Innovation of Competence Development of State Civil Apparatus Through Knowledge Management Model

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Abstract. Competency development of the State Civil Apparatus (ASN) has become an obligation for government agencies in Indonesia. This relates to the management of human resources carried out by the agency as an organization in order to find, use, maintain, and develop human beings. Innovation is carried out whose implementation is through changes in development patterns, changes in competency development governance, development of teaching tools such as learning management systems and knowledge management systems. Knowledge management system is a model that is currently being developed to accommodate the process of human resource management/ASN through training to maintain and develop the ability and willingness to share knowledge. The purpose of this study is to explain the various applications of knowledge management systems that were developed as innovations for developing ASN competencies. This study uses a qualitative descriptive research methodology, with the method of extracting data through a desk study based on the knowledge management system model document developed by government agencies. Based on the results of this study, it was found that the knowledge management system is the choice for government agencies to develop the competence of their employees. This system is well managed through good governance and in accordance with the needs of employee competency development. Knowledge management developed by government agencies can be an option for employees to develop competencies independently through colleagues. In conclusion, KMS in several government agencies that are examples in this study still need to be developed and maintained according to their respective

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maturity levels. In order for this KMS to be sustainable, the development strategy must be in line with the parent organization's performance targets, because KMS is one of the instruments for developing the competence of the entire organization as a learning organization.

Keywords: Innovation · Competency Development · Knowledge Management System · Human Resources · Governance · Government Agencies

1 Introduction

The development of State Civil Apparatus (ASN) competence has become an obligation for government agencies in Indonesia. Competency development is a series of human resource management whose division of competencies has been regulated in the Regulation of the Minister of Administrative Reform and Bureaucratic Reform of the Republic of Indonesia Number 38 of 2017 concerning Competency Standards for State Civil Apparatus Positions, namely Technical Competence, Managerial Competence, Social Cultural Competence. Competency development basically talks about human resource management carried out by agencies as organizations in the context of finding, using, maintaining, and developing people.

Many government agencies implement competency development innovations through changes in development patterns, changes in competency development governance, development of teaching tools such as learning management systems (LMS) and knowledge management systems (KMS). Several agencies such as the State Civil Service Agency, the National Institute of Public Administration, and the Ministry of Finance have their own platforms and even implement the integration of LMS and KMS systems.

Knowledge management system (KMS) is a model that is currently being developed to accommodate the process of human resource management/ASN through training to maintain and develop the ability and willingness to share knowledge. KMS is currently widely applied to an information system or the use of information technology. As it is well known that information technology has changed the behavior of society and human civilization globally. The development of technology and information currently affects economic life globally, both in the world in general and in Indonesia in particular. With the development of technology that is getting faster and faster, individuals can use technology well according to their needs. Even individuals can work from home because one of the benefits of working from home is the ability to work flexible hours [1].

Currently, knowledge management has not been widely applied to government organizations in Indonesia, although a policy on knowledge management was issued in 2011 through PermenPANRB Number 14 of 2011 concerning guidelines for implementing knowledge management. Management knowledge should be knowledge to increase organizational effectiveness because it can encourage the use of knowledge that is already owned (knowledge reuse) to improve the quality of the decision-making process. In addition, knowledge management can also act as a tool in the process of organizational change or transformation, because knowledge management can help build a learning culture in an organization.

There must be ground-breaking and innovative policies in place to address issues while remaining committed to providing the greatest possible public services to the community [2]. The use of KMS can be regarded as a concrete step towards digital transformation. 90% of businesses and IT executives agree that to be agile and resilient, their organizations need to accelerate their digital transformation with the cloud at the core. Then 63% of executives report the pace of digital transformation for their organization is accelerating, 92% of executives report that their organization innovates with urgency and calls to action this year, while 83% of executives agree that their organization's business and technology strategies are becoming inseparable or even indistinguishable [3]. This means that the situation can trigger leaders to act more quickly in adapting to provide services to service users, especially public services. This means that based on the report, executives/leaders really feel the changes that occur in the organization during the implementation of digital transformation.

