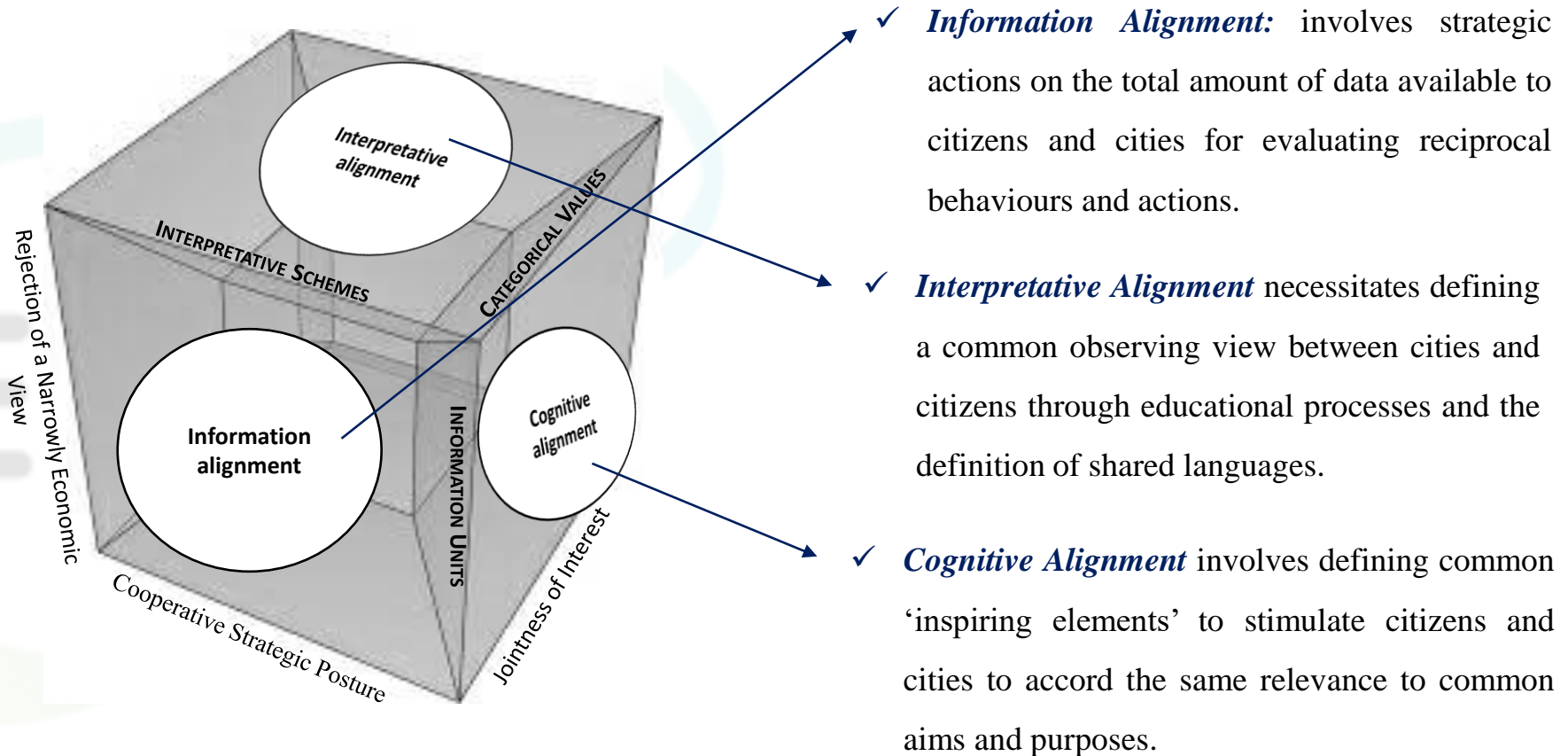
*Traditional approaches*, aimed at fostering enduring relationships between companies and stakeholders through information sharing, participation, and market exploration, *appear inadequate in comprehending the evolving trends in stakeholder behaviours and decisions* (Hendricks, 2021)

