

## **Determinants of Scholar's Participation of OAI: Developing a Conceptual Framework**

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### **Abstract**

This paper describes the framework used in a study to formulate the requirements for the design and implementation of a knowledge sharing for project-based education. Green Open Access Information is popular among researchers to access information in sharing their knowledge. The purpose of Green Open Access Information is to make the full text of the peer-reviewed research output of scholars/scientists and their institutions visible, accessible, harvestable, searchable and useable by any potential user to access the information from the Internet. Knowledge sharing is widely recognized that it can promote the competitive ability of scholars and it has been the focus of research for this century. Recently, there has been a growing interest in examining the factors that participation of OAI or knowledge sharing. The OAI has been conceived to support scholars sharing needs in making research projects. The study uses the Framework for knowledge sharing for the approach to investigate the initial requirements. The artifact addressed in the framework - readiness - is highlighted in this paper. Readiness in this work refers to major goal within objective or approaches that are significant to the OAI. This includes the readiness to participate the OAI, willingness to participate in making research articles available on the internet, and the success factors. Using multiple data-gathering techniques, the study identifies the readiness factors that support the plan for participation of the OAI. It outlines the vision statement, goals and objectives needed to define the make research articles available on the internet by the Scholars; the context to participate the OAI by the Knowledge Sharing Community; and the knowledge sharing expressed by the participation of OAI.

**Keywords:** Open Access Initiative, Knowledge Sharing Development, Scholars Needs Knowledge Sharing, Project-based Sharing, Framework for Knowledge Sharing, Open Access Initiative for Education, Malaysia, OAI.

### **Introduction**

OAI have created new opportunities and increased the availability of online knowledge sharing for the scholar educational community. This dissertation is in large part, occasioned by the increasingly widespread availability of networked- sharing information, in OAI. The growth of the Internet is undeniably affecting the knowledge sharing attitudes environment and share to the Internet has been widely seen as an important development for universities. The use of OAI in education has grown rapidly. As overwhelming sharing resources become

available online, new knowledge and information also open up, along with opportunities to share knowledge. Research results and current research activities have been bound by the current publishing monopoly becoming available online. Recognizing the opportunities knowledge sharing in the OAI, digital archive may be appropriately influenced in support of educational sharings for the scholar community (Anbu, 2008).

In Malaysia, the environments for OA for research reference are already in known and Malaysians are appreciative of OA as well as have positive views on its benefits. A national survey conducted by Yusuf and Ismail, 2009 although Malaysia scholar's have positive views on its OAI benefits, the fact that knowledge sharing seems to be unnatural for scholars in Malaysia. Universities and ICT penetration is growing. Most research universities now have motivated scholars to participate of OAI. OAI is natural for knowledge sharing that allows a scholar to allow the knowledge transfer to occur whenever they want from anywhere at any time. OAI is also defined as activities related to open access to improve local access to global research and global access to local research. The success of participation OAI is transforming knowledge sharing into scholar attitudes and the scholars needs in addition to general needs to support the creation and transfer of distributed knowledge. It is expected that OAI and knowledge sharing will to succeed that enables creation of new knowledge and it will encourages scholars into knowledge sharing behaviour. With the functions for creation and maintenance of online research repositories many scholars in developed countries are participation the OAI. Being able to make scholar's in OAI, it is possible towards understand the knowledge of scholar's for knowledge sharing and for organizations to collect knowledge into a central repository. Location and time will no longer constrain scholar's knowledge sharing quietly. Hence it is becoming more and more crucial for researcher to study the determinants of scholars adopting OAI and knowledge sharing attitudes.

A model that integrates knowledge from knowledge sharing research and information system effectiveness research is lacking, a gap which this research seeks to fill by integrating the information system stream with another dominant research stream (Matthews, 2016). The purpose of this study is to address this gap specifically to find "to what extent has the computer security knowledge sharing affected scholars perception of OAI system effectiveness". The research findings attempt to answer the main questions, which are:

What are the factors or determinants not contribute to knowledge sharing and information seeking to knowledge sharing and information seeking in OAR?

What are the scholar's perceptions of the initiative to participate the OAI to encourage a for knowledge sharing?

