

# Javanese Culture Digitalization in a Knowledge Management Framework At Kasunanan Surakarta Palace

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## Abstract

Kasunanan Surakarta Palace is one of place in Surakarta that has a lot of physical culture heritage or even non-physical culture heritage; all of them have been taking care today. Some of non-physical culture heritages that are taken care until now are traditional arts and ceremonies. However, Surakarta Palace has not had an adequate system to manage its cultural knowledge yet. The model of this knowledge management is built to help to manage and record all physical or non-physical culture files that are owned by Surakarta Palace. this palace's knowledge management model is aimed to fulfill Kasunanan Surakarta Palace's needs in developing web-based knowledge management model, for tangible knowledge, like historical things or intangible knowledge, for example news, events, arts, traditional ceremonies, *primbon* (Javanese Horoscope), life philosophy and also others palace's activity information.

**Keywords:** *Kasunanan Surakarta Palace, Knowledge Management, Digitalization, SECI Models, Javanese Tradition, Cultural Heritage*

## 1. Introduction

Cultural heritage is a precious asset that owned by the Nations in the world. Indonesia is one of nation that consists of various ethnic and cultural backgrounds that has a priceless wealth of cultural heritage that should be preserved and developed. It has very valuable aspect in social and economic. These precious cultures, both in the form of artifacts - material (tangible) and non - material (intangible), they have splendid potential to be developed [1].

Nowadays, Indonesian heritage faces some challenges, those are preservation and development. Conventionally, kinds of cultural heritage in Indonesia are not been preserved and well developed, yet. Almost of these cultural heritages are still in the form of physical document and intangible (living memory) those are easily broken and forgotten; moreover, they are inaccessible and difficult to be inventoried and managed. Then, the impact is the cultural heritage of the local wealth disappears slowly.

In addition, intangible cultural heritage will be lost when the people who know about it pass away. One of the kingdoms that contributed to the cultural heritage of Indonesia, especially for Javanese culture, is the Sultanate of Mataram.

Considering at the history of the Sultanate of Mataram, Kasunanan Surakarta is one of the cultural center that still exists today. Kasunanan Surakarta has several kinds of original cultures and also information about them. They are documented in many ancient documents and cultural objects that are stored in the palace. People are not allowed to access them without restrictions because the storages are in the palace that has sturdy custom. Furthermore, documents and cultural objects are already fragile, so they can be ruined and endangered. On the other hand, those documents and cultural objects contain of culture and knowledge of the past history to enrich the national cultural heritage. Thus, cultural heritage should be documented well altogether to avoid the losing of cultural heritage of Indonesia generally and Java particularly.

The presence of technology opens up new point of view about documenting and managing of Indonesia's cultural heritage as a resource of knowledge (*knowledge capital*). In the *Focus Group Discussion* with National System of Cultural Property Registration as the theme, held in 2008, the Secretary of the Vice President in a collaboration with the Ministry of Culture and Tourism of RI urged Cultural Property Database System implemented immediately. Arry Ardanta Sigit, one of the speakers of the Directorate of Law and Human Rights Department, said that the culture, ethnic diversity, and intellectual work are kind of rich cultural heritage; they have become one of attraction that is used commercially. Unfortunately, the inventory/ documentation about that cultural heritage, in physical and non - physical is still inadequate, spread, also not structured and well-coordinated yet [2]. Documenting the national cultural wealth

nationally takes time and a great resource. In hence, documenting the cultural objects and information can be done partially to be integrated into a system that can accommodate the entire documents.

Cultural wealth management requires a well mechanism/model of extracting knowledge capital about culture. Those mechanisms / models can be designed based on SECI models that commonly used to develop knowledge management. SECI model consists of four stages: Socialization, Externalization, Combination, and Internalization that include two types of knowledge, those are *tacit knowledge* and *explicit knowledge*. By using the SECI model, it expects the exploration of cultural knowledge capital both material (tangible) and non - material (intangible) can work well. All kinds of *knowledge capital* about Indonesia culture will be documented and managed digitally to answer all issues about stowing and maintenance that have been asked, recently. Digital document will be accommodated in a system and presented in the form of multimedia.