The utilization of KMS basically may increase the knowledge of the organization's human resources. Fulfillment. The addition of knowledge will certainly be accompanied by an increase in the competence of ASN as organizational human resources. Moreover, in Government Regulation Number 11 of 2017 concerning the Management of Civil Servants, ASN is entitled and/or obliged to get 20 h of PNS competency development every year.

Competency development prioritizes non-classical methods that emphasize on-the-job learning processes such as coaching, mentoring, e-learning, distance training, data sharing (secondment), outdoor learning (outbound), benchmarking, exchanges between civil servants and employees in private sector/state-owned enterprises/regional-owned enterprises, self-development, learning communities (community of practices), on-the-job guidance, and internships/work practices. This is where KMS is for the fulfillment of ASN competency development.

The purpose of this study is to explain the various applications of knowledge management systems that were developed as innovations for developing ASN competencies and to analyze their strengths and weaknesses. This research has a novelty or novelty value, namely by comparing/differentiating the existing KMS in several agencies which will later be seen as related to the implementation of competency development for every civil servant 20 h per year. For example, the RCWI System as a KMS is intended to assist functional positions in competency development and learning with the community. This article describes the KMS features and feedback and input from users for system improvement. However, there is no emphasis on making KMS RCWI a fulfillment of the overall competence of civil servants and only for certain functional positions [4].

On the other hand, KMS research and development must preserve and build on the significant literature that exists in different but related fields. It is necessary to conduct a review of various fields with the aim of identifying important areas for research [5]. In addition, it provides the view that organizational knowledge management focuses on the potential role of information technology in its implementation process.

The research question in answering the objectives and problems as well as the novelty of this research paper is about how to differentiate the concept and implementation of KMS innovations in government agencies in Indonesia. In addition, there will also be

questions related to how the implementation of the existing KMS is connected to the fulfillment of competency development for every PNS 20 h per year. Therefore, the research paper on Innovation for Competence Development of State Civil Apparatus through the Knowledge Management Model is considered very important, not only related to its implementation but also seeing the value of benefits from the innovation of the KMS model.

2 Literature Review

2.1 Knowledge Management Concept

In technical terms, knowledge management can be interpreted as the management of knowledge. Knowledge management is a tool, technique, and strategy used to maintain, analyze, organize, develop.Knowledge management is a tool, technique, and strategy used to maintain, analyze, organize, develop, and share business expertise [6]. From this understanding, it can be said that knowledge management is an organized management of existing knowledge so that this knowledge can be used and useful effectively to provide a competitive advantage to a company. In addition, knowledge management is the ability to capture, store, and selectively access knowledge related to work and decision making from managers and employees for individual or group actions [7]. Knowledge management from a business point of view has a different meaning, namely it is a systematic and thoughtful business optimization strategy to select, filter, store, organize, and communicate information that is important to business within the company which is intended to improve employee performance and the competitiveness of the company [7].

Nonaka and Takeuchi argue that the fundamental reason why Japanese companies are successful is because their skills and experience lay in the creation of organizational knowledge. Knowledge creation is achieved through the introduction of a synergistic relationship between tacit knowledge and explicit knowledge [8]. Ikujiro Nonaka and Hirotaka Takeuchi in 1991 and 1995, distinguished between tacit knowledge and explicit knowledge, and shared a conversion model for knowledge.

Furthermore, Nonaka and Takeuchi explained that knowledge management is actually formed from knowledge, where knowledge is divided into three types, namely: first, tacit knowledge is knowledge that is not easily described and shared, this knowledge is in the form of experience and expertise possessed by each person. Where this knowledge has not been documented, this knowledge is acquired or developed through interaction and communication with other people. Second, explicit knowledge is knowledge that has been successfully documented, which has a structural nature, is systematic and easy to communicate and share with others. This knowledge can be in the form of books, journals, scientific works, references or others. This knowledge is obtained and developed from the content and information contained in it. The third is potential knowledge. It is knowledge that is used to perform a data analysis and convert data into knowledge. This knowledge is obtained and developed from the analysis of existing data.