How can framework be used to provide knowledge sharing and attitude context for the approach to investigate the scholar's willingness and lead to the participation of OAI?

How does the knowledge sharing prototype perform in the OAI?

How aware are the scholars of the participation of OAI in Malaysia research universities?

Several objectives of this research have been identified. They are as follows:

To understand the knowledge sharing and environment that would ensure the scholars participation of OAI and this would include :

Bring out scholars readiness to participate the OAI as contents for knowledge sharing. This would include finding out status, their knowledge, and the use of OAI.

Bring out a require analysis for the knowledge sharing among scholars in participation of OAI. This would include finding out their actual needs for sharing knowledge.

Carrying out the types of knowledge sharing and would participate of OAI when sharing

their knowledge. This would include studying their level of satisfaction with participation of OAI.

The paper is organized in the following manner: introduction, literature review, research framework, research methodology and conclusion. This section, the introduction has introduced the importance for this research, the research questions, and the research objectives. The following literature review section reviews the information system effectiveness, utilization, and technology-to-performance chain model. Next is a description of the proposed research framework with its hypotheses and constructs definition. The research methodology is then presented, and finally, the conclusion.

### **Literature Review**

Identify the various definition of OAI have been an explosion of literature on Internet. The scholarly journals have quickly migrated to the networked environment and most scholarly journals now offer electronic editions available over the Internet. Actually open accesses are responses to new technologies under knowledge sharing. The OAI has brought about several changes in the world information, especially in the areas of information handling. Due to this, it make good research articles available on the internet should be did dominate, as widely as possible these new journals will no longer invoke copyright to restrict access to and use of the material that they publish. If scholars are to face the challenges of the OAI, they must develop standard procedures in order to make research articles available on the internet.

Review of the literature on knowledge sharing indicates that there is definition of knowledge sharing summarized in Table 2.1. Many researchers have defined knowledge sharing from their own point of view. Some researchers even considered knowledge sharing; knowledge flows and knowledge transfer as exchangeable terms. Alavi & Leidner (2001) compare knowledge sharing to knowledge transfer and define it as the process of disseminating knowledge throughout the organization. The dissemination can happen between individuals, groups or organizations using any type or number of communication channels. Similarly, Gupta and Govindarajan (2000), connect knowledge sharing to knowledge of five elements: value of the source knowledge, willingness of the source to share knowledge, media richness of the communication channel, willingness of the recipient to acquire knowledge.

Davenport & Prusak (1998) define processes that involve exchanging knowledge between individuals and groups. Connelly and Kelloway (2003) define knowledge sharing as the exchange of information or assistance to other. Sharing knowledge of scholars within participation in OAI can realize potential gains and is critical to survive and prosper in competitive environments (McDermott and O'Dell, 2001). OAI are knowledge-intensive and principal professional group for scholars. Their theoretical and practical knowledge is vital to the sharing knowledge, and the quality of specialty-based scholar's practices is a major determinant for knowledge sharing. OAI in this sense becomes important for scholars in sharing their knowledge, because they are required to be research-oriented, creative in research works, and ready to share new knowledge (McDermott and O'Dell, 2001). The ultimate objective of knowledge sharing is to elevate the quality and efficiency of care in knowledge.

One of the most important in knowledge sharing is exchanges of information. Cumming (2003) defines knowledge sharing as means by which scholar obtains access to its own and others. Successful knowledge sharing involves communication process. According to Teece (2000) knowledge sharing is intentionally in which knowledge is made more emphasis on the

knowledge transfer process. Knowledge sharing refers to the communication of all types knowledge, which includes explicit knowledge or information. The types of knowledge that can be documented and shared as research information. One of the difficulties in getting people to share knowledge is the attitudes. Knowledge sharing is unnatural act in Malaysia.