Based on all the background that was described before, some steps that can be taken to manage knowledge of Java cultural wealth are to do the digitization and design knowledge management model of cultural treasures that exist in Java specially, take place in Kasunan Surakarta Palace. Those steps can be implemented in a knowledge-management-system that assists by multimedia.

## 2. Review Literature

### 2.1 Originalitas This Study

Some Poverty Measurement Models in Indonesia Previous research that has been done shows the success one of companies in Japan is considered by their skill and expertise in the creation of organization knowledge (*knowledge - creating company*). In that study, presented on SECI models are used to transfer tacit knowledge into explicit knowledge. That explicit knowledge is manifested into documents that are managed well. The knowledge that has been documented can be a study material for each personnel in that organization so that the process of transferring information and knowledge can run as well. So, that knowledge is no longer constrained by ethnicity or nationality differences, then east

and west's culture and knowledge can be combined into a new knowledge/information. The result of that study is the transferring information and knowledge which can work well in an organization community in the company through the implementation of great *knowledge management*. In order to, the organization becomes more dynamic and innovative [3].

In a study about Knowledge Sharing Culture in Social Department of Jakarta Provincial explained the development of a Knowledge Management System (KMS) to explore the potential of knowledge resources as intangible asset. The early conditions that occurred in the Social Department of Jakarta Province is the knowledge resource has not optimized and well explored, yet. Thus, that study was designed a method for managing knowledge that can be communicated and shared between individuals/agencies. Then, that knowledge is stored in a structured repository. The conclusion of this research is the knowledge sharing culture is needed to support the creativity and innovation of knowledge from the tacit knowledge which is converted into explicit knowledge through a knowledge management system [4].

Early research on Knowledge Management Design of the Surakarta Palace's Culture Web-Based has been done by Yasin, Tanaamah, and Bezaleel [5]. In that study, they designed a knowledge management of Surakarta Palace's culture used SECI models. The result of that study is a design of a knowledge management system web -based. However, this study did not describe about the preparation of a reference model that became the foundation for the design and construction of the system. The suggestion toward that study is the importance of continued research to create a model the development of a knowledge management system.

In a study conducted by Ataupah, Tanaamah, and Beeh [6], entitled Local Cultural Knowledge based on Knowledge Management studied Boti Tribe in South Central Timor, East Nusa Tenggara Province as the study case discussed the development of information systems about the knowledge of Boti tribe in East South Central. It became important because it was found that there was an alteration in cultural values caused by technology development, made the original values tended to be left by the local society. Therefore, the use of

knowledge management is needed to document the cultural values.

## 2.2 Cultural Heritage of Java

Culture is the overall skills (customs, morals, art, science, etc.) of human beings as subjects of society. In terms of history, Bakker revealed that the culture is social heritage or tradition. In terms of anthropology, culture can be defined as a system of life, way of life, behavior. It can be concluded, culture is all values that related to the creation of human society as a subject, including language, the various objects that made and used by humans, manners, and so on. In general, culture preserved by inherited way from one generation to the next generation [7].

Cultural heritage can be interpreted as the product or cultural physical value of the different traditions and spiritual achievements in the form of the past value that become the principal element in the identity of a group or nation [8]. It can be concluded that the cultural heritage is a cultural value of physical form (tangible) and non – physical form (intangible) from the past.

Sujamto divides the preservation of culture in a variety of systems in general to seven elements, they are: (a) religion and religious ceremonies, (b) social organization, (c) knowledge system, (d) language, (e) arts, (f) economic life or occupation , and (g) system of technology [9]. Preservation of Javanese culture also includes the preservation of the seven elements above. Various form of Javanese cultural heritage provides an opportunity for people to learn wisdom in addressing the problems faced in the past and then think its relevance to the present. However, local knowledge is often neglected because of the reason that there is no relevance to the present. The impact is most cultural heritage dwindled by age, abandoned, neglected, and even the existence is abused [10].