2.2 Competency Development Concept

The implementation of competency development is closely related to human resource management. Human resource management (HRM) is the process of acquiring, training, appraising, and compensating employees, and attending to their labor relations, health and safety, and fairness issues [9]. In addition, it is related to how organizations find, use, maintain, and develop people to achieve the desired results effectively [10]. Of course, this all requires policies, practices, and systems that can influence employee behavior, attitudes, and performance [11]. Learning institutions as places of education and training must rethink the content of learning modules. In particular, different and new competency demands have emerged within the framework of the Industry 4.0 approach [12].

Entering a period of adaptation to new habits, of course, requires adjustments in competency development. Changes in ASN competency development are something that must be done. In this regard, LAN as a coaching agency that is obliged to oversee the development of ASN competencies must continue to strive to develop new approaches so that it can always run and transform according to the needs and developments of the times. There are at least 3 main aspects in the competency development policy framework in the new normal era, namely: learning management system, integrated competency development, and competency development for widyaiswara and accreditation policies to support training organizations. One of the important things in implementing competency development is the presence of teachers who have sufficient competence to answer current issues and future learning needs by compiling learning modules with interesting content and oriented to problem solving, problem-based learning, project-based learning, and high impact learning.

2.3 Conception of Technological Innovation and E-government

Today, the world is familiar with the latest digital information and communication technology. This information technology gave birth to a new form of government bureaucratic mechanism, which is referred to as Electronic Government (E-government) [13]. E-government allows for new interactions and communications between local governments to one another. The implementation of e-government in the government sector plays a very important role in realizing the government's desire to improve the quality of public administration services [14].

The increasingly widespread use of applications is an unavoidable impetus for the acceleration and efficiency of work completion. Activities that use this technology are closely related to the term innovation. But, the innovation itself is very broad in scope and not only about technology. The use of the current system/application is not limited to web-based. Many systems/applications have been directed towards the use of mobile applications using smartphones. The design of this knowledge management model would certainly be better if it could also be accessed via a smartphone. Moreover, based on data from the Indonesian Central Statistics Agency (BPS), in 2020 there will be an increase in active mobile broadband subscribers per 100 population, which is 75.00 percent as well as the use of fixed broadband [15]. That means that a mobile application-based system needs to be applied in the knowledge management system model.

The information system of a knowledge management-based system is an innovation that utilizes the development of information technology in digitizing the activity process. Of course, currently web-based systems are developing more widely because they can run in real time for all users. Information systems are very useful for increasing the speed, flexibility, integration, and accuracy of the information produced, so that many parties use information systems to achieve company excellence [16, 17].

Innovation is an idea, practice, or object that is considered/feels new by individuals or community groups [18], as well as thoughts, breakthroughs in the context of reforming administrative government practices and processes, so that they have added value in one or more aspects and/or processes and has elements of novelty, benefits, can be adopted/replicated, sustainable and does not conflict with applicable laws and regulations [19]. Innovation in the public sector emphasizes the "improvement" aspect resulting from the change activities carried out. For example, the provision of public services by the government more effectively, efficiently and of high quality, cheap and affordable in accordance with the needs of the community.

Innovation in the public sector can be interpreted as one or even a "breakthrough" to overcome bottlenecks and organizational needs in the public sector [20]. Then for the business world, innovation is closely related to the activity of modifying the business model and adapting to changes to create a better product or service. The forms of innovation in business also vary, depending on what goals the company wants to achieve, which can be product innovation, internal systems or work processes, for individual or company business models in creating new product concepts, methods, and ideas [21]. The most important thing in innovation is the process of diffusion of innovation or its spread which means that sooner or later an innovation can be accepted depending on the innovation ability that is known by others [22].