In the survey Chow and Chan (2008) reports the lack of understanding about the benefits derived from knowledge sharing, the internet technology plays an important role in education. Lee and Al-Hawamdeh (2002) study the aspect of knowledge sharing is still the human factors. People and culture hold the keys to the knowledge sharing activities and OAI plays the role of enable enhancing access to the information. With the use of OA, scholars can quickly and easily access information from anywhere at any time. McDermott and O'Dell (2001) express the most significant obstacle in knowledge sharing is culture. And according, Hsiu O-Fen (2006) states a relevant aspect of knowledge sharing is that it can be seen as generating new ideas. In rewarding for knowledge sharing, Hall (2001) tangible the economic record and enhanced reputation and personal satisfaction as rewards. According to American Productivity and Quality Centre (1998) when the rewards are not given the result there will no motivation.

### **Related Work**

OAI participated and shared by a community of scholars, and their capabilities to make the research work needs and uses of research community. In other words, OAI are required to scholars to share information effectively. As such, OAI are useful and usable. Swan (2006) opined that if OAI are to achieve scholar's potential, their works need to be useful. Within OAI, how efficiently and effectively scholars can achieve their goals with make research articles available on the internet; how easily scholars can share knowledge; how much scholars enjoy with the OAI; and how well the OAI fits within the attitudes context.

Scholar's participation of OAI has been a continuing topic of interest in the scholar community and a focus on scholar attitude needs is central in the study. There is a general acknowledgement that OAI will result in the creation of better knowledge sharing (Ware, 2004). All efforts to design, implement and evaluate OAI must be basis in the needs, characteristics and contexts of the scholars who will or may participate of OAI. Kiran & Chia (2009) wrote that the field of OAI has initiated innovative services to the researchers by creating open access institutional repositories for wide dissemination of scholarly. Corley (2010) viewed an OAI as a meeting space of knowledge sharing common interests. However, not many scholars adopt the OAI for knowledge sharing (Papachristopoulos et al., 2008).

Various frameworks for the design, improvement, estimate and interaction of knowledge sharing have been conceptualized and described in knowledge sharing research. The literature also emphasized the importance of a model approach to examine the knowledge sharing (Iligenti et al., 2000). While there are several attitude models for the knowledge sharing, a model that involves participants who have varying expert, needs, experiences, and interests should make a considerable in the participation of OAI for education. Development of a model or models that describe scholar participation should enhances the attitudes can be effectively involved in aspects of the knowledge sharing. Therefore, to make effective scholars willingness, a researcher must have some conception of what the prospective scholars already know about OAI, what their misconception and problems might be and what they should be interested in knowledge sharing. In order to increase the willingness and relevance of OAI to scholars needs, researchers should focus on knowledge sharing analysis to discover expectations and content demands to integrate into attitudes.

### **Approach to Formulate the Scholars Participation of OAI**

By understanding the framework, the researcher can help gain consent of acceptance scholars regarding readiness knowledge sharing in OAI. Literature emphasized the importance of a holistic approach to examine digital sharing such as OAI (Kankanhalli et al., 2005; Swan 2005) as examining a single view of such as participation are likely to be limited in their usefulness. Tenopir (2009) discussed a perspective of OAI that is based on the work people do, and how OAI assist in the completion of research work related duties. Prusak (1998) define knowledge as a “fluid mix of framed experience, values, contextual information and expert insight that provides a framework for evaluating and incorporating new experiences and information”. Alavi & Leidner (2001) presented a framework, consisting perspectives, includes knowledge about customers, knowledge about products, knowledge about processes, knowledge about competitors, and knowledge about business frameworks. Another holistic framework is presented by Bock et al. (2005) study theoretical framework. To this framework, they have added extrinsic motivators, social psychological forces and organizational climate factors. According to He et al. (2009) presented theoretical knowledge represents abstract knowledge and principles, which can be codified, or at least embedded in systems of rules and frameworks for action’. Shin et al. (2008) mention that explicit knowledge flows is often through IT projects including designing portals and intranets, and buildings various models and frameworks to represent knowledge flows in an organization. Regarding the theoretical frameworks used to find these factors.

### **The Study**

As such, this research adopts multiple data collection techniques that do not only examine the various dimensions from a variety of perspectives, but also provide for the relationship of these dimensions in a framework. This approach is consistent with He et al. (2009) study an empirical research. There is a need to identify potential scholars, their involvement and roles in the OAI, their attitude towards the initiative, their perception of its potential use and how it fits within the knowledge sharing attitudes in general and a education in particular. In order to do this, knowledge sharing is required, which is derived and based on empirical data and stand up to conceptual reasoning. The current research proposes to model the OAI within the context of knowledge sharing.