## 2.3 Cultural Heritage of Java

Knowledge is a mix of experience, values, contextual information, expert views, and basic intuition that provides an environment and framework to evaluate and integrate new experiences with information [11]. Nonaka and Takeuchi divide knowledge into two types of tacit knowledge and explicit knowledge [3]. Tacit Knowledge is the experts' knowledge,

even individuals or society, as well as their experience. Tacit knowledge is highly personal and difficult to be formulated so that it is very difficult to be explained or communicated to others. Explicit Knowledge is something that can be expressed in words and numbers, and can be delivered in the form of scientific, specifications, manuals and so on. This kind of knowledge can be transmitted already from one individual to another formally and systematically.

Nonaka and Takeuchi said that knowledge creation is achieved through the introduction of a synergistic relationship between tacit knowledge and explicit knowledge, also introduce the SECI model as knowledge conversion model as seen in Figure 1 [3].

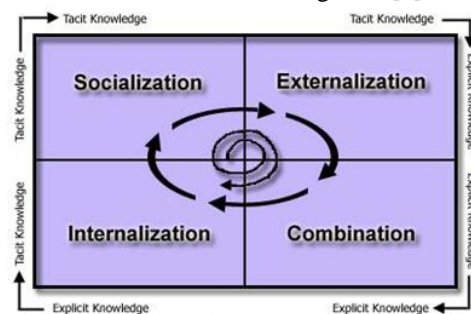


Figure 1 SECI model [3]

In this research, there are four stages of the development of knowledge based on the SECI model, those are: (1) Socialization (tacit knowledge to tacit knowledge) which is the transfer of knowledge through conversation; (2) Externalization (tacit knowledge to explicit knowledge) which is the process of tacit knowledge into more clearer concept, (3) Combination (explicit knowledge to explicit knowledge) which is the combination of explicit knowledge into a knowledge management system, (4) Internalization (explicit knowledge to tacit knowledge) this one is the process which all knowledge are documented so it can be read by others.

## 2.4 Knowledge Management System

Knowledge management is an understanding of discipline that focuses on the dissemination of knowledge that have by individuals or groups across organizations that directly affect the performance. Knowledge management talks about getting the right information in the right context to the right people at the right time and for the right business purposes [12]. To manage

such information, we need a system that can manage the existing knowledge and present it when it is needed.

Hansen et.al. shows a strategy to manage the knowledge divided into two, they are: the codification strategy and personalization strategy. Codification strategy is the management of knowledge by translating that knowledge explicitly in a carefully way (codified) and stored in a data base so that the users who need it can access that knowledge [13]. However, the personification strategy is a knowledge management by transferring knowledge from one to another person through intensive personal relationships. In those both strategies Knowledge Management System has a major role.

Knowledge Management System (KMS) is a system that provides the information that needed by the users, in accordance with the required forms, and exact when the user needs it or a system that connects to all knowledge sources [14]. KMS is a system that becomes a media to carry out the strategies in managing knowledge. KMS models can be seen in Figure 2.

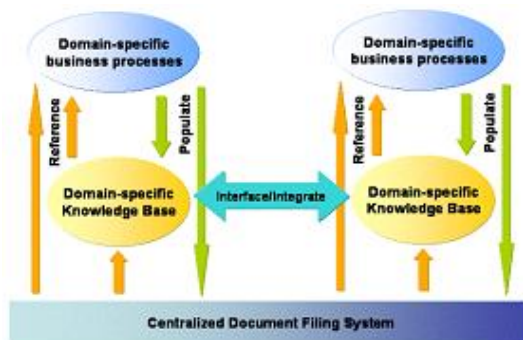


Figure 2 Model of Knowledge Management System [15]

In the model in Figure 2, it can be seen that the KMS integrates knowledge bases there. With the support of centralized document storage systems, that knowledge is stored, so that it can be accessed by users who need it, next. That knowledge is explicit knowledge. Whereas, for tacit knowledge, provided an interface that allows the user to be able to share the knowledge that each personal has (personal knowledge). Possibly, tacit knowledge can be converted into explicit form to be stored in a centralized document storage system.

### 3. Research Methods

In addition, the research stages depicted in Figure 3.

