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by Putri Robiatul Adawiyah

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Implementation of Artificial Intelligence: The Use of Technology on Diffable Public Service in Banyuwangi

Putri Robiatul Adawiyah[1], Fuad Ardiansyah[2], Kahar Haerah[3]
[1]Governmental Science, University of Muhammadiyah Jember ,
[2]Special Education IKIP PGRI Jember
[3]Governmental Science, University of Muhammadiyah Jember
putri.ra@unmuhjember.ac.id

Abstract

This research focuses on the implementation of Artificial Intelligence in Banyuwangi Innovation on standards diffable public service. Implementation of Artificial Intelligence through technological innovation and special infrastructure for people with disabilities and public service standards for disableds, braille printers, braille scanner, hearing it tools, audio graph tools to measure hearing, deaf speech electrolytes, multi-function wheelchair, regulations on braille printing disabilities, braille computers, jaws applications for pc, talk voice to read mobile applications, embosser printers, braille reference books. The implementation was realized by the government, education service providers, stakeholders, the community, and the private sector. AI formulated important support, needed, applications, technology, machine learning, public facilities, and access to information. Innovation in Banyuwangi manifested the form of support for regional regulations (PERDA) No. 6 of 2017 that concern the protection and fulfillment of the rights of disabilities to realize public service standards for disabilities following technological innovation.

Keywords: implementation, artificial intelligence, diffable public service

1.   Introduction

Banyuwangi since 2014 has declared itself as a city of compassion and declared itself a District of Inclusion. In 2017, Banyuwangi formulated a Regional Regulation on Disability to accommodate the aspirations and improvements in public service innovation for people with disabilities. A district that provides opportunities for all people with disabilities from various groups to access all policies made by the government, including access to special facilities and infrastructure provided for groups of people with disabilities. A good governance and administration system for people with disabilities is made specifically for people with disabilities so that they are better able to access the benefits of policies made by the Government. In addition to good and proper educational institutions, there are also infrastructure facilities including buildings, social services, and access to sufficiently accessible information from the government. The diffable group is a citizen who has the same rights and obligations in social life, he must be treated. The understanding of diffable is considered as an incapacitated person, a person who often receives discrimination, and even has negative perceptions. In this case, every citizen has the same rights and obligations, as the rights of other citizens. No one wants to be born in an imperfect state, God chose certain humans to accept his destiny along with all his strengths and weaknesses. Groups of People with Disabilities are groups that must get more attention from the government and society so that they can get their rights like other normal humans [1].

Innovating to Modernise the Public Sector in France Françoise Waintrop and Tanguy Dennielou, SGMAP, Innovation in the Public Sector. State that public sector innovation, this is not without contradictions, the various challenges which public sector innovation faces: to develop agile administrations in an environment that is still quite rigid; accepting the right to an error in a culture founded on risk aversion; supporting innovators against the instincts of

public sector organizations to prefer the status quo; to discuss innovation, to market good practices; to be inspired not only by top-down but also by bottom-up ideas from the field; to be pragmatic and to test as well as to experiment before implementing projects [2]–[4].

Banyuwangi has attempted to innovate based on bottom-up aspirations so that this will later be the key to success in implementing artificial intelligence. So that later groups of people with disabilities get more attention from the government and society by implementing innovation of Artificial Intelligence standards for diffable public service.

2.   Artificial Intelligence Concept

The relevancy between AI and our research is that our research is on the implementation of the use of technology in services provided to people with disabilities in Banyuwangi Regency. Artificial intelligence that we mean here is a variety of technologies that can be accessed by people with disabilities to use services provided by the government. For example, the Jaws text to read the application, braille modules and reference books, electronic and braille disability regulations, and many public services that use technology in public services. Why this research is important is because good public service is to provide the best service for all components of society, especially those with disabilities and disabilities so that all components of society can receive the best services from the government.

Although still in a nascent stage, data analytics is a functionality that is playing an increasingly important role in public sector evidence-based decision-making around the world [5]. Both private and public sectors generate vast quantities of data in various areas, such as energy, traffic, education, healthcare, environment, fraud, and corruption, among others. Despite this, however, a few governmental bodies are exploiting the full potential of such data for better decision-making and governance in solving public problems. The benefits in so doing lie within. Improved governmental decision-making processes translate not only into better policies, but also in superior public values like security, safety, accountability, and transparency [6], [7]. In a nutshell, data analytics can and has been used as an enabler of better governmental performance, improved quality of services delivered, new forms of interaction with citizens, and enhanced wellbeing for every citizen [8].