Framework establish of a mutual understanding among scholars in the OAI. The knowledge and understanding by answering the question what, how, where, who, when and why. By answering these questions it can improve to understand the factor the success the willingness in OAI. The understandings on OAI are formalized of knowledge sharing. When researcher doing this research, it is helpful to analysis knowledge sharing and OAI why scholar's need to be participated. And why OAI was closer to scholar and need to participate. The framework may help determine what scholar's model in order to participate of OAI. This framework provides information needed to make decision in order for successful to scholars to participate in OAI. In this framework also the researcher learns how considers OAI from many perspectives.

By understanding the framework, the researcher can help gain consent of a scholars regarding OAI. The research is willingness of Malaysia scholar's participation in OAI. The cause and prevention of knowledge sharing involve the OAI. This researcher may say that may be useful in the development of knowledge sharing. The knowledge and understanding by answering the question what, how, where, who, when and why. By answering these questions can improve the success rate of readiness knowledge sharing in OAI. When

researcher in the research, it is helpful to analysis OAI and knowledge sharing why things are done the way something is done. The framework helps determine what scholars are required through participation in OAI.

The framework illustrates these themes and shows technology professional how to organize, design and construct a solution for any type or size of problem. Framework consults a solution for any type or size of problem. In fact by using this framework it would like to know the detail of the issues of scholar's OAI in the future. This model presented as the systematic framework for the detailed presentation of this study.

### Readiness

Readiness refers to major goal within objective or approaches that are significant to the OAI relation to readiness. This include the readiness include to participate the OAI, willingness to participate in context of knowledge sharing and the success factors. Dealing for this element includes, a) survey question related scholar's readiness for gaining publication and perceptions of the OAI potential, their readiness and willing to participate and sharing research articles and their need and expectation of OAI, as well as understand their role in the OAI, b) focus group with the scholars probing their conception of OAI, their motivation for knowledge sharing and their perceptions of it potential, their behavior when share knowledge information, and their need and expectation of the OAI, c) interview with scholars to determine their willingness and readiness to participate in the OAI, their understanding of their role in OAI, d) evaluation of the knowledge sharing concerning its potential.

### Readiness: Why the OAI is Needed

OAI is needed why (Readiness) describe the readiness of the scholars and the OAI that support the knowledge sharing. This reveals the reasonable the OAI, as well as the establishment of knowledge sharing. the scholars concern the Why finding from the survey and focus group interviews help educational community in this case study is ready to participate the OAI and readiness scholars this support the OAI are as follow :

OAI readiness about indicated being not ready by the following findings:

OAI readiness as indicated by scholar's open access usage: The findings indicated that scholars are ready to participate the OAI as use open access is high (34.2%, 114) and all respondents in the sample indicate having use open access. A high majority (70.8%, 234) has participate to the knowledge sharing activity. The scholars indicated not participate of OAI. The scholars in this survey can be described as "not knowledge sharing-sense" many of these scholars have not willing in OAI. A total of 51.1% (170) have an open access usage experience of about 1 year, whereas 14.1% (47) have about 2 years. The scholars are also frequent users of the open access ( $\bar{x} = 3.05$ ;  $\sigma = 1.09$ ) with 49.2% (164) at least once a week, 9.9% (33) at least once a month and 13.2% (44) others. Scholars state that their reason for participation of OAI (Table 1), and that is the location they most frequently participate of the OAI. This equated to about Dspace 235 (74.4%) of the total respondents having participate to the OAI.