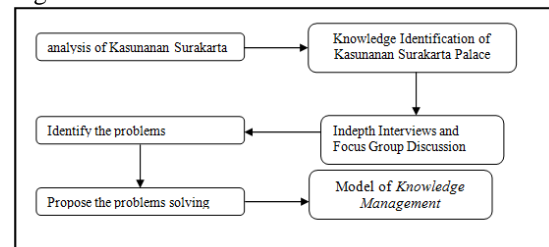


Figure 3 Stages of Research

This research will be conducted the analysis of Kasunanan Surakarta Palace and its knowledge also the identification of existing problems. The stages those are completed in the first part include: **1) Analysis of Kasunanan Surakarta Palace**, at this stage the writers will conduct the description of Kasunanan Surakarta Palace profile and SWOT analysis of the various activities that take place in the Kasunanan Surakarta Palace; **2) Knowledge Identification of Kasunanan Surakarta Palace**. At this stage there will be identification of knowledge derived from the SWOT analysis that has been done in the previous stage; **3) Indepth Interviews and Focus Group Discussion** was conducted to determine the stage of information about the need for knowledge in Kasunanan Surakarta Palace nowadays, and the best way to be able to perform the manipulation of knowledge . Parties that involved in Indepth Interviews are researchers, courtiers and family of Kasunanan Surakarta Palace as a manager; **4) Identify the problems**, at this stage will be the identification of the problems faced by Kasunanan Surakarta Palace in the knowledge management and dissemination. With the identification of knowledge in detail and also information and inputs that are obtained from indepth interviews, the problems that occur can be identified well; **5) Propose the problems solving**, at this stage will be carried out a discussion with the Kasunanan Surakarta Palace to formulate problem-solving in order to overcome the existing problems to fit the needs of Kasunanan Surakarta Palace.

## 4. Analysis and Discussion

### 4.1 Profile of Kasunanan Surakarta Palace

Kasunanan Surakarta Palace was built by Pakubuwono II in 1745. The palace was built as a replacement of the ruin Kartasura Palace [16]. Nowadays, Kasunanan Surakarta Palace has been led by Pakubuwono XIII. Pakubuwono XIII is still living in the palace today with his family.

Kasunanan Surakarta Palace has a mystique and myths also legends that live in the community. The example is the belief of some people that compete to get *gunungan* in *Grebeg Event*. They believe the parts of the *gunungan* can bring a good luck; such as: health and etc. [17].

The region of Kasunanan Surakarta Palace includes Alun-alun Lor area, Lor Sitihiinggil area, Kamandungan Lor area, Sumewa Sasana area, Sri Manganti, Kedhaton area, Kamagangan area, Srimanganti Kidul area, and Kemandungan Kidul area, as well as Sitihiinggil Kidul area and Alun-alun Kidul area. This palace is also surrounded by a defensive wall called *Baluwarti* that protects the palace. Its shape is rectangular. The distribution of Kraton Surakarta regions are captured in Kasunanan Surakarta Palace Maps. it is stored and exhibited in the Radya Pustaka Museum. The map is able to be seen in Figure 4.

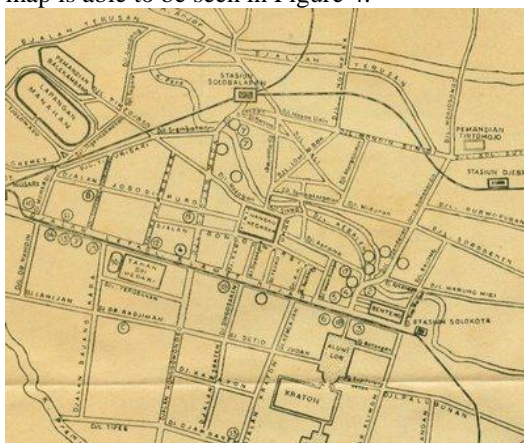


Figure 4 Map of Kasunanan Surakarta Palace [18]

Kasunanan Surakarta Palace has a variety of cultural heritage that must be protected and preserved. One of the cultural heritages is in the form of traditional ceremonies that is organized by the Kasunanan Surakarta Palace. The famous traditional ceremonies are *Grebeg Suro* and *Sekaten* ceremony.

