# Knowledge Sharing Process on Sustainable Public Service Program Innovation: a case study in Surakarta City

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Abstract---Knowledge Sharing (KS) is an essential component in Knowledge Management (KM), which is the primary driver in creating sustainable innovation. Five-yearly leadership succession is always followed by massive mutations so that both phenomena have become threats to the sustainability of public service innovations. This qualitative research will explore on: How does the process of innovation program knowledge sharing occur concerning the sustainability of public service program innovations after the succession of regional heads in the Surakarta City Government? The findings have shown that there has been knowledge sharing program innovation that occurred after succession and massive mutation, which are influenced by four variables: the role of the leaders, transformation of innovative mindset, mechanism of social interaction, and external drive. In connection with these findings, further research is recommended to deepen the study of the constructed model of the proposition on local government organizations that fail to continue their program innovations post-succession. Another quantitative research construct model is to test the level of influence of the four KS variables innovation programs in both profit and non-profit organizations.

**Keywords**---knowledge management, knowledge sharing, innovation cycle, public service

## I. Introduction

The annual public service innovation competition was promoted since 2014 under the one agency one innovation program by the Indonesian government through the Ministry of Administrative and Bureaucratic Reform. The competition requires competitive advantage as Resource-Based Theory (RBT) argues that the RBT is a theoretical basis for creating competitive organizational advantages, which consist of four critical criteria: Valuable, Rare, Inimitable, and Nonsubstitutable (VRIN) [1,2]. This theory then developed into Knowledge-Based View (KBV), which becomes the Knowledge Management (KM). Knowledge Sharing (KS) is one of the essential components of KM, which is the primary driver in creating innovation [3,4]. It was supported by previous research that had a strong relationship between KS and Innovation [5,6].

The phenomenon, the mandatory succession of the leadership, is conducted every five-year of regional leadership, which is usually followed by massive mutations. These two become a threat to the sustainability of the innovation of its public service program. In this context, it found a research gap that there is no specific research that can explain the relationship between KS program innovation and the sustainability of program innovations in public service organizations, especially post- a succession of the Mayor.

The Surakarta City Government was chosen as the unit of a single case study because they had a succession of the Mayor in 2013, which was also followed by large-scale echelon II and III mutations. It is interesting to then examine deeply on how the KS process of innovative post-succession programs can influence the sustainability of program innovations? Because succession events have a significant effect, both positively and negatively on what is deemed typical or expected by new

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officials [7]. In the case of Surakarta, there are several local government organizations succeeded to maintain and even improve their program innovation related to birth registration, child-friendly city, health insurance, and child-friendly education. Some concrete examples of successful innovations in public service programs are often carried out by other local governments, such as subsidized education, E-KTP services, Community Health Insurance (Jamkesmas), tax services. [8-11]. The sustainability of program innovation post succession and mutation might be because there are effective KS processes at the level of individuals, groups, and organizations.

Our contrast long experiences in facilitating innovation in public service programs in government organizations that succession and mutation are threatened not to continue after the succession of regional heads. The results of the study report Yesil [5] in 51 companies in Turkey supported our experiencies which found that the KS process became an important aspect that determines the implementation of program innovation after the organization experiences a succession of leadership. In addition, various Knowledge Sharing (KS) literatures, for example, [12-15] also support them. However, have no studies that specifically discuss the influence of leadership succession in the KS process that supports the sustainability of program innovations, especially in the context of public services. According to Gothard and Austin [16], when new leaders run program innovations from internal groups, the program innovation will continue. However, at the beginning in Surakarta, the overall performance of program's innovation declined although the successor was his deputy, but in several Local Government Organization (LGO) the program innovations were still ongoing, and some are adopted into national programs and get international awards, so this was an interesting empirical phenomenon to study further. Therefore, this study focused to those LGOs which are continue maintain and improve their program innovation.

More specifically, until now, there has been no research that explains how a city government that implements Knowledge Management can improve and continue the innovation of public service programs through its Knowledge Sharing Program Innovation process. Referring to the explanation above can be seen that the breadth of the theoretical gap is still not filled by previous research. From this understanding, the main problem or main question of this research is: How does the process of innovation program knowledge sharing occur concerning the sustainability of public service program innovations after the succession of regional heads in the Surakarta City Government? This study uses a qualitative approach of inductive theory building through a single case study technique to answer the research question.