Table 1  
*Open Access Experience (n=316)*

Open Access Experience	Frequency	Percentage	Mean	Std.Dev.
Frequency			3.05	1.09
Never	31	9.3		
Seldom	44	13.2		
At least once a week	164	49.2		
At least once a month	33	9.9		
Others	44	13.2		
Length			2.13	0.97
Less than 1 year	73	22.4		
About 1 year	170	51.1		
About 2 years	47	14.1		
3 years	10	3.0		
Others	16	4.8		

OAI readiness as indicated by scholar's awareness of OAI and proffered for knowledge sharing: The surveys indicated that high proportion of scholars experience with OAI (Table 2), participate them extensively (Table 3), and are relatively well providing in term of sharing of the knowledge (Table 4). Overall there is a strong preference for knowledge sharing. This preference by the easy of knowledge sharing, as indicate by a few scholars who wrote that OAI are the best option for fast publication information. However, scholar's participation of OAI is limited to only specific subjects as many scholars are not aware of the OAI as well as their attitudes.

Table 2  
*Scholars Knowledge Sharing Experience (n= 377)*

Experience in Knowledge Sharing	Frequency		Percentage	
	Yes	No	Yes	No
I always share what I wanted	80	234	24.5	71.8
I acquired my reputation while sharing the knowledge	279	37	85.6	11.3
I have fun while sharing the knowledge	190	126	58.3	38.7
I find it so easy to make research articles	146	44.8	170	52.1
I have sometimes been refuse while sharing the knowledge	18	5.5	298	91.4
I need more incentives from university on sharing my knowledge	28	8.6	288	88.3
My university encouraged me to share knowledge	122	37.4	194	59.5
My friends discouraged me from sharing the knowledge	44	13.5	272	83.4

Table 3  
OAI Activities (n=316)

Documents Types	Never		Seldom		Once a year		Once in 2 years		Others		Mean	Std. Dev
	f	%	f	%	f	%	f	%	f	%		
Theses and dissertations	54	16.6	138	42.3	41	12.6	79	24.2	4	1.2	2.50	1.082
Teaching materials	34	10.4	129	39.6	51	15.6	98	30.1	4	1.2	2.71	1.058
Journal articles	32	9.8	7	2.1	54	16.6	32	9.8	191	58.6	4.09	1.332
Conference papers	21	6.4	26	8.0	57	17.5	29	8.9	183	56.1	4.03	1.300
Newspaper articles	73	22.4	193	59.2	20	6.1	26	8.0	4	1.2	2.03	0.860
Chapter of books	58	17.8	133	40.8	17	5.2	104	31.9	4	1.2	2.57	1.162
Monographs	69	21.2	200	61.3	10	3.1	33	10.1	4	1.2	2.06	0.883
Exam questions	51	15.6	197	60.4	9	2.8	56	17.2	3	9	2.25	0.962
Patents	61	18.7	216	66.3	9	2.8	27	8.3	3	9	2.03	0.806
Dataset	63	19.3	180	55.2	8	2.5	57	17.5	8	2.5	2.26	1.053

Table 4  
Knowledge sharing, Knowledge Extending and Suitability on the OAI (n=316)

Extending Knowledge Information	f	Suitability	f
Easy to publish	75	Never	77
Can share research articles at any time	59	Seldom	28
Free	131	Sometimes	131
The information is reliable	43	Frequent	14
Others: Communicate with experts	8	Very Frequent	65

Table 5  
Scholars Experience in Web Portal (n=316)

Web Portal	Frequency	Percentage
Yahoo	276	82.8
Google	289	86.7
Altavista	23	6.9
Fast search	78	23.4
Excite	26	7.8
Lycos	40	12.0

Suitability to participate the OAI as by high response of scholars who feel that there is a need for OAI and this would definitely benefit them: OAI have been accepted in a very favorable way by the scholars (Table 6), even though many do not know what a OAI is. They perceive OAI as useful. In the survey, it was apparent that scholar's concerns and priorities were centered around getting the relevant information and participating in the OAI community as content knowledge sharing. The main findings of the scholars study revealed the need for knowledge sharing and publishing research articles in the OAI, as well as the need for a community developed research findings. The survey revealed that some scholars not only desired the OAI where they could share information resources for research works but also were also willing to be design scholar attitudes and being part of the community within which they could contribute knowledge information and communicate with others.

