Initiating Digitalization as Institutional Changes in Institutional Government Bureaucracy

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Abstract

Changes in local government institutions is a certainty that cannot be avoided. Various factors that cause these changes and various carriers of changes that trigger changes. The advancement of information and communication technology as a change-carrying artefact has a great opportunity in these changes. This opportunity will be even more significant when the demands of the needs and environmental conditions that exist around local governments collaborate in encouraging these changes. The institutional pillars hold an essential position in diffusing communication and information technology through institutionalization efforts so that this digital technology can become an integral part in the administration of regional government.

Keywords
Digitalization, Change, Institutional, Bureaucracy, Government

1. Introduction

Decentralization has made local governments in Indonesia in various dilemma positions in managing bureaucracy in the regions. Various demands of situations and conditions that change very quickly bring its ambiguity for the local government and its bureaucracy to determine and take firm and definite steps in carrying out their duties and functions more productively. Building certainty and firmness of bureaucracy in carrying out its tasks and functions is not as easy as turning the palm because what is needed is dynamic adaptation and acceleration following such rapid changes. Local governments formed after the centralized era was then in a frame of decentralized conditions which initially immediately experienced a surplus of authority as a result of the devolution of authority from the central government. Then gradually the authority is rationalized with a variety of considerations both because of the potential possessed by the region and the ability of local governments to manage and carry out these authorities. Thus the local government will be faced with a dilemmatic position, where limitations are originating from the conditions and situation of the region itself. The dilemma, of course, refers to the desires and needs to maximize regional development. However, on the other hand, this effort collided with the position of inability that refers to regional conditions.
Contextually, the limitations that occur are manifested through norms and regulations, which at the same time form boundaries in areas that define where and how local governments should act and work. Norms are guidelines that try to describe what should be done. At the same time, regulations are a product of constitutional activity intended to provide guidance related to the procedures and technical implementation of a policy accompanied by sanctions if the procedure is implemented or not implemented. Both norms and regulations are essential institutional instruments in assessing the legitimacy of an institution. In the sense that the legitimacy of an institution will be recognized if there

is a significant contribution from regulation and norm elements other than cultural-cognitive elements. Concerning the limitations created in directing local government and its bureaucracy, these pillars are an element of legalization that has an essential role in imposing limits as well as provide opportunities or otherwise close opportunities for action. The opportunity for local governments to act and work will significantly depend on how this institutional element can be integrated with the maximum level of precision. This is important so that the regional government will be able to maximize its role and function in carrying out government affairs which become its authority. Referring to these conditions, institutional changes in the regional government bureaucracy that are significant and accelerated are needed so that these changes will have a positive impact even though the regional government is in a position of limitations in the implementation of government affairs which are the authority of the regional government.

Integrating these institutional pillars with a high degree of precision is undoubtedly not as easy as imagined. This integration depends on efforts to make adjustments to the conditions and situations that develop dynamically. In the current situation, which is significant enough to introduce institutional changes in the regional government bureaucracy is the development of technology. The advancement of information and communication technology has become unavoidable and inseparable in the practice of governance. Almost all government institutions have begun to integrate the use of information technology in the practice of governance. Utilization of this development naturally has shown a change in the institutional context of the local government bureaucracy.

Factually, regional governments at both the provincial and district/city levels are required to begin to infiltrate the progress of information and communication technology at a level that is not merely mere information media but also becomes the basis for procedural practice in government practices. This condition appears in the initiation of local governments to start using a variety of integrated systems online that their use is not only intended as an information medium but also as an instrument in completing various government tasks.

In the context, as stated above, it is indeed inseparable from several problems that often descend on local governments related to the use of information technology and its relation to institutional change. Problems that can be detected include changes in the mindset of government bureaucracy which are sometimes still in the comfort zone, that is, without using and utilizing communication and information technology or utilizing these advances only at the level of formality. In these conditions can impact on the emergence of non-compliance with norms and regulations, and there is a tendency to practice manipulation.

The purpose of this article is to assess how technology as part of an artefact is capable of being a carrier for institutional change in local government bureaucracy in Indonesia and able to be integrated to the fullest in each institutional pillar.

2. Research Methods
The research method used in this study refers to a qualitative approach. Data analysis carried out through searching on a number of the references in this article and supported by research data that had been done before.

3. Result and Discussion
Based on literature search results and secondary data obtained related to the purpose of this study. It can be assumed that institutional change in the government bureaucracy in Indonesia is a form of contextual dynamics, where a shift in the situation and conditions that exist around local government institutions which in turn will trigger the change occurred. Changes that occur must certainly reach all institutional pillars at the level of norms, regulations and cultural-cognitive. However, the degree of integration of changes in each pillar will be very different, depending on how much diffusion will be absorbed in these pillars.