In the age of big data, effective analytics are reinforced by Artificial Intelligence (AI) techniques and technologies. This is because data analytics associated with AI profoundly enhances the predictive power of the systems created. Although there is no agreement over one single definition, AI generally is thought to refer to the study of how to train computers so that computers can execute tasks, which at present humans can do better or which are typically thought to be reserved for human intelligence. AI techniques and technologies hold tremendous potential for governments and can help in discovering new patterns in the data to make better predictions. If approached cautiously, can help not only to improve governmental decision-making and governance, but also transform governments altogether.

While there is evidence of many government initiatives that have been set up to harness the power of AI [9], empirical research on the topic is rather lacking in the context of the challenges and opportunities brought about by the exponentially increasing amounts of data and the number of advances in technology [10]. This may be because traditionally, governments have been followers instead of pioneers in the use of innovative technologies; globally, for example, only a few governmental agencies have adopted AI and Machine Learning in their daily operations [11]. The adoption and dissemination of AI technologies also take years to produce visible or tangible changes [12]. In this sense, then, the potential brought about by AI in exploring open private and public data for better governmental decision-making and governance purposes have not yet been fully explored [13]. Moreover, the application of AI

raises vital ethical questions regarding the substitution of human work by autonomous machines which could have both a positive and negative impact on the decision-making process and governance model.

As Qian and Medaglia (2019, p.370) elegantly remarked, "the scarcity of empirical studies on the impacts of AI in the public sector is particularly remarkable when we consider the unique nature of the problems of the public sector, as opposed to the private one. AI thus represents, in principle, an ideal technology to be applied to the public-sector context, where environmental settings are constantly changing, and pre-programming cannot account for all possible cases [14].

Key to a productive social network is the presence of what Granovetter and Burt (2005) refer to as strong ties (that is, a focused organization under the control of the entrepreneur) and weak ties (that is, a diffused range of contacts that have a heterogeneous set of knowledge and perspectives). Important, that process is a system of well-defined property rights and access to capital. For entrepreneurs in developed economies, the need for a system of competitiveness with well-defined property rights and access to capital is generally met, current innovation policy tends to focus on stimulating the creation, exploitation of social networks. In underdeveloped economies, the need for competitive markets, well-defined property rights, and access to capital may be a more fundamental concern [6], [7].

3.   Methodology

This study uses a qualitative research approach where qualitative research as a scientific method is often used and implemented by a group of researchers in the field of social science, including science education. Several reasons were also put forward, the point is that research qualitative enriches the results of quantitative research. Qualitative research is implemented to build knowledge through understanding and discovery. The qualitative research approach is a process of research and understanding which is based on a method that investigates a social phenomenon and human problem. In this study, the researcher made a picture complex, examines words, Qualitative research in which the role of the researcher is the key instrument in collecting data and interpreting data. Data collection tools usually using direct observation, interviews, document study. While the validity and reliability of the data used triangulation with using inductive methods, the results of qualitative research emphasize more meaning rather than generalizations.

This research focuses on the implementation of Artificial Intelligence in Banyuwangi innovation on standards diffable public service in Banyuwangi. Collecting research data in Banyuwangi. Furthermore analyzed indicators conducted interviews and data analysis from questionnaires distributed to several related respondents, some data analysis, formulate data, study and identify the factors supporting the successful implementation of artificial intelligence in public service standards in Banyuwangi.

4.   Result And Discussion

What we find on implementing artificial intelligence innovation on standards diffable public service in Banyuwangi, The role efforts of the government in the formulation of regional regulations concerning the protection and fulfillment of the Rights of People with Disabilities. Innovation in Banyuwangi manifested the form of regional regulations (Perda) No. 6 of 2017 the protection and fulfillment of disabilities rights. Implementation of artificial intelligence through technological innovation and special infrastructure for disabilities and public service standards for disabilities in Banyuwangi: computer screen reader software, braille printers, braille scans, hearing it tools, audio graph tools to measure hearing, deaf speech electrolytes,

chairs electronic wheels, regulations on braille printing disabilities, braille computers, Jaws applications for pc, talk voice to read mobile applications, embosser printers, braille reference books, etc. The implementation of public service standards for disabilities in Banyuwangi can be realized by the government, education service providers, stakeholders, the community, and the private sector. Of 250 blind peoples in Banyuwangi, almost 50 blind people can operate Android computers and PCs with the Jaws application. This innovation makes it easier for disabilities to access services and policies.

