

The Role of Universities in Preparing Local Governments for the Society 5.0 Era

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ABSTRACT

The Society 5.0 era is an era full of changes and challenges as a result of the industrial revolution 4.0. To be able to face these changes and challenges, good preparation is needed to be able to turn these challenges into opportunities. Education is believed to have a vital role as an agent of change and at the same time able to help us in facing all challenges. This research aimed to identify the challenges of Society 5.0 Era and the role of universities in preparing local governments to face the challenges of Era Society 5.0. This research was carried out by following the stages of a systematic literature review which consisted of designing a review, carrying out a review, analyzing, and writing a review report. The data were taken from electronic scientific journals both nationally and internationally related to the topic being studied. Data was collected by purposive sampling technique using certain keywords through the google search engine. The collected data was then analyzed using content analysis techniques. This research found that there are various challenges that must be faced in Society 5.0 Era and universities have a strategic role in preparing the government to develop strategies to turn the challenges of Society 5.0 Era into opportunities both in terms of preparing the necessary human and technological resources. The findings of this research, First, the challenges of local governments in entering the era of Society 5.0 include the readiness of human resources and technology. Second, in facing these challenges, universities have a vital role to help local governments. Universities as centers of technology development and dissemination are able to assist local governments in preparing and improving the quality of human resources and technology required by local governments. For this reason, it is recommended that local governments collaborate and collaborate with various universities so that they are ready to enter the Society 5.0 era and are able to turn these challenges into opportunities.

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1. INTRODUCTION

Technology is a completeness or infrastructure that is needed by humans today. Technology is an item or tool that humans need to meet their needs and survival (Sporn, 2015). Technology is growing

day by day so that humans feel it is easier to do various things, especially in carrying out their activities. The existence of technology clearly has a positive impact on human life (Sporn, 2015). The positive impacts include facilitating access to communication or exchanging information, improving work quality, and creating effectiveness and efficiency in doing or doing various things (Cavdar & Aydin, 2015; Sahal, 1980). So, it can be said that technology is able to make human life easier (Lau & Wong, 2001).

Because they are used to being assisted by technology, this affects people's expectations in various ways. Everyone today expects that everything can be solved easily and quickly and from anywhere and anytime with the help of technology (X. Wang et al., 2016). This also applies to people's expectations in obtaining services from the government. With the existence of increasingly sophisticated technology, people hope that the services provided by the government can be carried out more effectively and efficiently.

Therefore, the government is obliged to follow technological developments to improve service quality and realize community expectations through the implementation of e-governance (Ioppolo et al., 2020). However, realizing e-governance in accordance with the needs of the Society 5.0 era is not an easy problem. In realizing e-governance that is able to provide effective and efficient services, the government needs the support of competent human resources and qualified technology. Because superior human resources will be able to create and deal with all forms of existing technological developments (Sołtysik-P & Zdonek, 2021).

In order to prepare human resources and technology, universities as the highest educational institutions have a very important role in preparing human resources and technology. Higher education is an institution whose job is to produce quality human resources who are ready to work. Likewise in technology development, most of the existing technology is the work of academics and researchers at universities.

Considering the importance of the government to follow technological developments and the role of universities in facing the Era of Society 5.0, this research aimed to identify the challenges of Era Society 5.0 and the role of universities in preparing local governments to face the challenges of Era Society 5.0 (Roblek et al., 2020). Specifically, the identified challenges are viewed from the human and technological side that must be considered by local governments. Likewise, the role of universities is also focused on preparing human resources and technology for local governments.

2. METHODS

This research was carried out by following the stages of a systematic literature review which consisted of designing a review, conducting a review, analyzing, and writing a review report (Snyder, 2019). The data were taken from electronic scientific journals both nationally and internationally related to the topic being studied. Data was collected by purposive sampling technique using certain keywords through the google search engine. Furthermore, the researchers analyzed the data that had been collected qualitatively using content analysis techniques.