# II. Knowledge Sharing

Knowledge Sharing (KS) is "a transfer of knowledge between individuals, teams, groups, departments, and organizations" [17]. KS is part of Knowledge Transfer (KT) in terms of KT as a broader concept. However, KS is not one of the processes directly involved in KT. The processes involved in KS and KT differ according to the strategies used in KT and the chosen perspective in KS. This finding reinforced by the opinion that KS is a crucial stage in KT by using personalization strategies that occur at the individual level (one-way sharing) in the people-to-people process. Thus, KS is more complicated than KT. Liyanage et al. [18], Paulin et al. [19] Reychav and Weisberg [20] provide a definition of KS that shows the significance of the existence of the process in an organization, that "sharing knowledge among employees represents attempts and contributions towards creating an organizational knowledge database - and is an attractive growing interest in the parts of both practitioners and researchers alike.

"KS that occurs among employees in the organization is the embodiment of efforts and contributions to the creation of data centers of organizational knowledge. This definition emphasizes the implementation of KS that occurs among members of the organization, which is a form of overall organizational knowledge. Knowledge sharing is an organizational-controlled process [21]. The process in the form of information flow between individuals that occurs as an effort to solve problems, develop creative ideas, or to implement organizational [22], where implementation depends on the self-awareness of

employees to share their knowledge and experience [23], and was implemented to form an organizational knowledge database [20].

In addition to its nature (motivational factors, driving factors, and inhibiting factors), factors that influence the success of knowledge sharing practices in organizations based on the sources, namely individual and organizational factors [24]. Factors originating from individuals are (1) incentives, namely perceptions to get better assignments, promotions, and various learning opportunities [25,26], (2) reciprocity, namely perceptions to respond to employee learning needs, emergency situations, and familiarity [25,27], (3) subjective norms, namely social pressure where CEOs, bosses, and colleagues must be knowledge sharing with other colleagues [26], and (4) behavioral control, namely the perception and ability of employees to share knowledge with coworkers [25,27].

Furthermore, factors originating from the organization are factors (1) organizational structure, namely the authority of the organizational structure (division of tasks, decision making, method, and systematic procedures) [28], (2) CEO support, namely active desire CEO, supportive work environment, and physical support for knowledge sharing [29,30], (3) learning climate, namely regular training and programs about new knowledge [31,32], (4) IT systems, namely the development, management, and use of IT systems in an efficient manner [25,26], (5) reward systems, namely extrinsic and intrinsic incentives, and justice about awards [33], and (6) trust, namely open interactions between coworkers regarding organizational policies, knowledge and experience of coworkers [26].

# 1.2. Knowledge sharing and innovation cycle.

Various definitions and understandings obtained by experts who have carried out studies on innovations as follows: 1) Joseph Schumpter: innovation is the first commercial use of a product or process that has not been exploited. The definition of Schumpter emphasizes understanding of innovation concerning with novelty of a product or process that has not been known or used by a wide audience before commercialization or announcement of its existence. 2) Peter Drucker: "Its [innovation's] criterion is not science or technology, but a change in the economic or social environment, a change in behavior of people such as consumers, as citizens, as students, or as teachers. Innovation creates new wealth, or new potential for action, rather than new knowledge. " The criteria for innovation are not in terms of technology or science. 3) Edward B. Roberts: "Innovation = invention + exploitation. The innovation process covers the goals of creating new ideas and getting them to work.

Referred to the above definitions, they have some commonality among them as well as what has been regulated by the Government of Indonesia, that will use in this study: namely innovation in public service programs as a breakthrough in the types of public services, both in the form of original creative ideas / ideas and / or adaptation modifications that benefit the community, directly or indirectly. (Regulation of the Minister of Administrative Reform and Bureaucratic Reform of the Republic of Indonesia Number 31 of 2014). The following figure explains the relationship between the innovation cycle and the knowledge sharing cycle.

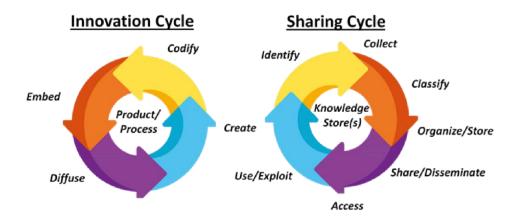


Figure 1. Knowledge Sharing Cycle and innovation cycle

The cycle on the left side is an innovation cycle that describes the development of the creation (create) of an innovation idea. Then codify into more systematic innovations and readier to be transferred to be embedded in members and organizational systems. The result of innovation can be diffuse into processes and services. While the cycle on the right is a knowledge sharing cycle that shows the related process begins with creating knowledge, identifying, collecting, classifying and then organizing so that it is easily stored, shared or distributed so that it is easily accessed, then utilized, and as feedback on improving or creating new knowledge so that the cycle repeats itself.

