

Towards a Concept of “Governance as a Smart-Service” in Service-Oriented Value-Creation-Systems

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ABSTRACT

Service-oriented value-creation thrives with seamless interaction in the conscious providing and coupling of resources, i.e. products and services, physical and digital elements, manpower and competencies, massively supported by and dependent on data and analytics in multi-actor-systems. In order to create this “seamlessness” new modes of governance are necessary that help balancing value co-creation and value co-destruction and thus facilitate the cost of collaboration and positively impacts on quality. A first outline of “governance as a smart-service” is presented.

Keywords: Smart services, Value-creation-systems, Governance, Collaboration

INTRODUCTION

The course of the digital transformation of economy, work and society as well as increasing pressure from hyper individualized demand on the one hand and on the other hand issues that ask for global action, like pandemics or climate change, paves the way for new and smart service-oriented forms of value creation. We assume this as a central new mode of value creation, economic and beyond, which means creating monetary as well as other, e.g. social, interactional or intellectual value. As a starting point we resort on the definition of Bullinger (2017) “Smart-Services are data-based, individually configurable bundles of personal services and digital services that are based on intelligent technology and are organized and provided via digital platforms.” Furthermore we follow up the recent work of Neuhüttler (2019, 2021) on a framework and method to construct and test perceived smart-service quality and the therein elaborated inclusion of “coordination” as *pari passu* component in smart-service- systems complementing the components “infrastructure and database”, “digital services” and “end-user service”. On this basis we describe service-oriented value-creation as the delivering of solutions enhanced by new technological possibilities that transcend corporate or individual routines and restrictions of human coping with complexity.

Future Service Business thrives with seamless interaction in the conscious providing and coupling of resources, i.e. products and services, physical and digital elements, manpower and competencies, massively supported by and

dependent on data and analytics in value-creation-systems. This position is connectable to the broader notion of ecosystems or entrepreneurial ecosystem enfolded e.g. by Hilb and colleagues (2021) or Bouncken/Kraus (2021). These new kinds of value-creation-systems, overarching differing boundaries of focus like smart-service-systems, (business-) ecosystems or domain specific entrepreneurial ecosystems, involve always the joining together of several contributing actors who are aligned to a common value proposition (VP) towards the customer or end-user, i.e. external value proposition of the system. This external directed promise making cannot be kept by any of the participating actors alone. It is not only formulated collaboratively but must also be fulfilled collaboratively. This requires sharing and usage of defined resources brought in by each contributing actor from their respective home base - which are the individual business-model and value creation procedures but also culture and mindset - and their integration in a way that is oriented toward fulfillment of the commonly made external VP. The realization of smart service value creation is about managing and work with resources that one does not own and rely heavily on others to produce, what Bouncken/Kraus (2021) put as "the fate of the participant is connected to the system".

In order to create the above mentioned "seamlessness" a new quality of conjoint value creation on strategic as well as operative level in multi-actor-ecosystems is necessary that helps balancing value co-creation and value co-destruction as two parts of the same coin (Echeverri, Sklaen 2021, Cabiddu, Moreno, Sebastiano, 2019) and thus facilitate the cost of collaboration. Governance is the concept that frames the regulation and enactment of collaborative value-creation.

SETTING THE STAGE: SERVICE ORIENTED VALUE-CREATION ARISES IN COLLABORATION THAT NEEDS TO BE GOVERNED

This paper shares our early stage of thinking and ongoing research. We limit the literature listed to recent and overview contributions thereby following a transdisciplinary, discourse oriented and grounded theory approach. We draw on bodies of knowledge rooted in Service Marketing, Service Science and Service Engineering, Managerial Science, Social and Behavioral Sciences and Policy Analysis, and, to a small extent, in Informatics and include insights from ongoing project work in our domain of applied science.

Our contribution is to formulate a positioned starting point that provides guidance to lay out the elements that can possibly contribute to provide a menu of mechanisms and practices to realize "governance as a service" to multi-actor value-creation. We aim to channelize attention to specific components of the governance function that help to develop new value-creation-systems, like e.g. smart-service-systems, as an entity that is able to turn value creation opportunities into realized value creation.

The selected perspective is inward, towards collaboration of the actors in the system in the sense of a collective smart-service provider. We draw a clear demarcation between the outside, the customers' world, and the inside, the service production or delivery system itself, which is, in smart-services as well as in other service-oriented value-creation activities, a multi-actor system. In

doing so we do not neglect the rich body of knowledge that states and investigates the customer as part of service value-creation. We perceive that there is a lot of knowledge and research in the customer sphere of the service economy regarding per example the design and enactment of relations between customer and provider or the role of perceived quality of service. In contrast we see much less knowledge and research in the sphere of design and enactment of collaboration management for resource integration in emerging multi-actor-constellation. We think it is necessary to pay focused attention to the operations and their governance inside the new forms of service-oriented value-creation that we witness in practice, and which are often conceptualized as business ecosystems. All the more as according to Pidun, Reevevs, Schüssler (2020) there is a large amount of failure of these systems and the foremost reason are wrong governance choices.

Elaborating a Distinct Value Proposition for Governance as a Service

In our attempt to figure out key elements that help constitute good governance of multi-actor value-creation as a service we follow Bouncken/Kraus (2021) who draws on Dedeheyir (2016) and propose: the boundary of the system that shall be governed is the collective functionality rooted in the given external VP - selfmade by the system - towards the customers of the system.