Artificial Intelligence technology for people with disabilities is the discovery of the Jaws application, which is a text to voice application. Job Access With Speech is a screen reader, which is a software that is useful for helping blind people using computers. Jaws is made for visually impaired people and people who suffer from the low vision so that they can easily use Microsoft Windows personally. With this tool, blind people and low vision can easily access computers and can even let go of dependence on other people to use them. Jaws is designed as best as possible by considering many aspects, therefore Jaws need to design tools that make it easier for people with visual impairments and low vision. Jaws is equipped with a screen that can pronounce text (text-to-speech). Also, the keyboard used is more comprehensive with the ability to interact with the monitor. The way Jaws works is to read all the text that appears on the screen, reads the text in an English accent, so it is not surprising that writing in Indonesian has an English robotic accent. Only recently have there been attempts to Indonesianize the guides and text reading. In this prototype, the scanned text is then converted by OpenBook, then the computer will read it word for word automatically. Previously, the vocabulary of up to 10 billion words has been entered into the computer. Of 250 blind peoples in Banyuwangi, almost 50 blind people can operate Android computers and PCs with the Jaws application. It is the best innovation in realizing public service standards for disabilities.

Banyuwangi strategy and innovation attaches importance to the Public Procurement of Innovation: current knowledge-based innovation policies incorporate initiative ideas aimed at stimulating new solutions in public service standards. Success factors for artificial implementation in Banyuwangi are:

a. Focus on specific problems and needs and existing solutions.
b. Articulate functions transparent which could be evaluated and verified.
c. Create evaluation models that support innovation and novelty.
d. Government develops and encourages innovation and socializes.
e. The existence of cooperation, partnerships, innovation as supporting instruments.
f. Accommodating bottom-up policy input aspirations from citizens.
g. The financial budget that facilitates policies so that public service standard policies can be implemented here is a law that legalizes policies so that public service standard policies can be accommodated.
h. Participation from all components of society in the implementation, the community is not only a recipient of policies but also provides feedback.
i. The government accepts criticism, input, and suggestions from service providers and users so that constructive corrections can improve the quality of public services [7], [12], [15].

The importance of knowing the role and efforts made by the Government in the Formulation of Regional Regulations concerning the Protection and Fulfillment of the Rights of Disabilities aims to find out whether, in the policy formulation process, the government has carried out the process optimally. Whether in terms of preparing a formulating team, coordinating with related policy support institutions or agencies, or involving relevant stakeholders as well as practitioners and academics as well as disabilities. This is aimed at the

perfection of policy formulation and implementation.

The implementation has the full support of all agencies and SKPD so that there is the will of all parties who support the realization of innovation in public services. There is a positive response from a participatory society and people who are critical of awareness of their rights. Transparency accountability in public services, monitor and assist the development and development. What is needed by public service providers, what can be provided to improve services in public services for all people and groups of disabilities? The existence of technology that supports the process of providing services in public services. The existence of a law that supports the Public Service process. The existence of a budget that is supported by various parties to support the Public Service process. One building service that can simplify the service process to the community. The plan and design of the location arrangement of public service spaces are very simple and easy to understand even by the general public, so that in only one place and one building, the public can access services and various kinds of service products by support AI technology. One-stop and one-door service methods in Mall public services in Banyuwangi, which in the innovation of the variety of products that are presented in various ways. In one-stop and one-stop services, the service product provided is only one type from one agency. In addition to the service process and also the tools used, in conventional or classical methods the tools used tend still incompatible, the service process takes longer than what was promised and is expected so that it can slow down the service process that has been processed but is far different when it will be carrying out the process of public services in terms of tools and service processes has tended to be carried out in a modern way, both the tools used to accelerate the service process in public service malls that are time, technology support, efficient and special service standards for disabilities.

5.   Conclusion

The implementation of Artificial Intelligence in Banyuwangi innovation on standards diffable public service was realized through technological innovation and special infrastructure for people with disabilities and public service standards for people with disabilities in Banyuwangi: among others, was realized by the presence of computer screen reader software, braille printers, braille scanner, hearing it tools, audio graph tools to measure hearing, deaf speech electrolytes, multi-function wheelchair, regulations on braille printing disabilities, braille computers, Jaws applications for pc, talk voice to read mobile applications, embosser printers, braille reference books, etc. The implementation of public service standards for people with disabilities in Banyuwangi realized by the government, education service providers, stakeholders, the community, and the private sector. Artificial Intelligence formulated important and needed solutions for diffable including public policy, applications, technology, machine learning, public facilities, and access to information. Innovation in Banyuwangi manifested the form of support for regional regulations (PERDA) No. 6 of 2017 that concern protection fulfillment of the rights of disabilities to realize public service standards for disabilities following technological innovation.

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