THE COMPETENCIES OF ARCHIVIST ON THE DIGITALIZATION INTO ONE DATA

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Abstract: *The era of industrial revolution 4.0 has transformed conventional work into digital basis which has impacted archives management in government, private, and community organizations sectors. Archives has an important role in accountability for activities and budgets within the government, therefore archivists are required to have various competencies to support their performance. This study aims to determine essential competencies archivists must have in digitizing documents towards* Satu Data *(One Data). This research uses literature study research methods, policy analysis, and interviews with several archivists who have had experience in managing archives from various government agencies. Based on the results of the study, it was found that core competencies in digitizing archives, such as (1) technical competence; (2) Professional competence; (3) Personal competence; (4) Sociocultural competence; (5) Managerial Competence; (6) Archival Competence in Dynamic Archive Management; (7) Archival Competence in Static Archive Management; (8) Archival Competence in Archival Development; (9) Archival Competence in Processing and Presenting Archives into Information; (10) Digital Archive Competence. This research concludes that an archivist must possess the principles of archivist Competency Standards in the digital era which include understanding of all existing regulations and guidelines regarding archives, having education as an archivist both through formal and nonformal education, having skills in operating computers and existing applications, enabling skills in the authentication process, and facing the challenges of rapidly changing technology with a broad-mind.*

Key Words: *technology, digital, archive, authentication, competence, data.*

1. INTRODUCTION:

The era of industrial revolution 4.0 has transformed conventional work into digital basis which has impacted archives management in government, private, and community organizations sectors. Archives have an important role in accountability for activities and budgets within the government, moreover, archives have an important role for all in every program, planning, forms of evidence of accountability for activities and the decision makings made by the leaders. The implementation of archives in Indonesia is demonstrated by the use of electronic signatures by most of governmental institution in the process of making archives as stipulated on the Law Number Law Number 19 of 2016 concerning Amendments to Law Number 11 of 2008 concerning Electronic Information and Transactions. The Law has impacted major influence on the archives practice, one of which is the making of archives. The Law enables flexibility of making archives. It is no longer limited by time and place. The concept of digital archives has a major influence on the implementation of archives activities and archives making. This concept is assuredly supported by the archivist who have influence in the archives making equipped with the competencies of archivist for archives digitalization process. In addition, the role of electronic information in archives has a major influence in many sectors. However, on the other hand, a new issue arises due to forgery and editable data. In addition to the archive process that may be made in electronic form based on the Electronic Service Manuscripts, it leads to the fact that the physical archives have been transformed into digital archives. Moreover, the covid-19 pandemic that has been occurring for two years challenged the archivist to work harder due to the necessity of archives authentication. In addition, new problem arises from the making of electronic archives, aside from the possibility of forgery, the variety of archive storage places that provide various data, archivist has the role on archives digitalization process into one archives data. The National Archives of the Republic of Indonesia as the patrons, has led towards one data archive for Indonesia as mandated by Article 1 paragraph (1) of the Presidential Regulation of the Republic of Indonesia Number 39 of 2019

concerning One Indonesian Data "One Indonesian Data is the government data management policy to accurate, updated, integrated and accountable data, which is accessible and usable by central and regional governments through compliance with Data Standards, Metadata, Data Interoperability, and using Reference Codes and Master Data,". Based on the importance of the role of archivists in digitizing archives into one data, the **authors are interested in examining the competence and role of archivists in digitizing archives into one data**.

2. LITERATURE REVIEW:
Definition of Industrial Revolution 4.0 and Society 5.0
The world has experienced various changes and leads to the rapid development in all matters including the industrial sector. Recently, the term industry 4.0 is frequently mentioned. However, what is meant by industry 4.0?

This term was first mentioned at the Hannover Fair on 4 to 8 of April in 2011, the term used by the German government to advance the current industrial sector into the next level supported by the technology. The industrial revolution 4.0 or also commonly known as the "cyber physical system" demonstrates a phenomenon of collaboration between cyber technology and automation technology.