3.1. Digital Technology as a Carrier for Institutional Change
In an institutional review, it will focus more on matters related to the institution. The institution itself is a concept that is more than just an organization or even a public organization, the institution itself is an atmosphere in which it contained and based on regulations, norms, and administrative systems and social functions (Wangwe and Rweyemamu 2001). While the concept of the institution itself is a scheme that regulates the behaviour of everyday life, as stated by Scott that institutions are diverse systems that combine symbolic systems of cognitive construction and normative rules and regulative processes carried out through and forming social behaviour. In context, the organization formed to comply with and make the institution as a guide in carrying out the concept of the organization (Scott 2014).

Furthermore, how and where is the focus of digital technology in bringing about changes in institutions, especially in the local government bureaucracy. In the situation of technological advances, especially those relating to information and communication, local governments required to build more efficient and accelerated links. As stated by Scott that in the rapid development of communication and information technology, it certainly gives a positive contribution,

especially in streamlining time in the dissemination of various ideas, build connections and strengthen the process of organizational transformation in terms of global relations both in economic and political terms (Scott 2014).

Thus demands in an increasingly globalized framework of relations place local governments not only as spectators but also as players. This context certainly also has a significant positive impact because in global connectivity, at least globally positive concepts will be introduced on a local scale. In the framework of building a connected network, especially in a global context, of course, a standardized, acceptable and flexible technology system is needed both in terms of software and hardware as note by Salento, where the urgency of a technology transfer is that technology as an artefact that will utilize opens opportunities to be managed in an integrated, flexible manner in continuity and remains under adequate supervision (Salento 2018).

Scott has also explained the existence of technology as an artefact that carries institutional change that artefacts as a carrier emphasize the existence of material objects or cultures that are the result of human thought (Scott 2014). Technology is an object of culture produced by humans aimed or expected to provide convenience from all activities undertaken. Furthermore, when analyzed more deeply, technology as an artefact will give a clear picture of how the change occurred. Based on this, two main things can be assumed. First, the magnitude of the need or expectation to get ease to produce a technology that can drive a change and second, the demand for technological development is so massive that it forces the emergence of demands that encourage institutional change. Likewise, the conditions that occur in local governments, are encouraged to produce maximum performance, efficient and effective, initiates the birth of innovations related to technology development. On the other hand, local governments are also in an environment that requires public organizations to be immersed in the flow of technological development because if it not followed, then the local government is considered negligent in fulfilling its obligations.

3.2. Digital Technology Integration in Local Government Institutional Pillars

The massive advancement of communication and information technology has made local governments in Indonesia compelled to make very massive changes both from the institutional and organizational side. From the institutional side, the atmosphere formed as much as possible can guarantee the organization in a position capable of accommodating changes in the surrounding environment. While from the organizational aspect, the structure, system and resources formed to anticipate the development of the situation following the field or field of the organization where the organization located and carry out its functions.

The development of this technology then makes the local government anticipate by adopting the advancement of technology. This condition is apparent from the results of research conducted by (Yunita and Aprianto 2018), which shows that there is a development in the use of websites by local governments in Indonesia, as shown in the following table.

Table 1. Comparison of website status

Status	2003		2012		2018	
	Number of Websites	%	Number of Websites	%	Number of Websites	%
Dapat diakses	305	87%	353	83%	483	88%
Tidak dapat diakses	45	13%	71	17%	60	11%
Tidak memiliki website	88	20%	62	13%	5	1%
Total website	350	100%	424	100%	543	100%
Total	438		489		548	

based on data cited from the results of research by Yunita and Aprianto, up to 2018, only 1% of local governments have no websites, with a total of 543 local governments having websites.

The application of digital technology in the activities of the implementation of authority delegated by the central government to local governments is inseparable from the process of integrating digital technology into institutional pillars, both on the norms, regulations and the cultural-cognitive pillars. Pillars of norms refer to prescriptive, evaluative values and obligations in social life (Scott 2014). Norms are a reference for the regional government as the frontier, which is in direct contact with the community should provide the best service for the community. In this condition, the regional government certainly has a big obsession with maximizing services to the community. One effort to maximize these services is the use of information and communication technology is an opportunity that must be achieved by local governments.