3. FINDINGS AND DISCUSSION

Society 5.0 Era Challenges for Local Government

In carrying out their duties, local governments have at least eleven mandatory authorities that must be carried out. These powers include public works, health, education, culture, agriculture, transportation, industry, trade, the environment, cooperatives, and employment. In carrying out this authority, local governments often deal directly with the community. Considering the large number of people who must be served by the government, if it is handled using a service system that is still manual, the services provided by the local government will be ineffective and inefficient,

In the face of the Society 5.0 era which requires alignment between humans and technology, changes must be made. However, surely, these changes will go through various challenges. The

challenges faced by local governments in facing the Society 5.0 era in terms of human resources and technology based on the data obtained are described below.

Challenges for HR in Local Government

HR is the most needed thing for every institution where humans are the main actors. HR is the first factor that affects the progress of an institution. If there is a lack of human resources in an institution, then it is most likely that the institution will not be able to develop and face many obstacles in its development (Ellitan, 2020). In its role as workforce, it is very important for HR to have superior abilities which are able to develop their respective roles. HR is very influential on the smoothness and success of an institution (Yasmeen et al., 2020). In the era of society 5.0, human resources with superior capabilities are needed. In general, there are various challenges faced by HR in the era of Society 5.0. These challenges include:

1. Digital Skills

In carrying out their work, all human resources in the local government environment must have good digital skills. Digital skills in question are skills in using the latest technology in an effort to operate or realize e-governance. Because in this era, many people are already classified as smart society, or people who already have digital knowledge and skills (Foresti et al., 2020; Hadiyat, 2014).

However, the number of people who have low digital skills is still quite large, even in DKI Jakarta (Arrochmah & Nasionalita, 2020). Those who have good digital skills will want everything to be done more easily using technology, but those who have low digital skills are likely to experience obstacles in utilizing the technology provided (Sampoerno & Herwandito, 2021). To realize e-governance, it is necessary to have human resources who have good digital skills, so that they are able to serve the community optimally to meet smart society's expectations and help people who experience obstacles (Larsson, 2021).

However, unfortunately, until now, there are still many human resources available in local governments who have problems with digital skills, as happened in the Manado city government (Ruth et al., 2018), Sidoarjo District (Mariano, 2019), and Central Java Province. (Irawati, 2020). Thus, this becomes a big challenge for local governments in implementing e-governance in the face of the Society 5.0 era.

2. Creativity and Innovation

To provide the best service, human resources owned by local governments must be creative and innovative. This is because community needs and community problems in the Society 5.0 era are increasingly complex. For this reason, creativity is needed in creating various solutions to solve these problems. In this era of Society 5.0, it is also important to have innovative capabilities to produce new solutions that are sustainable and in accordance with the development of community needs (Ferreira & Serpa, 2018). In other words, higher order thinking skills such as critical, creative, and innovative thinking are needed in the Society 5.0 era (Supendi & Nurjanah, 2019).

In reality, the creativity and innovation of human resources in local government are still low (Agusta & Jaya, 2021; Sulistio, 2010). This situation requires regional leaders to be able to motivate their human resources to be more creative and innovative (Supriatna, 2020). Especially in terms of creativity and innovation in terms of the creation and use of technology that can unite the community with technology to facilitate services so that services that meet the expectations of smart society are realized (Phuyal et al., 2020).

3. Multitasking

Considering the complexity of services and community problems in the Society 5.0 era, human resources owned by local governments are required to have multitasking abilities or become smart state civil servants (Chrisnandi, 2019). Multitasking means having various kinds of skills that support the implementation of work to be effective and efficient (Abdullah, 2020). Thus, multitasking will affect one's productivity (Shin et al., 2020; P. Wang et al., 2020). In addition, with the simplification of the bureaucracy, it is important that human resources are owned to master various types of expertise so

that they are able to handle various jobs and problems. This is because in the Era of Society 5.0, the problems faced by the community will be more complex (Elim & Zhai, 2020).

The existence of multitasking human resources is very much needed by local governments in the era of Society 5.0. However, in reality it is very difficult to form human resources, namely ASN in local governments who are able to have multitasking abilities and high productivity. Even from research data conducted by several researchers, it shows that the productivity of civil servants in local governments is low (Komara, 2019; Sudiarta, 2020).