The Industrial Revolution 4.0 or commonly known as the cyber physical system is a revolution that focuses on automation and collaboration between saber technologies. The 4.0 revolution emerged in the 21st century with the main feature of integration of information and communication technology into the industrial sector.

The emergence of this revolution has changed many things in various sectors. One of which is the alleviation of work from using many manpower replaced by machine technology to run the operation.

The German Chancellor Angela Merkel in 2014 described the meaning of the industrial revolution 4.0 as the comprehensive transformation of the whole sphere of industrial production through the merging of digital technology and the internet with conventional industry.

In addition, according to Schlechtendahl et al (2015) define the industrial revolution which emphasizes the speed element of the availability of information, including industrial environment that enables all entities to be connected and may easily share any information with each other.

Industry 5.0 or Society 5.0
All the progress and changes caused by the industrial revolution 4.0 may let many people deem that no more revolutions can happen. However, such opinion was disappeared after the era of Society 5.0 emerged as a concept presented by the Japan Business Federation. The concept that has been proposed in the 5th Science and Technology Basic Plan is referred as the future society that must be aspired by Japan. In the other words, the era of society 5.0 aims to integrate virtual space and physical space. The integration aims to provide ease for all activities. The balance of economic growth and settlement of social problems by utilizing a system that integrates the two will provide ease in all sectors, especially expanding job prospects.

Based on the explanation above, it can be concluded that in broad perspective, the basic difference between 4.0 and 5.0 is the fact that the industrial revolution 4.0 focuses on the aspect of work automation. Meanwhile, the era of society 5.0 emphasizes on expanding job prospects and optimizing working hours accountability in accomplishing work. Both concept aim to improve human life using different approaches.

Definition of Archivist
According to Sulistyo-Basuki (1991:147), a profession is a job that requires competent education. Professionalism of a person is demonstrated by his performance on the work with the competencies the person has. Competence is associated with professionalism. The competence enables level of integrity is measured with the performance of a person.

The profession of archivist is an important component of every institution, notwithstanding that some people underestimate the profession. To confute such assumption, several efforts that shall be done are as follows: (1) building the confidence of archivist, (2) improving the image of archivist, (3) developing the potency of archivist, and (4) developing profession organizations. (5) Keeping the information on archival technology update.

In passing Archives
Adjustment of In passing Archives is the process of appointing Civil Servants (PNS) in functional positions to fulfil organizational needs in accordance with laws and regulations within a certain period of time. Civil Servants (PNS) who have Associate Degree III, Associate Degree IV and Bachelor based on the decisions of authorized officials can be adjusted (In passed) into the functional position of Archives in the Skills and Expertise Category. The

enactment of the Regulation of Ministry of Administrative and Bureaucratic Reform of the Republic of Indonesia Number 26 of 2016 (Permenpan Number 26 of 2016) increases the number of archivist civil servants (PNS) significantly.

Definition of One Data:

One Data is an initiative from Indonesian government to encourage data-driven policy making. To achieve this goal, the governmental data must be accurate, transparent, and interoperable. In the upcoming projection, archives must have One Data, to enable accessible information on archives, such as the National Library that has accomplished the IOS (Indonesia One Search). Moreover, the possibility to realize BIG DATA on Archives, Libraries and Museums integrated into ONE DATA as in Finland is conceivable.

3. METHOD:

This study uses literature research methods and interviews with several archivists experienced in managing archives from various government agencies. Sugiyono (2015: 225) asserted that when based on the source of data, data collection can use primary sources in the form of data directly obtained by data collectors. Secondary sources in the form of data indirectly obtained by data collectors, such as through other people or documents. The model for determining the data source informants in this study is based on a non-probability sampling approach with a snowball sampling technique that enable authors obtain recommendations to choose data source informants based on the information from the first informant. Data collection techniques used in this study are observation, interview, and documentation.