*Grebeg Suro* ceremony in Javanese society is a celebration of the new year according to the Javanese calendar which is held every in 1st *Suro* evening (*Malam 1 Suro*). *Malam 1 Suro* begins on the last day of the last month according to the Javanese calendar (30/29 Besar) until the rising of the sun on the first day of the first month of the following year (1 *Suro*). The steps of this ceremony are held a pray then *Kirab Pusaka*, a process that the heritage heirlooms owned by Kasunanan Surakarta Palace are brought to the Grand Mosque, get Kyai Slamet, heirloom spears, incense out; and the latest is to march or procession around the palace. Participants in the carnival heritage is the courtiers and Sentana courtiers and also the descendants of *kebo bule* (foreign buffalo). The route of the procession is from Kamandungan toward Alun-alun Utara, Gladhag, Sangkrah, Pasar Kliwon, Gading, Gemblegan, Nonongan, Slamet Riyadi street, Gladhag, Alun-alun Utara, Kamandungan and returned to the palace. Moral values that are contained in *Grebeg Suro* ceremony is the safety value, the value of the blessing, the value of the divinity, the value of well-being, and the value of cooperativeness [19].

*Sekaten* is not only a ceremony that was held as an effort to spread the Islamic religion but also to celebrate the birth of Muhammad [20]. *Sekaten* comes from: (1) *Sahutain* that has a meaning to stop or avoid immoral and fair, (2) *Sakhatain* means eliminate animal and devil character, (3) *Sakhotain* means always maintains a sense of gratitude or nobility sacred and devote to God, (4) *Sekati* has the meaning that living people should be able to judge good and bad things, and (5) *Sekat* means that living people should limit themselves to do an cruel things, and know the limits of kindness and evil [21]. Based on the interview with Kanjeng Winarno as Vice Pengageng Sasana Wilapa Kasunanan Surakarta Palace on October 22, 2013, each building as well as the name of the ceremony, the shape of the building and ceremonial objects, the location of the building, also a ceremonial procession in the Kasunanan Surakarta Palace have each meaning or significance philosophy. Unfortunately, their meanings have not already known and noticed by people. For example, two large mirrors, one on the right and one on the left of *Kori Kamandungan* mean introspection. The name itself comes from the word *Kamandungan mandung* means stop, so the meaning of the

presence of large mirrors in *Kori Kamandungan* is everyone should have a moment to stop and introspect themselves.

All those things that have explained above have very priceless cultural values and they must be preserved. One way that has been made by the palace to preserve its culture is to open a museum palace and tell the story mouth by mouth. But it is not running maximally yet, remembers the rapid of the technological developments that make the existence of culture is getting squeezed.

#### 4.2 Analysis of Surakarta Palace

In order to know the strengths, weaknesses, and threats of Kasunanan Surakarta Palace, then at this stage the writers will do the SWOT analyses. Here are the results of the SWOT analyses that has been done in Figure 5:

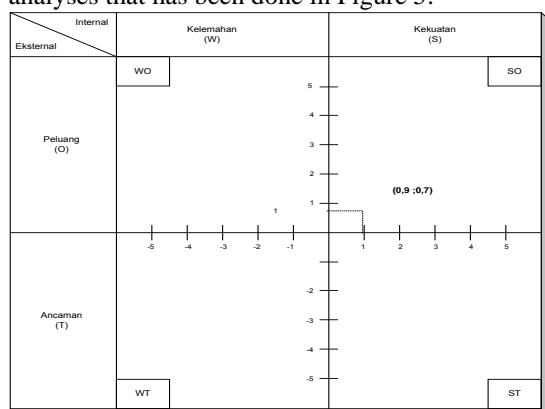


Figure 5 SWOT Analysis Conditions of Kasunanan Surakarta Palace

Based on the results of the mapping conditions Kasunanan Surakarta Palace, generally the condition of palace map shows that actually the palace has the power and a big opportunity. However, it should be anticipated, because the strength and conditions will be a weakness and a threat to the Kasunanan Surakarta Palace itself any time.

#### 4.3 Identification of Knowledge Goals

Determining the knowledge goals, the writers will map the normative, strategic, and operational knowledge that related to Javanese culture in the Kasunanan Surakarta Palace. Normative knowledge is the target norm in the Kasunanan Surakarta Palace that wants to be achieved based on a number of norms. Strategic knowledge is a prime target to be achieved to improve performance through these targets.