Table 6  
Usefulness of the OAI and Willingness to Participate in Knowledge Sharing (n=316)

OAI usefulness statement	Very useful		Useful		Somewhat Useful		Not useful		Totally not useful		Mean	Std. Dev
	F	%	F	%	F	%	F	%	F	%		
OAI accepted by scholars, which contains knowledge sharing attitudes on personalities, factor that improves research works. To be useful for research sharing	60	18.4	14	4.3	162	49.7	66	20.2	14	4.3	2.87	1.085
OAI willingness	Very willing		Willing		Somewhat willing		Unwilling		Totally Unwilling		Mean	Std. Dev
	F	%	F	%	F	%	F	%	F	%		
I am willing to participate the OAI if given opportunities	75	23.0	110	33.7	112	34.4	16	4.9	3	0.9	2.25	0.906
I am willing to publish and submit quality research work	110	33.7	90	27.6	95	29.1	14	4.3	7	2.1	2.11	1.008
I am willing to be a content personality to a research works	78	23.9	80	24.5	102	31.3	7	2.1	49	15.0	2.59	1.310
I am willing to be part on publish my research work through OAI	102	31.3	93	28.5	109	33.4	10	3.1	2	0.6	2.11	0.918
I am willing to publish my research work fast	154	47.2	101	31.0	32	9.8	20	6.1	9	2.8	1.83	1.035
I am willing to publish my research work if given incentives	91	27.9	17	5.2	132	40.5	45	13.8	31	9.5	2.71	1.289
unrestricted sharing to the literature	86	26.4	26	8.0	148	45.4	38	11.7	18	5.5	2.61	1.171
clearly shows that in future the scholarly publications will be available 'free and open' to the research community	73	22.4	22	6.7	131	40.2	61	18.7	29	8.9	2.85	1.239

SPSS: how to get mean, median, mode, standard deviation etc

Calculating the Mean and Standard Deviation Using the Descriptives Procedure in SPSS

Universities support-as indicated by the universities as indicated by the university comprehensive plan for the participation of OAI-mediated knowledge sharing in education followings: This plan includes the vision, mission, values, objectives, and timeframe of the OAI. The plan, initiated by the university, also the appropriation budget by the government, to cover costs related to publication, connectivity and upgrading of the university research works and development of educational research. The clearly delineates the purpose of OAI-mediated

knowledge sharing, in term of open education, open access and open research models.

Knowledge sharing readiness related to research work requirements for OAI-mediated education: Interviews with scholars, as well as evidence from observation indicated the followings: (i) the university has met the requirements for OAI-mediated education, in terms of delivery service, technical development and research on the efficacy of open access dissemination; (ii) OAI envisaged that by creating open and free access journals, both the researchers and scientists would benefit enormously; (iii) the OAI is to create metadata and store them in their respective servers to enable others access them; (iv) the university has developed a plan for the OAI; and (v) the knowledge sharing and the OAI (such as research findings freely available on the internet) has been communicated to scholars in make research articles in OAI.

Based on these considerations, it is implicit that the scholars is ready to participate of the OAI as it has the supporting knowledge sharing environment, as well as willingness from scholars to act as potential scholars to develop research works. On the other hand, some scholars indicate that the Malaysia scholars this sample is not fully ready to participate of the OAI as indicated in Table 6.2. The reasons are summarized below:

- (a) Scholar's participation of OAI capability is limited and their comfort level to share knowledge is low;
- (b) The degree scholars embrace knowledge sharing and change is participated as the scholars have no clear direction on how to integrate the OAI into their research works;
- (c) Some scholars are not aware of the existence of the OAI.

However, the scholars are taking an interest searching information in the repositories, and they are negatives in their judgments of the OAI. They see the value of OAI and online publishing for their research works. Although some of them are not aware of OAI before, they give the impression to have an idea what a benefit of OAI was. They expressed willingness to play the role as a researcher in the OAI (Table 6.3). Figure 1 presents the readiness factors that support the plan realization of the readiness knowledge sharing in OAI.

