Wise Governance – Elements of the digital strategies of municipalities

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Abstract

The innovation fields of municipalities are based on the creation of added value for the local population by creating a portfolio of digital implementation projects as a "proof of concept".

The Objective of the research project is focussed on answers to the questions of Strategies on multi-time acceptable and responsible governance standards in a portfolio of data-based, bureaucracy-reducing and trend-based topics.

The Prior work serves the elements of Open Data, Public Value Modeling, Business Process Optimization, Public Corporate Responsibility and Digital Leadership in a holistic orientation question of municipal departments.

The Approach are adjusting screws in the interaction of control options from the spectrum of local governance. Between different surveys there are relationships and effects.

The Results show that basic prerequisites at the level of values, competencies and management are necessary in order to effectively implement targeted instruments of digital transformation in everyday life. Transparency tools and creativity technology support the introduction of targeted governance.

The Implications of this interdisziplinary project should give an impact to academics in the public management and data sciences as well as specialists of leadership and strategic management. For practioneers and leaders of municipalities the possibilities of wise governance should get visual.

The Value of the paper lies in the direction of the tension between stable efficiency measures and visionary holisticness of adoption capability of ambiguous requirements in the public sector.

Keywords: Leadership/ Management, Public Value Creation, Responsible Creation, Data Policy

1.   Introducition to 'Wise Governance'

The characteristic of 'Wise Governance' includes prognostic trend analyses for dynamically developing strategic approaches as well as the agile implementation of current requirements in so-called cross-functional teams for complex issues with an innovative character. In addition to research-experimental spirit in academic method settings, a cycle of the continuously expanding reflective capacity must therefore be initiated. In this way, analytical balancing mechanisms are to be specifically included in the decision-making process (exploitation). The basis for this is cognitive research, which confirms knowledge acquisition in the case of experiential learning on the basis of existing structures, but also in social interaction through behavioral patterns of practice.[1]

Professional development projects in legal affairs, technology implementation and design as well as methodological transformation such as New Work pilots are intended to provide the framework for the analytical examination of research- or theory-based evidence in the field of andragogy and learning psychology in public sector [2]

2.Requirements for a culture of innovation

Social changes also inevitably lead to other requirements for the provision of services. In the classification of meta-shifts in the basic attitude of societies, the "Society 5.0" can be determined. A possible definition can be summarized as follows: "A human-centered society that balances economic advancement with the resolution of social problems by a system that highly integrates cyberspace and physical space" [3].

The focus of social reform since the 2010s is innovation. In the Society 5.0 forward-looking attitude is the ground-breaking paradigm, while whose members have mutual respect for each other. No more the neo-liberal profit orientation is the only achievable goal, instead each and every person can lead an active and enjoyable life in an total perspective.

Fig. 1. Society in Change Process.
Source: own diagram in order to Cabinet Office, Government of Japan (2021)

Trend research around New Work deals with these complex changes in the new world of work. The change from fixed to fluid structures and from predetermined to iterative methods makes it necessary to critically reflect on organizational attitudes and available competencies in interaction with legal and service-centered framework conditions. In the public sector, New Work projects are still rare. In this respect, new forms of work can be found primarily in the acquisition and processing of funding programs, for example in the field of data infrastructure for digital urban development: as "Smart City" projects.

Data infrastructure is associated with sub-areas of open data, AI use or user-centric investment in service. In cooperation in the implementation, it worked with the cross-functional design of interdisciplinary teams.

3.Management models of data-based governance

In addition to the creativity and technical understanding of networked data services, these projects also require professional processes and structures to integrate them into the operational context. Management is to be interpreted as processes and structures of "Wise Governance". This is accompanied by regulations on responsibilities and liability compartments in the event of faulty implications as an extension of an integrated view, which must be developed through well-founded management methods. Increasingly, these management questions are also dealing with the ongoing spread of automated systems in

the context of artificial intelligence, as soon as the development of necessary competencies and culture around AI has reached a certain basic level in institutions [4].