While operational knowledge is a process or activity that is used to manage business processes. Kasunanan Surakarta Palace’s normative knowledge goal is fostering a culture of knowledge sharing about Javanese culture and alive well in Kasunanan Surakarta Palace for all the courtiers and society to still pay attention of norms that become a principal in the Java community. In this case, the knowledge sharing is meant not only limited to the sharing of knowledge but also to confirm, correct, and strength the certain knowledge that exist in the wider community. It is intended to preserve the Javanese culture existing because it is no longer preserved or becomes incorrect because of the distortion of the information development in the community. In addition, there is an attempt to make the Javanese culture develops not only in a local scale but on an international scale so that Javanese culture not only belong to the Javanese but also belong to the world community.

Strategic knowledge Surakarta Palace goal is to provide a media for documenting information and knowledge about Javanese culture. In addition, in order to preserve Javanese culture, improving people’s understanding about the existing Javanese culture is needed. For that, the media is expected to be used by the general public in order to document the information and knowledge of Javanese culture and to improve the public understanding of the Javanese culture. The media will be expected to facilitate the desired knowledge sharing occurs in the social life..

Kasunanan Surakarta Palace’s Operational knowledge goal is to facilitate the data storage through a media that is supported by the presence of technology. The development of technology has always been considered to the extinction of culture. It must be utilized for the benefit of cultural development, especially in terms of transfer knowledge about existing Javanese culture. With the support of technology, it is expected to minimize the difficulties in accessing the Java cultural heritage that still exist.

#### 4.4 Identification of Knowledge Surakarta Palace

Kasunanan Surakarta Palace’s identification of knowledge is derived from the SWOT analysis which has been done in the previous stage. At this stage it is still a Socialization step, which includes communication and data

collection. Knowledge that is identified will be divided into tacit knowledge and explicit knowledge. Furthermore, that knowledge will be digitalized.

In this research, four stages of the development of knowledge based on the SECI model, those are: (1) Socialization, which is done by interviews and *Focus Group Discussions* (FGD) directly with Kanjeng Pangeran Haryo (KPH) Edi Wirabumi, Kanjeng Winarno as Vice Pengageng Sasana Wilapa, Kanjeng Luki, and Mas Heru; (2) Externalization, where the results of the interviews and discussions were transformed into a written form, (3) Combination, the written results of interviews and discussions are combined with other Kasunanan Surakarta Palace's sources, such as books and calendar of events and other explicit knowledge, (4) Internalization, portray the knowledge management so that it is able to manage all information and data that have been collected. Not only display data and information, but also serve a facility as a place of interaction, discussion and ideas exchange among the community, at last it will bring new tacit knowledge.

The results at this stage is a model of digitization and knowledge management of Kasunanan Surakarta Palace's Javanese culture, it is divided into two types; tacit and explicit knowledge. The knowledge that have been gotten are an event calendar book, the life guidance book, interview about art, interview about traditional ceremonies, photos of activities, video of activities, a brief history and organizations in Surakarta Palace. Referring to that understanding, mapped the knowledge conditions were summarized from the tacit and explicit knowledge experience that still exists. Based on the exposure, the identification is comprehended through: 1) Palace's activities, this knowledge becomes the base or reference in getting information related to the Kasunanan Surakarta Palace's activities; 2) Palace's profile, it contains the history of the palace, government structure, and others; 3) Ritual and Art, it describes the knowledge which related to rituals and arts in the form of traditional dance and music in the Kasunanan Surakarta Palace; 4) Museum, it describes the knowledge of historical documents, the activities of the palace, the journey of a history, transportation, and others; 5) Palace's philosophy, it contains a variety of information about the philosophy of

life in Kasunanan Surakarta Palace, which becomes the knowledge and the life order in the Kasunanan Surakarta Palace; 6) Forum, is an organization of interaction in the form of sharing knowledge, which is focused on the information distributing and exchanging, related to the Kasunanan Surakarta Palace; 7) *Primbon* that describes the review of java's horoscope; 8) Organizations that contains of the various information about organizations in Surakarta; 9) Download, is a page for downloading files that are available. Based on the explanation above, it is showed that knowledge about that information are needed to be developed by the Kasunanan Surakarta Palace. Knowledge; that have been identified, becomes the base for the Java Cultural Digitizing development in Kasunanan Surakarta Palace.