In the diagram above shows there is a relationship between the innovation cycle and the knowledge sharing cycle, this is reinforced by Skyrme [34] research which states that there is a relationship between the innovation cycle and the knowledge sharing cycle which generally involves two activities: transmission (sending or presenting knowledge to potential recipient) and absorption by other people or groups. While KS is related to learning because basically, the exploitation of existing knowledge through KS explicitly implies making it possible to shorten the learning cycle.

#### III. Method

This study uses an inductive theory building qualitative approach with a single case study technique. According to Creswell [35], grounded theory-building research that has its roots in the field of sociology, is research that focuses on developing theories rooted in data based on the views of participants who are directly involved in the interaction process, taking actions on changes or innovations in public service programs. Thus, the development of theory in this research is the development of Knowledge Sharing in the context of leadership succession for the sustainability of their program innovations. The unit of analysis in this study is the process of knowledge sharing that occurs as a result of interactions between stakeholders both as individuals, groups, and organizations of the four selected LGOs in Surakarta City government after the succession of leadership. These stakeholders will be informants and resource persons from this research. This informant selection is in line with what was intended in the inductive theory building that research unit analysis is a process, action, or interaction that involves many individuals [35].

#### IV. Data collection

The interview model used is semi-structured in-depth interviews conducted in December 2017. This model was chosen because structured interviews were too limited to collect data related to the perceptions and views of the informants. The informants of this study are civil apparatus (SCA) echelon II (3 persons) and III (10 persons) and staff echelon IV (3 persons) who experienced leadership changes and mutations. They are responsible and involved in managing program innovations from four different local government organizations (LGO) offices (Health, Education, Civil Registry and Population Administration, and Women's Empowerment and Child Protection). Besides, Substitute Mayor or Regional Secretary, Regional Development Agency responsible for planning and budgeting of program innovations and Regional Personnel Agencies that manage SCA mutations, as well as the Organizational Section responsible for the SINOVIK program (Public Service Innovation Information System).

Data Analysis

The qualitative data analysis method is a cycle consisting of data coding, categorization, and conceptualization processes as done in the previous stage. However, some key features of the analysis of case study research can be identified through three stages: (1) open coding, (2) axial coding, and (3) selective coding [36,37]. Open coding and axial coding in this study were conducted to find sub-themes and themes and concepts from the theory process knowledge sharing within the context of sustainable public service programs that occurred after the succession of regional heads in Surakarta City. The process of finding themes and sub-themes or often called categories, then the initial concept was developed using the help of NVivo 11 Pro devices. The use of NVivo 11 Pro software in general in qualitative research is needed to simplify, accelerate, and multiply the possibility of data analysis.

Trustworthiness

This study uses several techniques to ensure that our analysis fulfills four criteria of trust: credibility, transferability, dependence, and confirmation [38]. The researcher views that participants are the only people who can legitimately assess the credibility of the results of the research. To increase the power of transferability by doing work to describe the research context and central assumptions in the study as well as the detail process of the research. Confirmability refers to the ability of research results to be confirmed by others. For this reason, researchers need to document procedures so that other people can examine and reexamine the entire process and research data. Dependability refers to the need for researchers to consider the changing context in research with referring to key step in this study.

#### V. Results

From the process of analyzing open coding and axial coding and selective coding (conceptualization), there has been proven knowledge sharing program innovations in Surakarta City after massive succession and mutations in echelon II and III was occurred and contributed to the sustainability of program innovation. There are four concepts or variables, namely the role of the leader, the transformation of an innovative mindset, the mechanism of social interaction, and external encouragement that influence the KS in Surakarta City. The found model of the study illustrates through the following figure 2.

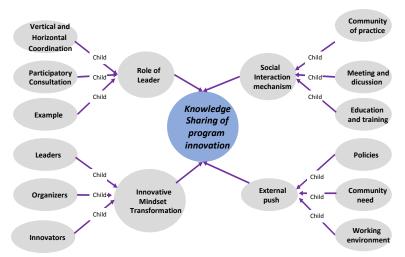


Figure 2. Determinant variables of KS Program Innovation. Source: Research Analysis (2018)

Based on the findings and the conceptualization process, the propositions formulate as follows: In the Surakarta City Government public service organization, there is a Knowledge Sharing process after the succession in the LGO of the Surakarta City Government. The process is influenced by the leader's active role, the mechanism of social interaction, the transformation of the innovative mindset, and the presence of external encouragement or push, that contributes to the sustainability of the program innovation.