Based on the model of the development of AI management by van Giffen et al.[5] the areas of strategy development, the creation of a data-based ecosystem and the question of competence and organizational agility are considered in particular with regard to the path of establishing 'Wise Governance'. See the model underlying the following explanations:

Requirements and Trends

Strategies

Ideas, Prototyping, Development, Impelementation

Data Infrastracture

Competecy and Culture

Transformation of Learning and Organisational Improvement

Fig. 2. Elements of Management Perspective.
Source: own diagram in order to [5]

3.1 Strategy development

The digital transformation of the service sector is also driving entrepreneurial thinking onto the public sector agenda. The possibility of developing digital business models can be combined with the non-profit offer of public services of general interest and is therefore also helpful for public institutions. In order to get an overview of the most important key factors (such as the confirmation of business idea, market analysis and the detection and naming of weak points), a Business Model Canvas [6] which typically consists of eight building blocks helps.
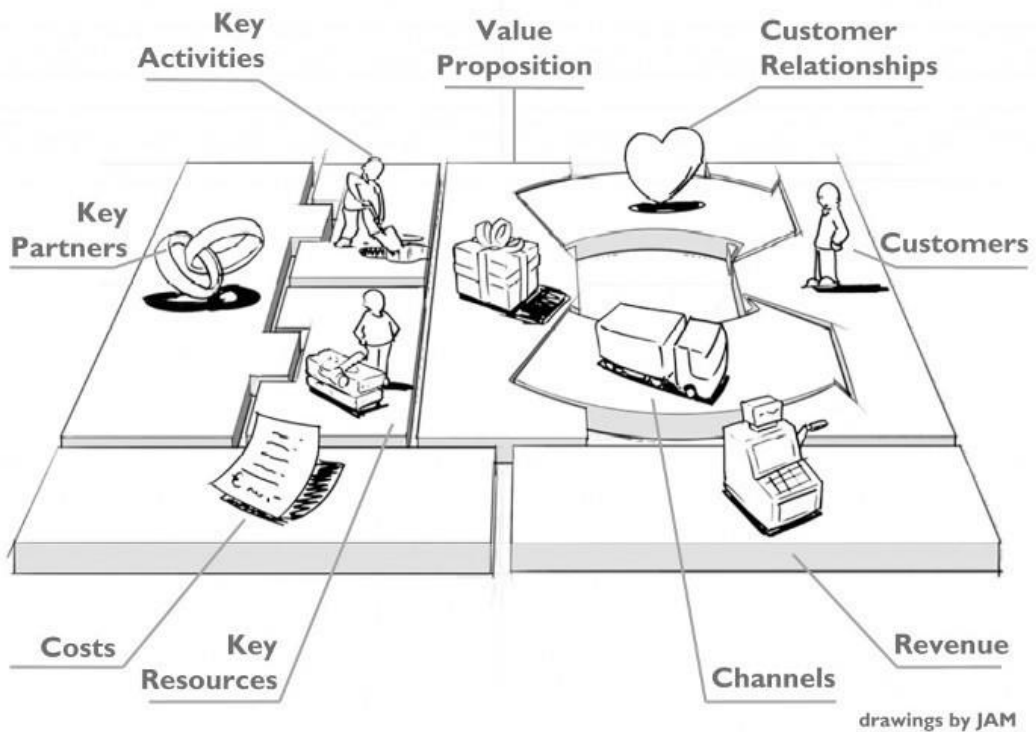
Fig. 3. Business Model Canvas.
Source: JAM Visual Thinking, businessmodelgeneration.com

This is intended to balance the relationships between customer interests, value culture, communication channels and key services and partner interests. ISO 10746-2-2003 provides a process model for collaborative data use based on sustainable use cases for distributed data systems including a theoretical model (information technology - Open Distributed Processing - reference model - ODP-RM). Here, business model-related, information and infrastructure technology as well as technological aspects are considered in interaction in order to classify open and complex distributed systems through a strategic framework.