#### 4.5 Model of Knowledge Management

Based on the results of the profile analysis and conditions of Kasunanan Surakarta Palace, so in this part the writers are going to show the model of knowledge management at Kasunanan Surakarta Palace.

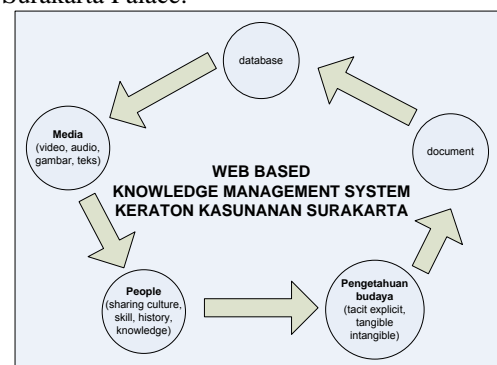


Figure 6 Model of Knowledge Management of Kasunanan Surakarta Palace

The models of Knowledge management in Kasunanan Surakarta Palace as seen in Figure 6 is a model where there is a cycle of cultural knowledge management process of Javanese culture in Kasunanan Surakarta Palace. The cycle starts from the presence of a group of people who have *sharing culture*, refers to a culture to share knowledge with others, the ability to utilize the technology, historical experience, knowledge of Javanese culture, also willingness of innovation. All of these refer to three factors that contribute to the creation of new knowledge that is explained by Auernhammer and Hall [22], and it is illustrated in Figure 7

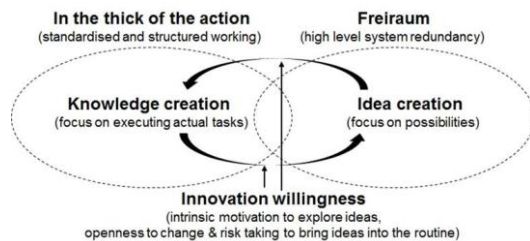


Figure 7 Three Determinants in the New Knowledge Creation Process [22]

People’s knowledge need to be managed so it is necessary to transfer cultural knowledge process both tangible and intangible cultural, in the form of tacit and explicit knowledge. Cultural knowledge that is transferred is documented in the form of documents and stored in a database . The documents that contain cultural knowledge is presented through various media such as video, audio, image, and text to the wider society, so that it makes other society. Thus, the cycle will return to the starting position where there is a group of people who have Javanese culture knowledge to be able to start the cycle again.

The cycle is expected can occur in a knowledge management system web-based so that the process can be run by utilizing the advantages of the Internet’s characteristics in general and the Web in particular. Consequently, it requires a model of knowledge that will be managed later. The knowledge model is designed based on the identification of knowledge in the Kasunanan Surakarta Palace. Models of knowledge can be seen in Figure 8.

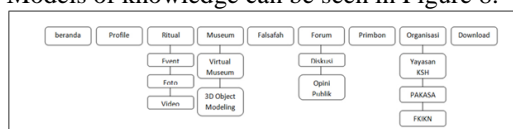


Figure 8 Knowledge Model Diagram

Referring to Figure 8, it is seen the models of knowledge on Kasunanan Surakarta Palace. Based on this understanding, so the model that has been developed, will be the structure of the development of knowledge systems, where the developmental structure is expected to be the media of knowledge digitization that can be used in the documenting and learning process at the Palace Kasunanan Surakarta.

## 5. Conclusions

Starting to the knowledge of Kasunanan Surakarta Palace’s results of the identification

and development, hence the digitalization for the development of cultural management model based on SECI enable to the fulfillment of Kasunanan Surakarta Palace’s needs in doing documentation, and dissemination of knowledge that is owned. On the other hand, this model is expected to fulfill the needs of Kasunanan Surakarta Palace in developing an organization or facility to manage the knowledge (Knowledge Management) web-based, both for knowledge that are tangible, such as historical objects, and intangible, such as news, events, arts, traditional ceremonies, *primbon* (Javanese’s horoscope), philosophy of life and other information about royal events.