The development of a "knowledge management system" as an information system can be categorized as technological innovation and the implementation of digital transformation by government agencies to manage knowledge for the community that requires such knowledge. Technological innovation is a significant component of economic growth because it is a fundamental force that drives and propels the capitalist machine (Schumpeter in [23]. Technological innovation is developing or applying new technologies that are more effective and capable of solving problems [19]. Moreover, technological innovations, mainly information and communication technology and renewable energy are examples of possible developments in 2021 that will enhance living standards, human health, and environmental protection [24].

The results of technological innovation usually appear in several forms, such as inventions, designs, new data, or new knowledge. The spread of technological innovation in all countries and especially in developed industrialized countries is highly dependent on several economic, social, and political factors of the socio-cultural environmental system of society. In addition, the development of information system-based KMS is a step for government agencies in Indonesia to carry out digital transformation. Digital transformation can significantly expand and accelerate coupled with the development group for digital governance systems that are made in almost all aspects of public service activities [3].

2.4 Knowledge Management System as Application of Digital Literacy

The word literacy refers to the ability to read and write. Digital literacy has become more than just the ability to handle computers—like traditional literacy and numeracy, digital literacy consists of a basic set of skills covering the use and production of digital media, information processing and retrieval, participation in social networks for the creation and sharing of knowledge, and various professional computing skills [25].

Digital literacy is one of the pillars supporting the realization of digital transformation towards a modern society. Knowledge management system is an implementation of digital literacy that familiarize users to share knowledge using information and communication technology.

Talking about knowledge, there are 3 perspectives of knowledge. There are three things that are needed to be considered in knowledge, namely (1) how much emphasis is given to understanding the differences between data, information, and knowledge and drawing implications from these differences (2) since knowledge is personalized, in order for individual or group knowledge to be useful to others, it must be expressed in such a way that it can be interpreted by the recipient, and lastly, (3) information hoards of small value; only information that is actively processed in the individual's mind through processes of reflection, enlightenment, or learning can be useful [5].

Knowledge management is a topic that talks about how to build and manage knowledge materials aimed at increasing individual learning and understanding through the provision of information [5]. Knowledge management can also be said as an activity to find, capture, disseminate, and implement knowledge so that it can be improved [26].

3 Method

The research methodology of this study is descriptive with a qualitative approach, the method of extracting data using the desk study method based on the knowledge management system model document developed by government agencies. Qualitative methods are more based on phenomenological properties that prioritize appreciation (verstehen) [27]. The data collected in this study are based on facts that occur in the field and will be explained in written words rather than numbers. In qualitative research, conceptualization, categorization, and description are developed on the basis of "events" obtained during field activities. Therefore, the activities of data collection and data analysis cannot be separated from each other [28].

At the advanced stage, data processing and or reference citations are carried out to be displayed as research findings, abstracted to obtain complete information, and interpreted to produce knowledge for drawing conclusions [29]. In this study, data collection was carried out through searching various sources which were then processed and described in narrative form according to data needs. The population in this study are government agencies that have innovated the competence development of state civil servants by using the knowledge management system model.

4 Result and Discussion

According to the findings of this study, a knowledge management system can be utilized by government agencies to enhance employee competence. This system is well-managed

due to its good governance and adherence to employee competency development requirements.

4.1 National Civil Service Agency Knowledge Management System: I Know BKN

The knowledge management system at National Civil Service Agency (BKN), namely I KNOW BKN is aimed at identifying and compiling the need for implementing a knowledge management system within government agencies for the development of ASN competencies. In designing the model, a discussion forum is held together by inviting interested parties from various work units, identifying the core knowledge needs of government agencies that become organizational values, compiling an analysis and design of a knowledge management system process with a contingency factor approach and building an application in the form of a prototype based web and mobile containing applications which are technology supporting the implementation of knowledge management processes in the management and development of ASN competencies by using knowledge management solutions and foundation methods as well as information system design.