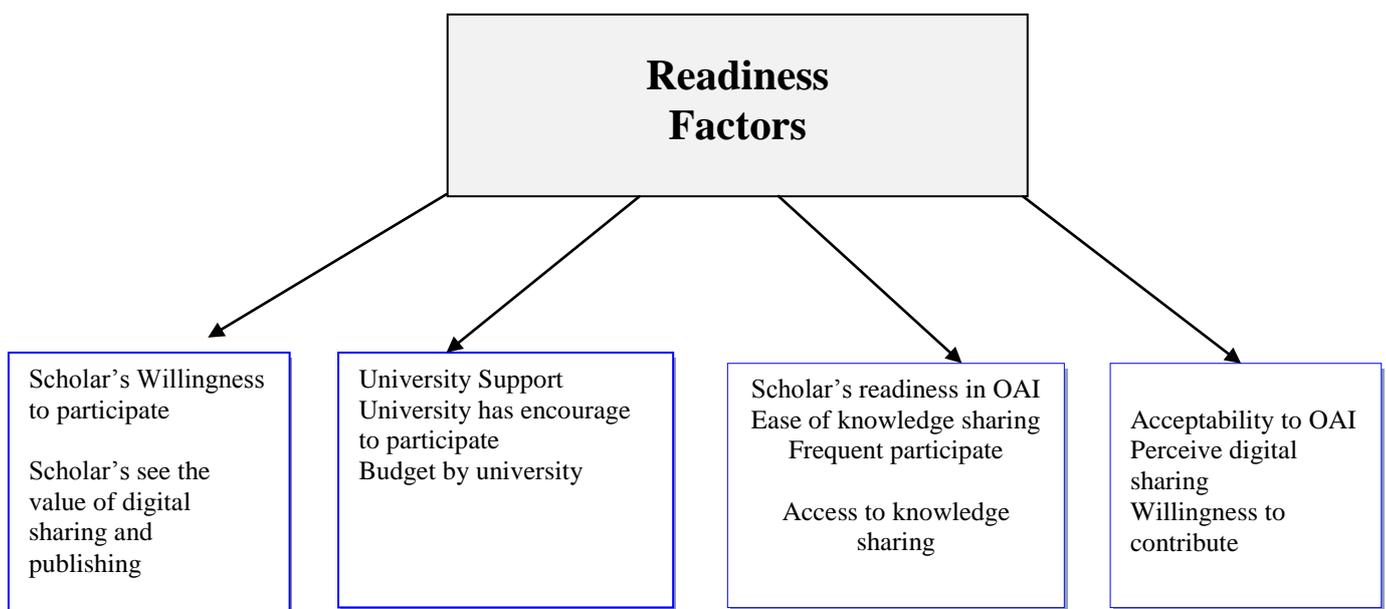


Figure 1. The Readiness Factors that Sustain the Diagram for Realization of the OAI

### **Scholars Goal and Objectives**

Goals and objectives identify the vision statement needed to define the willingness for the participation of OAI. The OAI has been conceived to support scholar's needs in conducting research projects. In research works-based knowledge sharing, interpret, analyze, generate, and evaluate information about a research, collaborate with others, and research findings. Through the exploration of an essential question that results in a research works, scholars develop a more in-depth, applied understanding of an academic content area, philosophical issue, or social problem. Knowledge sharing is especially effective when supported by educational technology. Research has also shown the approach to be effective in enhancing scholar motivation and fostering higher order in sharing research articles, especially when supported by Internet technology. To support scholars in these types of knowledge sharing activities, a full complement of roles in disseminating scholarly information and preserving it for research is needed to meet the needs of scholars, and OAI have the affordances to support scholars in these activities.

Based on this basis and fact finding analysis, as well as building from various knowledge sharing model, the scholar establishes the following vision of the OAI: "aim to provide free and unrestricted access to the literature that the scholars provide, comply with the Open Archiving standards". With this vision in mind, the broad thrust and goals for participating the OAI include:

(1) Increase of Knowledge Sharing Collections: The OAI will create, organize and maintain knowledge sharing and quality research works resources on local scholars that respond to the research and educational needs of research community.

(2) Condition of Research Works for Knowledge Sharing: The OAI will be a one stop centre on the internet for knowledge sharing on promoting research works. Accommodating research works means recognizing that there is a move from knowledge sharing to education. The knowledge sharing in the OAI will serve educational needs of university scholars, who are interested in research works. The OAI will support specific scholar attitudes that strengthen research and knowledge sharing such as, browsing, encountering, foraging, sharing, gathering, filtering, and using.