4. RESULT AND DISCUSSION:

Law Number 43 of 2009 concerning Records and Archives Administration stipulates "An archivist is a person who has the competence in the records and archives administration acquired through formal education and/or education and training thereon and has the functions, duties, and responsibilities of conducting records and archives administration duties and responsibilities of carrying out archival activities. Based on the definition, an archivist is a certain functional official who is required to have competence in the field of archives obtained from formal education with a major in archiving and/or through archival education and training who has duties, functions and responsibilities in carrying out activities and archives management, including making archives, use of archives, archive maintenance and archive shrinkage. In the era of the industrial revolution 4.0, archivists are required to have various competencies to rescue the State archives and the implementation of archives for all institution effectively and efficiently. One of archives implementation is in the process of digitizing archives. Various required competencies for archiving including:

- Technical competence: technical knowledge and skills related to management from making to depreciation stage
- Professional competence: the ability to comprehend extensive and profound archival theory not limited to developing the theory
- Personality competence: the ability to control a steady, intelligent, dignified personality, high morality, exemplary and problem solving
- Sociocultural competence: the ability to serve the community, the ability to interact and adapt to a pluralistic society of various religions, ethnicities and cultures in carrying out their duties
- Managerial Competence: ability to lead a team, coordinate and solve problems
- Archival Competence in Dynamic Records Management:

Guidelines for the Management of Dynamic Archives in Law Number 43 of 2009 concerning Archives:

Chart 1 Dynamic Archive Management Guidelines Based on Law Number 43 of 2009 concerning Records and Archives Administration cited from the Presentation of Setyo Edy Susanto, Middle-Expert Archivist for Archivist Provisons
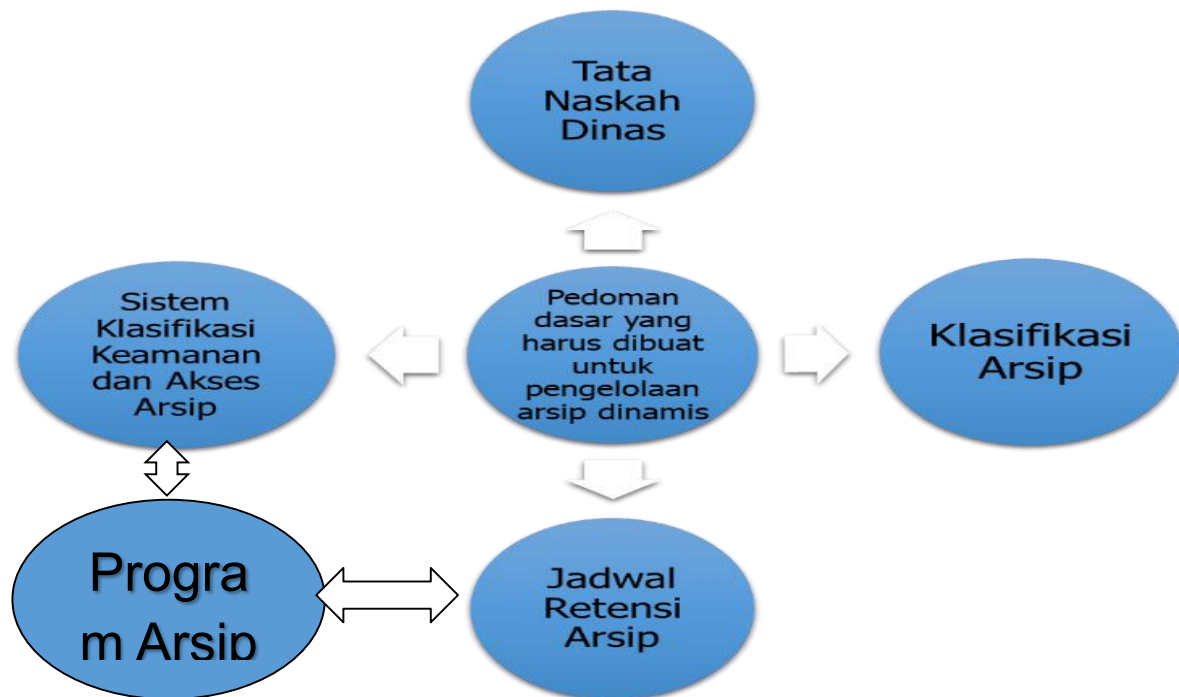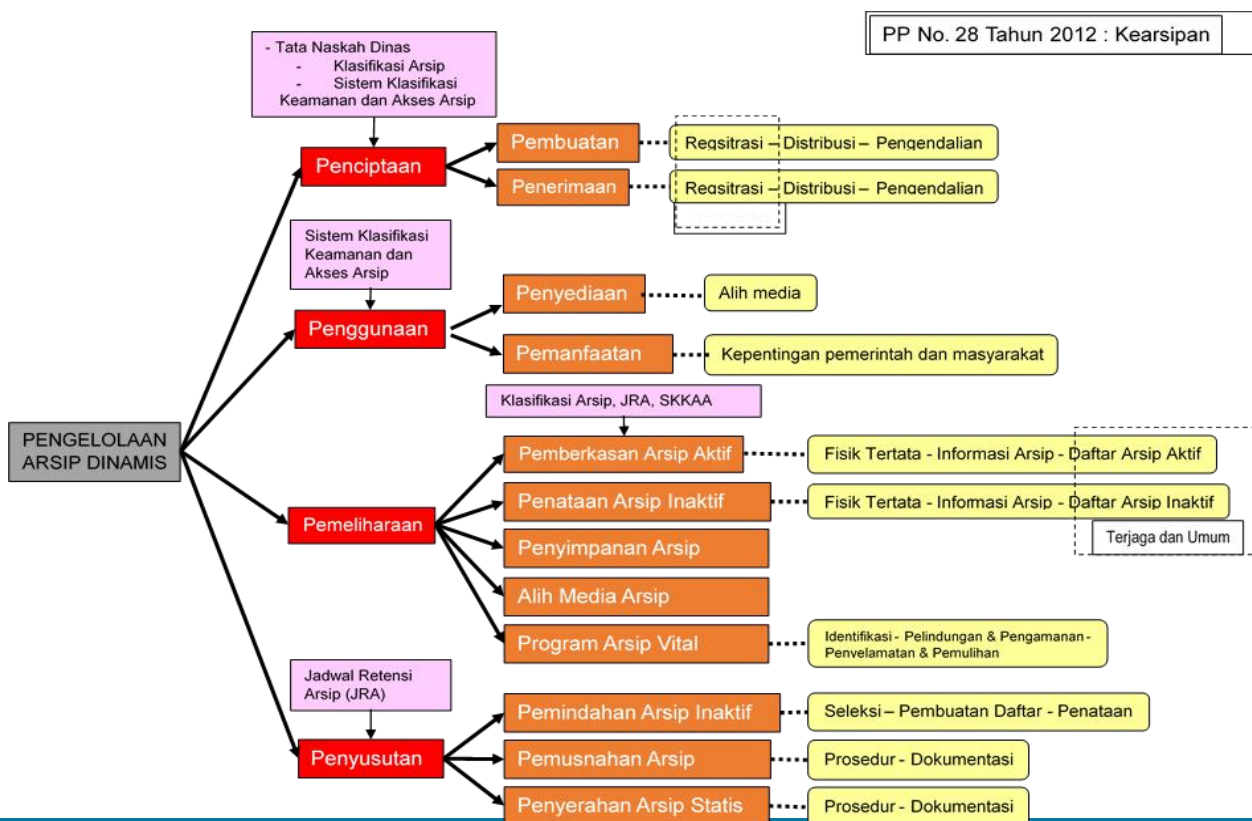
Chart 2 Dynamics Archives Management

Based on Governemnet Regulation Number 28 of 2012 concerning Implementation to Law Number 43 of 2009 concerning Records and Archives Administration cited from the presentation of Setyo Edy Susanto, Middle-Expert Archivist on Archivist Provisions.