The development of KMS features at BKN are Document Management, Document Search, Knowledge/Experience Management, Discussion Forums, and Chat features.

The knowledge management mechanisms needed to encourage the implementation of KMS at BKN so that it can run well include the following:

a. Commitment from the leadership in supporting knowledge management
b. Regulations governing the implementation and utilization of KMS
c. Giving motivation (reward) to employees
d. Providing opportunities for employees to attend education, training, and seminars
e. Hold regular meetings within a certain time
f. Creating a work environment that supports the knowledge management process
g. Evaluating the implementation and utilization of KMS (Fig. 1).

The technology in question supports the process of discovery, capture, sharing and application of knowledge in the form of information repository facilities, discussion forums, online chat, sharing experiences, work performance systems, web based access to data, expertise locator systems, e-mail and integrated web portals. In the web-based application and mobile application, it is hoped that all work units in central and regional agencies can exchange information and knowledge in the management of ASN, thereby supporting the achievement of government goals in improving ASN resources properly and fostering a culture of knowledge sharing within the work unit in the context of developing ASN competence and organizational performance improvement.

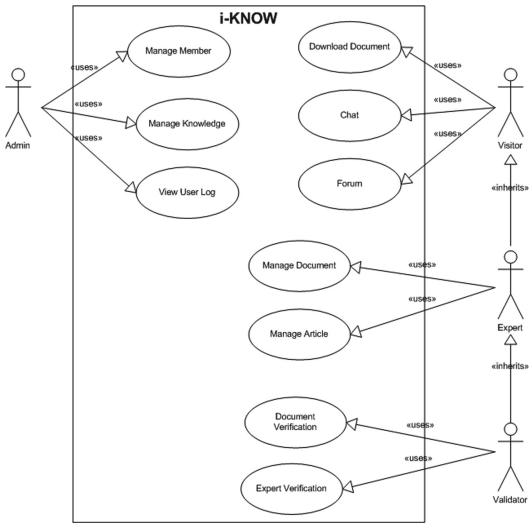

Fig. 1. Use Case Diagram Knowledge Management System I KNOW BKN

4.2 National Institute of Public Administration KMS: Rumah Cerdas Widya Iswara (RCWI) and KM 8.7

Rumah Cerdas Widyaiswara (RCWI)

The development of the Widyaiswara Smart Home (RCWI) was carried out by the State Administration Agency (LAN) in 2020. As the supervisor of the widyaiswara functional position, LAN wants the existence of a widyaiswara competency development platform that as a community can enable each other. Moreover, at that time the widyaiswara functional officials were well coordinated and became a learning/practitioner community for widyaiswara circles. RCWI is a forum for them to interact with each other, write papers, share knowledge with each other, and document activities that can develop widyaiswara's competence in a learning community.

The RCWI system has features that allow users to obtain information related to certain fields and share knowledge with each other. In addition, it takes into account the process of developing widyaiswara's competence through the feature of sharing various works, appreciating the work of colleagues through ratings and voting, discussing various matters related to their field of duty and profession [4]. The RCWI system has been used by widyaiswara to support and build a network of works and to mutually empower members of their community.

The features in RCWI include SUAR (Broadcast of coaching info, knowledge and interaction); WISHARE (Widyaiswara Share); and DASHBOARD (Outlets and access). In full, these features are as follows:

- SUAR (Broadcast of coaching info, knowledge and interaction) is a group of features that can be used by functional supervisors to convey coaching information, knowledge and interact with functional officials. Consist of:

- Public Lecture, which is a feature of delivering information and knowledge through thematic live broadcasts filled by expert speakers via online meetings, live streaming or webinars.
- Widyaiswara Guidance Information, is a facility for updating information by coaches regarding policies and other information that Widyaiswara needs to know.
- Session (Information on closed and open sessions), is a means of "information" on the implementation of closed and open sessions for the written works of widyaiswara who follow the scientific oration process as a prerequisite for promotion to the main level by using video conference facilities.
- Wicare (Consultation Room & Knowledge Management), is an online consultation facility provided by the coach to answer the issues raised by the widyaiswara.
- WISHARE (Widyaiswara Share) is a feature group to facilitate the writing process in various scientific and popular forms as well as opinions and can be done individually or in groups/collaborations.
- Idea Challenge, is a facility to accommodate smart ideas and ideas from widyaiswara and can be a place to show off-the-box thinking skills/smart idea contest on Wikipedia, is a feature that can facilitate collaborative, open-ended writing in the style of Wikipedia related to popular facts and phenomena. Scientific Writing, is a feature that helps widyaiswara organize research-based writings through the stages of initial ideas, proposals, study results, article manuscripts, until they are ready to be sent to journal article publishers. Opinion, is a facility for widyaiswara to respond quickly to actual issues based on views, personal ideas or personal reasoning with the same writing style as the opinion column in newspaper.
- Wikipedia, is a feature that can facilitate collaborative, open-ended writing in the style of wikipedia related to popular facts and phenomena.
- Scientific Writing, is a feature that helps widyaiswara organize research-based writings through the stages of initial ideas, proposals, study results, article manuscripts, until they are ready to be sent to journal article publishers.
- Opinion, is a facility for widyaiswara to respond quickly to actual issues based on views, personal ideas or personal reasoning with the same writing style as the opinion column in newspapers.
- Review, is a facility that helps widyaiswara convey constructive criticism and appreciation of the work of others (the work of community/cluster members) such as articles, books, videos, projects, and others.
- Widyaiswara interacting is a means of interaction provided to build more general discussion, greeting each other, communicating and sharing information from both widyaiswara and position builder, besides that it can be used to assist widyaiswara in providing consulting services according to the field of specialization to fellow widyaiswara.
- Winova, is a facility to help widyaiswara organize innovations that have been carried out individually or in groups.
- DASHBOARD (Outlet and Access) is the default RCWI page that displays general information, like the first page of a printed newspaper by displaying access based on cluster division.
- Temporary results or final results of a process, displaying temporary results or final results of various features/processes based on cluster division.

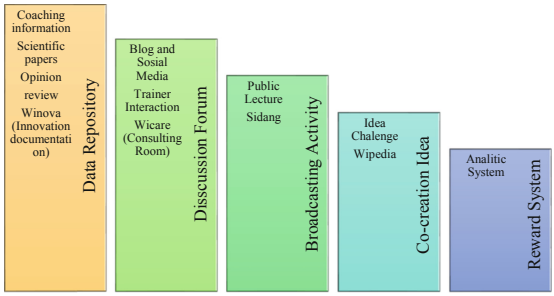

Fig. 2. Linkage of KMS RCWI Features and Functions

- Analytics, displaying analytical data from membership level, study hour conversion, most active members and so on.
- Feature access, is a means of access to features for cluster members.
- Blog and Social Media, It is a feature of private blog and more private mail interactions.
- Login/Registration, is access for Widyaiswara functional officials/prospective community members to register independently, and enter to access features according to their rights based on cluster division.

Within RCWI, there are several functions that are needed in order to synergize the development of functional Widyaiswara positions through Community of Practices. These functions are: (1) Repository Data in the form of teaching materials made by widyaiswara journals, books, research, (2) Broadcast activities in the form of online meetings, registering for webinars, and attendance, (3) Discussion forums between users, (4) Co-creation of ideas and activities in the form of joint idea creation, and (5) a reward system where every activity carried out by users will get reward points which will later show the level of users with tiered privileges. The relationship between features and functions can be seen in the following image (Fig. 2).

RCWI was indeed built to develop the competence of certain positions of ASN, namely widyaiswara. The point system prepared by the RCWI KMS system can be used to fulfill competency development for a minimum of 20 h per year. However, from a judicial point of view, there are no official rules for converting it into a calculation of learning hours for civil servants.