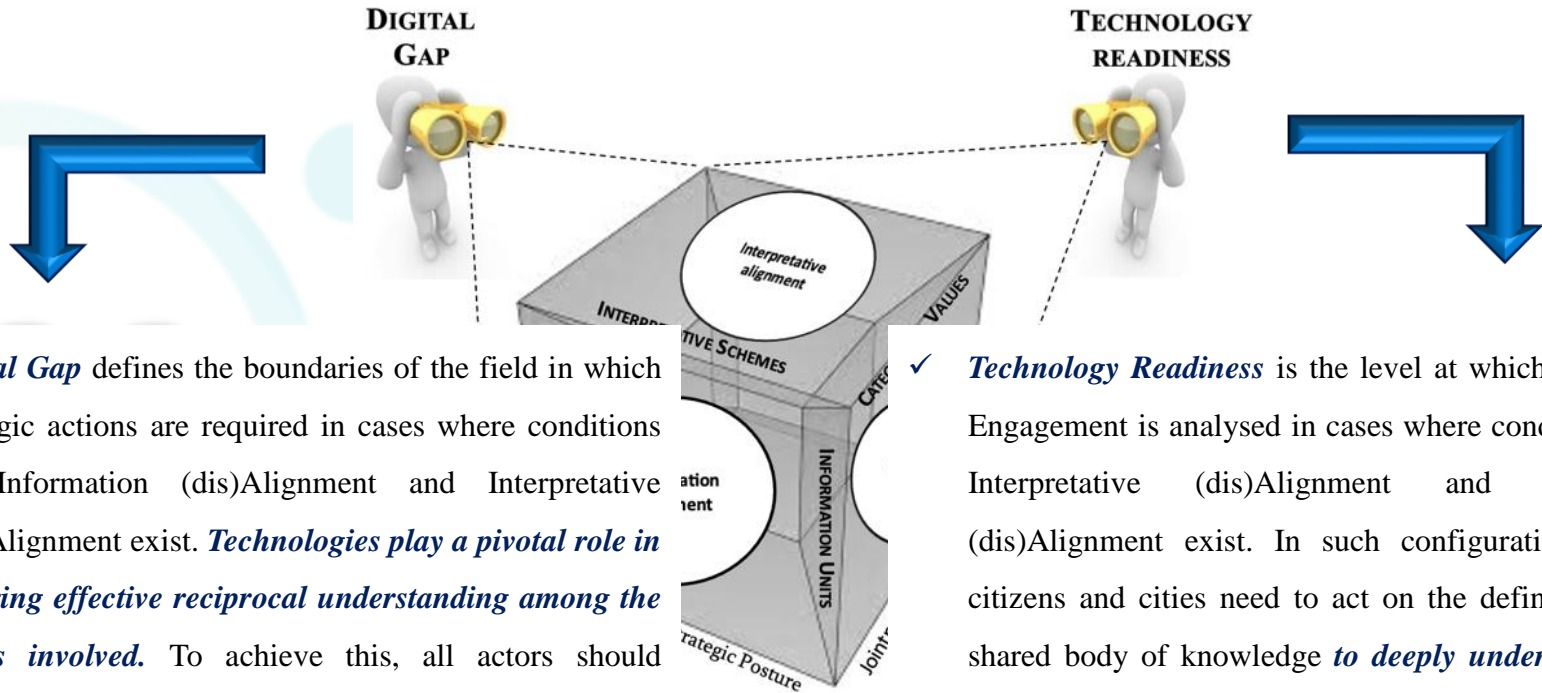
## A possible path for promoting citizens' engagement in the Smart City

By applying the *Information Variety Model*, it is possible to reinterpret the three stakeholder engagement dimensions:



- ✓ ***Jointness of Interest:*** Can be analysed in terms of *shared and shareable Categorical Value* to enhance stakeholders' comprehension of the company's vision.
- ✓ ***Cooperative Strategic Posture:*** Demands the development of common *Interpretation Schemes*, enabling stakeholders and companies to accord relevance to the same critical elements in a dynamic environment.
- ✓ ***Rejection of a Narrowly Economic View:*** Rooted in the *development and sharing of a broad range of common Information Units* used by both cities and citizens to construct a subjective and holistic representation of dynamics and contexts.





✓ **Digital Gap** defines the boundaries of the field in which strategic actions are required in cases where conditions for Information (dis)Alignment and Interpretative (dis)Alignment exist. *Technologies play a pivotal role in ensuring effective reciprocal understanding among the actors involved.* To achieve this, all actors should possess the *necessary skills through an extensive approach to educational programs.*

✓ **Technology Readiness** is the level at which Citizens' Engagement is analysed in cases where conditions for Interpretative (dis)Alignment and Cognitive (dis)Alignment exist. In such configurations, both citizens and cities need to act on the definition of a shared body of knowledge *to deeply understand the contributions that digital technologies can provide in defining common and shared strategies and actions.*

## Conclusions, implications, and future directions for the research

- ✓ Without a profound understanding of how *to attain citizens' engagement* in a turbulent and dynamic environment, future engagement strategies are likely to fall short of their objectives.
- ✓ By adopting the *broad and holistic perspective*, organizations stand a better chance of success in the context of Smart Cities. Not adopting such lenses *may lead to underestimating the impact of digital readiness and the digital gap among the stakeholders involved in Smart Cities*.
- ✓ The proposed model could serve as an effective tool in *achieving the general purpose of sustainable development for all*.

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*Thank you for your attention,  
comments, questions, and  
suggestions*

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