#### VI. Discussion

The components or variables that affect KS program innovation in the Surakarta City Government, namely the active role of the leader, social interaction mechanism, have an innovative mindset, and the presence of external encouragement, more in the City Government of Surakarta determined by individual factors. In this regards the innovation competency is the particular dimension require within state civil apparatus (SCA) in Surakarta. The primary role of an individual is in line with some of the opinions of previous researchers where they emphasized that individuals are the primary source of KS motives [38-41]. The process of knowledge sharing creates opportunities to maximize the ability of organizations to meet service needs, produce solutions, and efficiency. These make it a competitive advantage [19]. KS involves exchanging knowledge, experience, and skills between employees as individuals through all departments or groups and organizations. Furthermore, the Government of Surakarta City requires to ensure that the four components of KS program innovation should be strengthened in all LGOs to be able to reach the high performance in innovation for public service.

### VII. Implications

#### Theoritical Implication

One of the trends in the development of RBT is KBV (Knowledge-Based View) [42]. It is evident that by applying KBV focusing on knowledge generation and its application provides benefits in increasing the efficiency of the production process [43]. The occurrence of KS is influenced by four components of social capital mechanism (trust, fairness, and equality), namely the role of leaders, the existence of informal and formal social interaction media, having an innovative mindset, and the presence of external incentives. It is to confirm that KS will effectively occur when there are healthy social capital practices within the organization.

KM pioneer Karl-Erik Sveiby from Sweden with, "The Know-How Company" in 1986, then developed into intellectual capital in 1987. Whereas, it was only the first time in 1991 that a position as Vice President of intellectual capital carried out tasks related to knowledge management. In the same year, an article was published from the highly influential Harvard Business Review "Knowledge Creating Company" by Ikujiro Nonaka [44], which was later made a book with Hirotaka Takeuchi in 1995 of the same title. According to R. McAdam et al.[3], there are three main classifications of KM models, namely knowledge category model, human capital, and finally, the socially constructed model. This last model believes that KM is intrinsically linking to the social and learning process within the organization [43]. It is also to confirm the KM practices in Surakarta city are definitely socially constructed, which has a strong linkage with the social capital that exists within the LGO.

## 5.2. Practical implications

According to Crossan [45] developed a theory of multi-dimensional organizational innovation by placing innovation in five stages, consisting of three factors, namely leadership, managerial levers (including knowledge management), business processes, innovation processes, and finally innovation results [45]. In ensuring that program innovations are sustainable, the LGO has to ensure the KS of program innovation practice occurs and closely linked to the innovation cycle stages. Starting from exploring and creating creative ideas, managing and converting them into innovation, then implementing through instilling in all the ranks of the SCA involved and institutionalizing them into a system of procedures and policies. After that, the final stage is developing innovation and disseminating it to internal and external parties. To ensure strong linkage between KS and the innovation cycle occurs the four variables of the KS should be strengthened.

## VIII. Limitations and Future Research Directions

The results of research obtained from a single case study have distinctive limitations, which are tied to the LGO in the Surakarta City Government and cannot be statistically generalized. The purpose of this research is to explore the knowledge sharing process deeply among SCA after the succession of regional heads and mutations of echelon II and III. Thus, the informants are those SCA who get the impact of these changes, so it is also necessary to compare with SCAs that do not experience the consequences of succession and mutation. The LGO chosen is also limited to LGO that has been proven to continue and develop post-succession program innovations. Therefore, it is also necessary to compare with LGO who do not continue the program innovation so that they get varied findings. Also, to develop quantitative research constructs to test the level of influence of the four KS variables innovation programs in both profit and non-profit organizations.

# IX. Conclusion

From this study it was found, that one of the most critical variables in the occurrence of KS program innovation with its sustainability is caused by external factors, namely the involvement of the community so that innovation has become a necessity. This external factor occurs because the community so far felt that the provided public services are useful and valuable. The government will not be trusted if it does not innovate so that there is no point in return. Thus, this finding confirms and contributes to the Public Service Organization, that in creating quality public service innovations, the community is a very appropriate partner to be used as a "public value co-creation" and will undoubtedly continue.

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