1. Archival Competence in Static Archive Management
2. Archival Competence in Archival Development
3. Archival Competence in Processing and Presenting Archives into Information
4. Digital Archive Competence:
- create digital/electronic archives
- Manage dynamic and static archives in electronic and digital form
- Provide electronic archive services to the public
- Acquisition of electronic archives in digital form
- Maintain archives in digital form
- Provide coaching remotely using digital/electronic media. (Cited from the explanation of DR. Andi Kasman, SE, MM, Deputy of Information for the Development of the National Archives System of the Republic of Indonesia, General Chairperson of the National Board of Indonesian Archives Association in National Policy Development Competence of Archives in the field of technology IN THE DIGITAL ERA).

Based on the mentioned competencies, an archivist has an important role to adapt to the environment and technology during the person development for digitizing archives and towards one data. In addition, archivists are required to carry out archive authentication from physical to digital by transferring media, or by watching the existing authentication of electronic archives. Based on the Regulation of the Head of the National Archives of the Republic of Indonesia Number 23 of 2017 concerning Amendments to the Regulation of the Head of the National Archives of the Republic of Indonesia Number 5 of 2016 concerning Quality Standards for the Work of Functional Archives, it is stipulated that the authentication of archives is carried out and become the responsibility of the supervisor archivist. We believe that archives authentication is one of the quite heavy competencies and must be possessed by archivist. Moreover, it is the responsibility of the archivist in the category of expertise. As one of the important competencies that must be possessed by an archivist, the National Archives of the Republic of Indonesia as patrons of archivists in Indonesia is encouraged to review these competencies, as well as conduct training and education, and certification tests related to archive authentication capabilities in order to maintain the of archives in the digital era. As an addition, the digital era demands archivist must be skilled in digital, technical, managerial and socio-cultural competencies to reach the One Data Mission Vision for Indonesia, as well as the integration of data from various Ministries/Institutions and Agencies to provide ease in presenting archives as useful information for the people

5. CONCLUSIONS AND SUGGESTIONS:

Based on the foregoing discussion, it can be concluded that an archivist must have capabilities include the principles of archivist Competency Standards in the digital era including understanding all existing regulations, laws and guidelines regarding archives, obtained education as archivists through formal education and education and training, must be skilled in operating computers and existing applications, has open character and ready to face the challenge from rapid change of technology, has the ability to make digital/electronic archives, manage dynamic and static archives in electronic form, provide electronic archive services to the public in digital form, preserve archives in digital form electronically, maintains digital archives, provides remote coaching using digital/electronic media, capable to compare growth and decline in numerical data between time periods, demonstrates typing and data entry skills in advanced level, demonstrate skills in office suite products, software applications and databases, capable to search information efficiently and simply, demonstrate basic skills in managing activities with digital technology, develop, submit and adjust budgets and monitor expenses digitally, demonstrate problem solving techniques in digital form, capable to use archives and conduct research and present results in appropriate formats (graphs, reports) in digital form, conduct collaboration with colleagues and professionals using digital technology. The authors suggest that digital archiving activities need to be included in regulations related to archivists. Archivists must be open and adaptive to the development of information technology in the digital era. Regulations that aimed to develop the ecosystem of archivist shall be enacted in order to produce professional archivists in the digital era. It is necessary to increase support for archival activities from various stakeholders (such as funding sector, infrastructure sector, competency development).

Expanding opportunities to increase knowledge, insight, and networking, and authentication competence should be carried out by archivists with expertise level, as well as certification especially for authentication programs or archivists who have competence in managing archives in electronic and digital forms. Moreover, the National Archives of the Republic of Indonesia is expected to accomplish the big program of ONE DATA for the benefit of service and data uniformity or to archive information based on the needs of people and the State.

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