4.2.1 Knowledge Management 8.7

The Knowledge Management System (KMS) which is coordinated by the Policy Analyst Development Center (PUSAKA) LAN RI is named Knowledge Management 8.7 (KM 8.7). This KMS is a forum for employees of Policy Analyst functional positions throughout Indonesia to share knowledge and data related to Policy Analysts. Here is the Initial View of KM 8.7 (Fig. 3).

Fig. 3. Front View of KM 8.

For features, there are 6 menus, namely:

1. Policy Analyst Data

This menu contains data on the stakeholders of the Policy Analyst Functional Position (JFAK) with information on Name, Position Level, Work Unit and Expertise.

2. Document

Contains submenus containing JFAK Policies, Technical Guidelines, Exposure Materials, Modules, etc.

3. Policy Analyst Products

Contains JFAK outputs such as Articles, Policy Briefs, Policy Papers, Journals and Policy Notes.

4. Policy Quality Index

Contains instruments to assess the quality of a policy. Any Policy Analyst can participate in filling out the Policy Quality Index.

5. Discussion Points

Communication and Discussion Forum between JFAK Policy Analysts and Trustees. To access, we need a user login.

6. RB Learning Box

It is s a place to learn about matters related to Bureaucratic Reform.

KM 8.7 of PUSAKA is Information Technology-based Knowledge Management with the following development stages (Fig. 4).

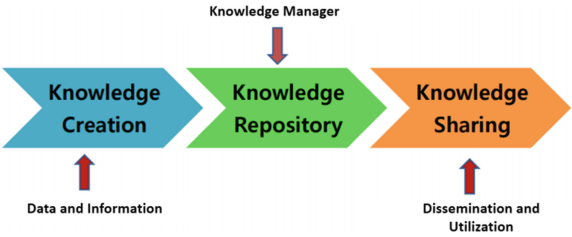

Fig. 4. KM Development Stage 8.7

Fig. 5. Ministry of Finance Learning Center (KLC). https://klc2.kemenkeu.go.id/kms/

Knowledge Creation starts from the needs identification stage, preparation for team development and formation, building a knowledge warehouse, developing stakeholder contributions, and categorizing knowledge.

Knowledge Repository and Knowledge Sharing use a technology approach. The target users of KM 8.7 are not only JFAK users but also the general public, academics and observers and practitioners of public policy.

4.3 Ministry of Finance Knowledge Management System

The Knowledge Management System (KMS) within the Ministry of Finance is represented through a digital platform known as the Ministry of Finance Learning Center (KLC). The system developed by the Financial Education and Training Agency was ranked first in the Top 5 Best Innovations at the 2021 Ministry of Finance Innovation Competition (KIKK). Implementation of KMS is regulated through the Minister of Finance Regulation Number 226/PMK.011/2019 concerning Knowledge Management within the Ministry of Finance (Fig. 5).

The knowledge management process within the Ministry of Finance is carried out through: first, identification of determining knowledge as an intellectual asset that is in accordance with the criteria in the field of state finance and related to the implementation of the duties and functions of the Ministry of Finance; second, documentation of knowledge in generating intellectual access through interviews, observations, focus group discussions, and community of practices as outlined in audio, visual, and audiovisual forms; third, organizing or structuring intellectual assets through cataloging,

classification, abstraction, and indexing; fourth, dissemination of intellectual assets on the KMS software interface that has gone through the quality assurance process; fifth, the implementation of the use of intellectual assets by users of KMS software, and; sixth, monitoring the suitability of the intellectual assets contained in the KMS software and user needs through the activities of polling opinions, reviews, opinions, and user comments.