## References

- [1] Sedyawati, E., 2003, Warisan Budaya Takbenda: Masalahnya Kini di Indonesia, Jakarta: Pusat Penelitian Kemasyarakatan dan Budaya Lembaga Penelitian Universitas Indonesia.
- [2] Kompas.com, Sistem Nasional Pendaftaran Kekayaan Budaya, <http://nasional.kompas.com/read/2008/11/19/19552384/Sistem.Nasional.Pendaftaran.Kekayaan.Budaya>, accessed on 20th March 2012.
- [3] Nonaka, Ikujiro and Takeuchi, Hirotaka, 1995, The Knowledge- Creating Company: How Japanese Companies Create the Dynamics of Innovation. Oxford: Oxford University Press.
- [4] Putri, S. S., & Pangaribuan T. H., 2009, Knowledge Management System: Knowledge Sharing Culture di Dinas Sosial Provinsi DKI Jakarta, Seminar Nasional Aplikasi Teknologi Informasi.
- [5] Yasin, M., Tanaamah, A. R., dan Bezaleel, M., 2011, Perancangan Knowledge Management Kebudayaan Keraton Surakarta Berbasis Web, Salatiga: Skripsi FTI UKSW.
- [6] Ataupah, S. Y., Tanaamah, A. R., dan Beeh, Y. R., 2010, Pengetahuan Budaya Lokal Berbasis Knowledge Management (Studi Kasus: Suku Boti Timor Tengah Selatan), Salatiga: Skripsi FTI UKSW.
- [7] Bakker S.J., 1988, Filsafat Kebudayaan: Sebuah Pengantar, Yogyakarta: Kanisius dan BPK Gunung Mulia.
- [8] Davison, G. and Mc Conville, C., 1991, A Heritage Handbook, NSW: Allen & Unwin.
- [9] Sujamto, 1992, Refleksi Budaya Jawa, Semarang: Effhar & Dahaar Prize.
- [10] Karmadi, A. D., 2007, Budaya Lokal sebagai Warisan Budaya dan Pelestariannya, Semarang: Dinas Pendidikan dan Kebudayaan Propinsi Jawa Tengah.
- [11] Davenport, T.H & Prusak L., 1998, Working Knowledge: How Organizations Manage What They Know, Harvard Business School Press.



- [12] Finneran, T., 1999, A Component Based Knowledge Management System, TDAN Issue 9.
- [13] Hansen, M., T., Nohria, N., and Tierney, T., 1999, What's Your Strategy for Managing Knowledge?, Harvard: Harvard Business Review.
- [14] McKenna, F., 2008, A Knowledge Management System: A Discourse, United States: Knowledge Corporation.
- [15] Aw, K. K., 2005, Complexity and Knowledge Management: Learning from the Industrial Revolution, Kuala Lumpur: ICKM.
- [16] Surakarta.go.id, Keraton Kasunanan Surakarta, <http://surakarta.go.id/konten/keraton-kasunanan-surakarta>, Diakses tanggal 21 Oktober 2013.
- [17] Solopos.com, Berburu Berkah Gunung Gerebeg Keraton Solo, <http://www.solopos.com/2013/10/16/idul-adha-2013-berburu-berkah-gunungan-gerebeg-keraton-solo-456594>, Diakses tanggal 22 Oktober 2013.
- [18] \_\_, 1905, Map of Surakarta Palace.
- [19] Fiddinia, A., 2010, Upacara Grebeg Suro Sebagai Penyampaian Nilai Moral Pada Masyarakat di Kelurahan Baluwarti Kecamatan Pasar Kliwon Kota Surakarta, Malang: Skripsi Jurusan Pendidikan Pancasila dan Kewarganegaraan FIS Universitas Negeri Malang.
- [20] Poeger, GPH., 2002, Sekaten, Surakarta: Kapustakan Sono Pustoko Karaton Surakarta.
- [21] Handipaningrat, KRT. Haji, Perayaan Sekaten, Surakarta: Kapustakan Sono Pustoko Karaton Surakarta.
- [22] Auernhammer, J. & Hall, H., 2013, Organisational Culture in Knowledge Creation, Creativity and Innovation: Towards the Freiraum Model, Journal of Information Science pp. 1-14.

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