However, this value must harmonized with values that grow in the community in the local context and also in the local government bureaucracy, so that the use of communication and information technology that loaded with new values can integrate with values that grow in the community. The process of integrating this norm is relatively more complex given the values that have existed before have embedded for so long both in society and in the scope of the local

government bureaucracy. Based on this, the local government must do it in stages, which of course starts from the bureaucracy of the local government itself to further addressed to the community.

n the regulation level, the use of advances in information and communication technology has carried out since the issuance of Presidential Instruction No. 3 of 2003 concerning national policies and strategies for e-government development. Furthermore, in anticipating the development of situations and conditions, a Presidential Regulation No. 95 of 2018 concerning Electronic-Based Government Systems. The regulation provides a frame, a reinforcement as well as an obligation for local governments to act in the administration of regional governments that utilize advances in information and communication technology. The existence of this regulation certainly provides an opportunity for local governments to maximize their services to the community so that both administratively and politically, the interests of local governments can be achieved to the maximum.

However, regardless of local government obligations based on existing regulations, it is also necessary to consider the feasibility factor. According to Harun, this feasibility is more on the consideration of heterogeneity that must take into account (Harun 2018). This heterogeneity is not only about the diversity of tribes, religions and races, but also considerations on topographical conditions and regional positions. Geographical conditions in the form of islands are essential considerations for formulating flexible regulations. This directed so that the existing regulations can touch the condition of regions in the form of islands, especially areas that are in the border, remote and outermost regions.

One of the things that are entirely instrumental in determining the position of norms and regulations in its implementation is how to interpret and interpret existing norms and regulations concerning the application of communication and information technology. The interpretation was born from the process of internalization environmental conditions that have been interpreting patterns of life and behaviour, both community and bureaucracy in the local government. Therefore we need actors who can become agents of change. Actors present as agents of change are born from a combination of the political context that developed at the time and institutional characteristics (James Mahoney & Thelen 2010). This is important because agents born in the context of local politics and institutional characteristics that will build consistency and commitment in the use of information and communication technology will have a strong basis of legitimacy to encourage the integration of better use of information and communication technology.

Overall in assessing the integration of communication and information technology directed at institutional change. Through digitalizing, the implementation of local government requires institutionalization both in the local government bureaucracy and in the community. as stated by Supriyono that the problem of institutionalization can do through institutionalizing existing rules accompanied by sanctions, strengthening the roles of the actors so that they can carry out their roles and institutionalizing the role of existing institutions both local government and those in society (Supriyono 2007). Through efforts to institutionalize the existing pillars, the idea of integrating digitalization in the administration of regional government through institutional pillars certainly expected to be comprehensively achieved and accepted as an integral part of governance.

3.2. Conclusion

The conclusion obtained from this article that technology as an artefact is a carrier of institutional change in the local government bureaucracy is a condition that is now happening. This is a certainty given the need to provide the best service and achieve the maximum goals is a condition that cannot be avoided by local governments. On the other hand, the latest and globalized information and communication technology advancements require local governments to participate actively and progressively follow these developments.

Integrating the idea of digitalization in local government requires the diffusion of existing institutional pillars, norms, regulations and cultural-cognitive. This is an absolute requirement so that the integration of digital technology in the administration of government does not run slowly. In order for this integration to be able to give birth to institutional changes that function optimally, efforts are needed to institutionalize these pillars, so that the role of institutional pillars can usher in institutional changes in local government bureaucracy through communication technology as a carrier of institutional change.

References

Harun, Harsya. 2018. "Kesiapan Pendidikan Tinggi Dalam Menghadapi Revolusi Industri 4.0 Dalam Perspektif Kelembagaan." In *Prosiding Seminar Nasional*, eds. Muhammad Ilyas, Rusdiana Junaid, and H. Asri. Palopo: Universitas Cokroaminoto Palopo, 187–94.

James Mahoney & Thelen, Kathleen. 2010. *Explaining Institutional Change Ambiguity, Agency, and Power*. eds. James Mahoney & and Kathleen Thelen. New York: Cambridge University Press.

Salento, Angelo. 2018. "Digitalisation and the Regulation of Work: Theoretical Issues and Normative Challenges."
AI and Society 33(3): 369–78.

Scott, W. Richard. 2014. *Institution and Organizations; Ideas, Interests, and Identities*. Fourth. Thousand: SAGE
Publications, Inc.

Supriyono, Bambang. 2007. "Pembangunan Institusi Pemerintahan Daerah Dalam Penyediaan Prasarana Perkotaan
Di Kota Malang." *Jurnal Ilmiah Administrasi Publik* 9(1): 727–40.

Wangwe, Samwel M., and Dennis C Rweyemamu. 2001. In Economic and Social Research Foundation (ESRF),
presented at the First Pan African Capacity building Forum *Human Resource and Institutional Development in
Africa: An Overview*.

Yunita, Novi Prisma, and Rudi Dwi Aprianto. 2018. "Kondisi Terkini Perkembangan Pelaksanaan E-Government Di
Indonesia : Analisis Website." *Seminar Nasional Teknologi Informasi dan Komunikasi* 2018(Sentika): 329–
36.

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