The implementation of knowledge management within the Ministry of Finance is supported by infrastructure including (1) knowledge management blueprints, (2) KMS software, (3) collection of intellectual assets, (4) quality assurance committee, (5) provision of help desks, (6) asset evaluation intellectual, and (7) appreciation. Intellectual assets in the Ministry of Finance's KMS must meet the validity and eligibility determined through innovative criteria, be useful for KMS software users, be a solution to certain problems or jobs, and be able to speed up the work completion process. The distribution of intellectual assets is regulated by the level of access (secret, confidential, shareable, public) in order to ensure the level of security and the purpose of dissemination benefits. In practice, helpdesk support is provided to facilitate potential problems using KMS software. Intellectual assets in the Ministry of Finance's KMS are continuously evaluated to measure the level of usefulness in the short and long term. Apart from being a place to share data (data repository), the Ministry of Finance's KMS also functions as a Learning Management System (LMS) or better known as e-learning. Of course, the target users are employees within the Ministry of Finance, all functional positions that are under the guidance of the Ministry of Finance, all Civil Servants who attend state finance training or are related to financial management positions, and the general public who want to learn general aspects of state financial management. What sets it apart is the level of access of each of these groups. KMS and LMS in the Ministry of Finance are an integrated part. Currently the development of KMS and LMS at the Ministry of Finance is directed to support the mission of the Ministry of Finance as a learning organization. The development of KMS and LMS at the Ministry of Finance is in line with the development of the Ministry of Finance's Corporate University.

5 Conclusion

The purpose of this study is to explain the various applications of knowledge management systems that were developed as innovations for developing ASN competencies. This is so that we could analyze the advantages and disadvantages for proper recommendation and the opportunity to use it to fulfill the competence development of civil servants. Based on the results of this study, it was found that the knowledge management system is the choice for government agencies to develop the competence of their employees. This system is well managed through good governance and in accordance with the needs of employee competency development. There are several features of the knowledge management system that are discussed in several ministries. Institutions discussed in this study, starting from those that are still prototypes such as those in the State Civil Service Agency to those that are very advanced, for example in the Ministry of Finance. Knowledge Management System.

1. State Civil Service Agency (BKN) Knowledge Management System—I Know BKN: The features contained in the KMS of the State Civil Service Agency are Document Management, Document Search, Knowledge/Experience Management, Discussion Forums, and Chat features. However, this KMS is still in the form of a prototype, not yet a platform that has been widely and optimally used. It still needs a lot of development and refinement. The main users are employees of the State Civil Service Agency.
2. National Institute of Public Administration KMS: Widya Iswara Smart House (RWCI) and KM 8.7. RWCI and KM 8.7 are KMS platforms that target certain professions, namely RWCI for Widyaiswara and KM 8.7 for Policy Analysts. The purpose of the development of these two KMS is in the context of developing the competence of the two functional positions in question. Through independent learning media from the documents contained in this KMS as well as discussion forums among these functional officials. Both of these KMS have been actively used and their content continues to be developed to enrich the learning process between these functional officials and their communities.
3. Ministry of Finance Knowledge Management: the Knowledge Management System at the Ministry of Finance is the most advanced compared to the previous two KMS. KMS in the Ministry of Finance is one of the most advanced compared to the previous 3 KMS. KMS at the Ministry of Finance is built and attached to the Learning Management System or LMS in the Ministry of Finance at Corporate University. Users of KMS and LMS in the Ministry of Finance are all employees of the Ministry of Finance, all functional officials under the guidance of the Ministry of Finance, all Civil Servants who attend training or are related to positions.

Of these four KMS examples, all of them need development with their respective levels of maturity. The existing KMS at BKN which are still in the early stages need a lot of development, while those that are already in the intermediate stage are RWCI and KM 9.7 need enrichment of materials and features, and those that are already very advanced such as in the Ministry of Finance, KMS and LMS are directed to a more advanced stage. In fact, it is even more advanced to the point that it is supporting the mission of the Ministry of Finance as a learning organization. In order for the development of this KMS to be sustainable, it must be attached to the performance of the parent organization.

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