This external VP manifests the vision of the services (solutions) that are to be provided to customers by the system. The problems to be solved are problems in the sphere of the customer. The means to solve them is the realization of the external VP by collaboration of actors in the provider system. Thus, in regard to the performance inside the system we propose to employ Value Proposition Design to create an internal Value Proposition *by and for* the system and its actors as a fruitful approach in order to manifest the vision of the collaboration that has to be developed by the respective actors of the systems. The problems to be solved in this perspective are problems in the sphere of each actor in the provider system. The means to solve them is governance as a service to steer multi-actor collaboration over time operationalized along the internal VP.

Advantage of thinking in a combination of external VP and internal VP, the former framing the latter, is that important aspects like unique purpose and shared goals, commitment to and collaboration with partners as self-interest and devotion of resources like money, effort, time are already clearly set and agreed upon by the external VP as a reliable common ground. This, as in the following will be roughly delineated, provides a good starting point to find out how the governance function can benefit from automating and augmenting selected tasks through use of novel technologies. Better coping with issues of complexity and pace by symbiotic human-machine interaction in smart governance services is a strong motivation.

Framing the Notion of Collaboration in Multi-Actor Value-Creation

In reflection of literature (see to start with Stout/Keast 2021) collaboration can be understood as a higher-order-level of working together that aim at reaching clearly defined goals and therefore demand integrative processes

that imply smooth interaction between the actors involved. It is the acknowledgment of interdependence and relational dynamics that differentiates collaboration from other forms of working together. In our view this makes it an especially suitable concept to shape high performance of promise keeping in service-oriented value-creation since it takes into account that each part of the system is moderated by other parts of the system which is especially true for emergence of smart services as shown in the framework of Neuhüttler (2019).

In our work towards a concept of "governance as a smart service" we propose to frame the notion of collaboration in two dimensions. On the one hand a meso-level dimension which embraces structural properties and procedural approaches for alignment e.g. functions, processes, as well as formal and informal institutions, e.g. unique purpose, rules, standards, artifacts, in order to cope with interdependencies. On the other hand, there is a micro-level dimension which embraces attitudes, behavior and interactions where relational dynamics enfold. We although can extract from literature that the handling of the phenomenons of trust and power is critical to collaboration quality and needs attentiveness, competencies in social engineering as well as time. As Stout/Keast (2021) figure out: "Collaboration offers a way for actors who are motivated to work cooperatively and to coordinate their activities, but in a particular manner that is more transactive and more egalitarian and self-organizing than managed. Thus, in many instances what we do may look similar (e.g. consolidate, coordinate, engage with clients, cooperate and compete) but why we do it and how we do it differs substantively" (Stout/Keats 2021: 26)

We assume that the above mentioned creation of an internal VP, the elements of which create transparency on the jobs to be done, the thereby suffered pains and gains of each actor in a system that works together to deliver an external VP, is a helpful approach to contribute to a better understanding, design and realization of governance services that take into account the mentioned "particular manner" to realize service-oriented value-creation in multi-actor-systems.

Shape the Role of Governance in Service-Oriented Value Creation Systems

So far, we claimed that sustainable service-oriented value-creation as delivering or keeping the promise of an external VP depends on seamless collaboration of partners in multi-actor systems. These partners and their indispensable resources can neither be fully controlled by hierarchical mechanisms, since each partner keeps control over her resources and remains committed to the business model of the respective home base, nor by market mechanisms alone, since interdependency and relational dynamics are paramount. We draw on social science research on network governance (e.g. Kenis/Provan) that distinguishes three basic shapes of governance that is:

Lateral self-control: In this form, governing functions are realized highly decentralized with all internal and external responsibilities and without a specifically designated unit via the totality of network participants themselves.

Important characteristics are a high degree of identification with the common goals and a high level of commitment, power symmetry and pronounced collective action.

Centralized self-control by a lead or focal organization: In this form, governance is highly centralized by a particularly strong, leading participant of the multi-actor-system who is to exercise this leadership role usually on the basis of strong resources and high legitimacy. All the important activities and decisions at the system level are controlled by this leading organization, which is part of the system. Important characteristics are a strong congruence between overarching goals and the goals of the lead organization, a mediating role of the lead organization and an asymmetric distribution of power in favor of the lead organization.

Centralized external control by an external Organization or Institution: In this form, which in our view corresponds with our thinking of governance as a service and can moderate between centralization and democratization via internal VP, an independent administrative unit is set up for the governance function by mandate or network participant decision. This neutral entity, which is not a network participant, plays a key role in the coordination and broad support of all system activities.

From recent research to platform governance (Hilb 2021) we realize that the second mentioned type, lateral self-control executed by a focal organization is the most frequent, yet not the most successful form of governance since problems of monopolism, poor working conditions, data security arise and are more and more addressed by contributors, users and political regulators. A tendency towards democratized forms of governance is visible and the term control starts to be replaced by the term orchestration. We therefore approach governance as the art of providing and realizing adequate activities that support continuous shaping of collaborative-value by orchestrating the meso- and micro-level of collaboration in multi-actor-systems.

CONCLUSION

In our ongoing applied research work we aim at figuring out features that make up a good governance service for newly arising multi-actors-systems of value-creation. We assume that there will be elements that are suitable for being automated or augmented by novel technologies since computing is increasingly about identifying new ways to collaborate and connect rather than simply offering alternative value propositions and the combination of appropriate governance activities and novel technologies opens up the necessary value-creation space (Jacobides 2019, Schmück/Gilgen 2021). It will be of special interest how far we can go in conceptualizations of the highly sensitive aspects of trust and power to be governed in a combination of mechanical and social trust and power moderation, provided by thoroughly developed, explained and sustained machine learning.

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