3.2   *Ecosystem Data Acquisition and Data Provision*

It is also necessary to break down barriers, increase data quality and create awareness of use cases with dynamic datasets, in short: to build an ecosystem of data management. Holistic service provider for the fulfillment of the expectations of citizens, in addition to quality-assured and efficient technologies, to strive for data usage scenarios that are as intelligent as possible. These include data clustering, algorithm development and machine learning. Trend analyses can be used as a lever to show the consolidation of isolated lighthouse projects and thereby set impulses for action. In the field of data processing

studies, Gartner's 'Top Scientific Software Trends 2021' can be used, which identifies the following trends for the current year:

Trend 1: Internet of Behaviors
Trend 2: Total experience
Trend 3: Privacy-enhancing computation
Trend 4: Distributed cloud
Trend 5: Anywhere operations
Trend 6: Cybersecurity mesh
Trend 7: Intelligent composable business
Trend 8: AI engineering

In the operational project management of each facet of the trend, the implementation of a digital ecosystem primarily included the clarification of the concrete use cases, clarification of goals and methods up to implementation in regular operation. Thematic cases in the public sector offer great potential in applications in the fields of tourism, health, mobility, e-government, urban/regional planning, construction, etc. In addition to application development, however, management-based documentation and transfer materials must also be created in order to attract as many idea generators and support for measures as possible.

3.3 Competence and Culture

Finally, however, it is essential to know the acceptance and understanding of executives as drivers of digitization measures in the public sector in order to be able to promote and expand them in a targeted manner. Even the composition of the project teams (so-called 'Cross Linking Groups') according to the maximum principle of the respective expertise in a virtual, locally unbound environment can have positive effects on the enthusiasm of the participants [7].

In addition to management issues, leadership aspects with requirements for social and non-profit competencies are also important, in order to be able to build a culture of trust in cross-functional teams and to actively win partners for cross-agency projects, an attitude that is free of biases is required. However, this requires methodical and competence-oriented realignments in strategic and operational thinking, which lie at the core of the agile value system. Basic technological understanding in modern basic technologies such as data analytics (machine learning, predictive analytics, deep learning) are increasingly part of many projects. Above all, however, methodological skills in agile leadership, holocratic forms of organization, moderation and support of large group events as well as methods and frameworks for pattern recognition in complex contexts are important.

In this respect, this represents a starting point for the transformation into a so-called 'fluid organization' as a parallel organization to the regular operation of rigid, hierarchical structures [8]. In order to be able to exercise the autocratic moments meaningfully, however, the insight for digital and shared leadership responsibilities from this group of employees is particularly acceptable. Finally, an increase in the importance of data-driven decisions can lead to the introduction of new functions such as CDO (Chief Digital Officer)

or CTO (Chief Transformation Officer) or pilots of different levels as multipliers, connected after exploring the competence development programs and learning paths in the dynamically developing environment. Innovation thus arises from self-determined framework conditions for employees who are in a creative process of integrating and appraisaling different approaches in agile project management. On a systematic level, however, the idea of 'project learning' must first be established in organizations [9].

At the same time, discussions are currently being held with institutions specializing in digital teaching formats (such as the Distance Learning Institute of the IU International University of Applied Sciences in the Department of Public Management) in order to advance the establishment of the governance concept in Public Data Service using service learning approaches based on actual projects and process mining. Initial evaluations of the sprint events runs by the IU show that there is interest in linking services oriented towards the common good in the IOT area among young public managers. At the same time, however, the interdisciplinary link between empirical methods and development-oriented tasks of IoT services from the field of data sciences has yet to be established.

4. Conclusion and Perspective

Interdisciplinary thinking and collaborative action between actors of public administration, service providers, representatives of civil society, business and science can be seen as the key to development in innovation fields of digital governance. The requirements of a dynamic transformation can be advanced if trends are systematically adapted to local conditions. There is then a management concept in which topics are arranged holistically and incentive systems, comprehensible subject preparations are carried out and competence development is designed via interactive teaching formats with reference to the field of work. From the author's point of view, the success of the overall project depends on an open-minded, agile and liberal cooperation of the interdisciplinary community of science and services as well as the collaborative willingness of the federal actors to network the project module descriptions.

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