Challenges in terms of Technology

Technology in the era of society 5.0 will be highly developed, especially digital information and communication technology (Söderholm et al., 2019; Yasmeen et al., 2020). As technology develops, entering the era of society 5.0, the more and more complex the challenges that must be faced (Gladden, 2019; Phuyal et al., 2020). The following are the problems faced by local governments related to technology.

1. Limited Supporting Facilities

The supporting devices for the implementation of e-government will affect the success of the e-government implementation (Kumajas, 2021). Adequate supporting facilities and infrastructure for the implementation of e-government will have a positive impact on the implementation of e-government and vice versa (Alshehri & Drew, 2010). In the implementation of e-governance, the obstacle that is often experienced is the existence of insufficient supporting facilities for e-governance implementation (Foresti et al., 2020).

These obstacles are also obstacles experienced in Indonesia (Novita, 2014). such as in the implementation of e-government in Kulon Progo District (Shafira & Kurniasiwati, 2021), in Kota Samarinda (B. P. Dewi et al., 2020), and in Gorontalo City (Mohi & Botutihe, 2020). The implementation of e-government in these areas is experiencing problems due to the limited supporting facilities they have.

2. Changing Technology

The emergence of Society 5.0 cannot be separated from the emergence of the industrial revolution 4.0. Where the industrial revolution 4.0 has produced various kinds of technology that facilitate all aspects of human life. Furthermore, it changes the social order of society which makes society inseparable from technology (Berawi, 2019). With such rapid changes, local governments who wish to implement e-government must be able to continuously update the technology used to facilitate services. For example, changing a web-based system to a mobile-based application system where currently people prefer mobile-based applications such as Android and IOs (Irsan, 2015).

3. Easy-to-Use Technology

The use of technology is intended to facilitate humans. Thus, technology users have the hope that by utilizing technology, they can do work or activities more easily. This is also the hope of the community with the use of technology by local governments. The community hopes that it will be easier for them to get services (Mariano, 2019).

However, in reality there are still many e-government systems owned by local governments that have not been able to provide convenience for the community and seem ineffective (Angguna & Gani, 2015; N. K. Dewi & Jayanti, 2017; Sudrajat et al., 2003). There are still many existing e-government systems that have not been able to make people feel helped or feel easier (Aprilia et al., 2014).

4. Eco-Friendly Technology

The existence of environmentally friendly technology is an important issue in Era Society 5.0 (Tabaa et al., 2020). This is because sustainable development is one of the main goals in this era (Kim et al., 2021). The technology applied must use technology that is energy efficient and does not cause pollution (Nagy & Hajrizi, 2019). Therefore, local governments must also ensure that the technology developed and applied to serve the public is environmentally friendly technology.

The Role of Universities in Facing the Era of Society 5.0

This section will explain the role of universities in facing the Era of Society 5.0 from the point of view of the quality of human resources and technology. The following is an explanation of the role of universities in facing the Era of Society 5.0 based on the results of data analysis that has been carried out.

The Role of Higher Education in terms of HR Quality

Higher education as the highest educational institution has a very important role in preparing qualified human resources (Boccanfuso et al., 2015; Cintamulya, 2015). This is evidenced by the level of education having a positive effect on the performance and productivity of workers (Benos & Karagiannis, 2016). The same thing applies to human resources in the local government environment. This has been proven from several studies regarding the level of productivity and performance of human resources in local governments such as in Indragiri Hulu District (Wijayanti, 2014), Manado City (Londong et al., 2015), and Central Java (Septiana, 2016). Based on the data obtained, specifically in terms of preparing and improving the quality of human resources in local governments to face the Society 5.0 era, the role of universities includes:

1. Digital Skills

Currently, universities are required to be able to produce graduates who are able to master digital literacy and skills (Helaludin, 2019; Wijaya et al., 2016). For this reason, universities are required to implement various types of technology that are able to shape students' skills and digital literacy (Effendi & Wahidy, 2019). This means that universities play an important role in preparing human resources that can later be utilized by local governments.

In terms of improving the digital skills of human resources in the local government environment, universities have a vital role in providing training, mentoring and workshops. Local governments can collaborate with universities to improve the digital skills of human resources in the local government environment (Sulistiyani & Heronica, 2020), such as the training carried out for HR at the Malang City Civil Service Agency (Saputra & Kurniawansyah, 2019), and in Mamminasata area (Masyhur, 2014). The training was carried out in collaboration with the local government and universities.

2. Creativity and Innovation

The ability to think at higher levels such as critical, creative, and innovative thinking has also become an agenda in universities. As agents of change, universities are expected to be able to equip students with higher-order thinking skills (Chotimah & Nurdiansyah, 2017; Marhadi & Erlisnawati, 2018). In other words, universities have a vital role in preparing human resources who have the ability to be creative and innovate. Higher education has proven to be able to produce many human resources capable of producing creativity and innovation products in the form of technology that can be utilized by the community (Muresan & Gogu, 2012). Even universities are often centers of creativity and innovation, especially in the field of technology (Moon et al., 2019; Pogodaeva et al., 2015).

So, it can also be conveyed that universities have a strong role in preparing human resources who have high-level thinking skills which include the ability to be creative and innovate. Likewise, the increase in creativity and innovation of human resources owned by local governments can be improved through collaborative activities between local governments and universities through training programs. Collaborative activities of universities and local governments in the form of training have been proven to be able to increase the creativity of human resources in the local government surroundings (Sambung, 2020; Wahyuni, 2014).

3. Multitasking

Multitasking is one of the skills that must be possessed in the 21st century era (Yoon et al., 2013). This is because in this era the world of work expects the realization of labor efficiency which requires human resources to be able to do various types of work in almost the same time (Matt et al., 2020; Rauch et al., 2020). Therefore, universities are also required to provide multitasking skills for their students.

Thus, it can be said that universities also have an important role in the formation of human resources with multitasking skills.

In relation to human resources in the local government environment, it also indirectly provides universities with human resources who have multitasking skills for local governments. So, technically, to improve the multitasking skills of local government human resources, it can also be done through collaboration with universities. And multitasking skills are proven to be formed and improved through training programs (Dux et al., 2009).

Paranan College from the Technological Side

Universities have a vital role in the development and dissemination of technology. Universities are one of the main places where technology is developed (Woodward et al., 2006). Furthermore, universities are also places where technology is transferred and disseminated (Amry et al., 2021; De Moortel & Crispeels, 2018).

So that in terms of the limitations of technological support facilities, local governments can cooperate with existing universities so that the facilities owned by universities can be used together. Such as the collaboration carried out by the Bogor Agricultural Institute with the Bogor regional government in the field of agricultural technology that can be utilized by relevant agencies and the community at the same time (Widayat et al., 2011). The same thing can also be done in the implementation of other public services.

In terms of the availability of technology needed by local governments in carrying out public services, it can also be supplied from universities. In fact, there are many technology products in the form of web and mobile-based applications that have been developed by universities in an effort to support the implementation of e-government. For example, a mobile-based e-government application developed for the government of Situbondo District (Ibad & Lolita, 2020), Central Kalimantan Province (Widiatry et al., 2015), and in Tanjungsari Village (Zaliluddin et al., 2020).

This shows that for the challenges of technological development and change, the government is able to face this by fostering good relations with universities. Likewise, the development of environmentally friendly technology can also be done in collaboration between local governments and universities.

4. CONCLUSION

In general, there are two important points that can be concluded from this research. First, from the data analysis conducted, it was found that there are various challenges that must be faced in Society 5.0. Era. The challenges faced by local governments in facing Society 5.0 include challenges regarding the readiness of human resources and technology. Second, in facing these challenges, universities have a vital role to help local governments. Universities as centers of technology development and dissemination are able to assist local governments in preparing and improving the quality of human resources and technology required by local governments. For this reason, considering the results of this research, the researcher suggests local governments to collaborate with various universities so that they are ready to enter the Society 5.0 era and be able to turn these challenges into opportunities.

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