(3) Provision of 24 Hours for Knowledge Sharing: The OAI available 24 hours a day, 7 days a week. Knowledge sharing to the OAI content will not be constrained by time limits.

(4) Development of Scholar Community: The OAI does not only provide the path to a rich collection of high quality educational content and knowledge sharing, but it also purposes as a forum where research works may become knowledge sharing providers. The OAI authorizes scholars and other educational community to participate the knowledge sharing. It will also develop a community of educators who validate, use, contribute to, and support the knowledge sharing.

This capacity, it establishes "a knowledge sharing environment" - that is, a networked, online information space in which scholars can locate, acquire access to and, increasingly, use information. The objective of the OAI is therefore to provide a knowledge sharing environment and make research articles network for education which is: (a) designed to meet the scholar needs of knowledge sharing; (b) participated to enable dynamic shared of a broad collection of materials for knowledge sharing, mainly in digital format; and (c) managed actively to promote consistent anytime - anywhere sharing to quality research works.

### **The Knowledge Sharing Community to Participate the OAI**

Accessing the problems encountered by scholars in knowledge sharing, as had been

highlighted by the scholars in the sample, makes it possible to formulate a new model for make research articles available on the internet and sharing resources. The OAI is modeled to focus on scholar needs in knowledge sharing. As such, the participate of the OAI would be an essential part of knowledge sharing activities. Scholars should be enabled to share research works, create and publish their own research works in the OAI and share them with others. In this case, scholars should be allowed to create and submit their research works in the OAI. They are the content researchers of the digital sharing. Before, research works are written and submitted in paper or book, the OAI may move the scholar community towards an emerging genre of digital sharing. Thus, as time moves forward, it is more and more common for scholars to prepare their research works could be digitized and published in the network. With respect to end user access using the IR repository, they may search the contents, retrieve collections of search results, and play the contents of result items consisting of multiple media resources.

Scholars would be given the opportunity to develop their knowledge by validating the quality of submissions to maintain content quality of the research works, projects and add links to other IR repository. Pedagogical relevance is a function largely of the skill of the scholars that use the OAI. The scholars may also play the role of content researchers. They will create new knowledge collections of digital sharing and make this available in the OAI. Sharing to information means being able to share for information. They will create and sharing of knowledge directly affects new approaching, discoveries and developments. The knowledge to be free, which is consistent with the knowledge sharing, is based up on the works of scholars. The scholar shares an interest to ensure that the OAI respond to their needs and interests, as indicated by the one scholar, "I have no objections to OAI as long as it instills interests and fulfills scholar's needs". The scholar also perceives the following benefits in the participation of OAI.

### **OAI Requirement**

Using data from the survey, interviews and review of participating OAI, the researcher develops the compulsory purposes requirement of the OAI expressed as willingness objectives to populate the Readiness (Why). Specifically the objectives of the participation of OAI (Figure 2) are to:

(a) Enable scholars to share research works, by access to the internet, regarding the topics they are researching. From the scholar's point of view, the sharing information can be obtained at the same time and from the same place as when it is participated.

(b) Allow scholars to progression and organize their research works in various presentations and submit the report as well as other resources in various formats, in order to create materials for publication in the OAI.

(c) Provide scholars the experience of publishing their research works. This condition enables scholars to share their work with a wider audience and it creates different readiness and expectations for scholars in publishing their works.

(d) Allow scholars to validate the appropriateness of submissions to maintain content quality of the research works.

(e) Enable the scholars to share metadata. The OAI also enables automatic sharing metadata generation for file types, format and file size. Enable scholars to register as members of the IR repositories. The OAI also dflows scholars to edit and update their research work if necessary.

(f) Provide different levels of research works to different types of scholars, based on their

expertise.

(g) Acquire scholar's feedback, submission and description of other useful research resources in various formats, as well as links to other useful resources found in the Internet.

Provide and sharing discussions on any issues related to research works.

Encourage scholars in participating the OAI for knowledge sharing.

Allow authorized to view, add, modify or delete, if necessary the collections and knowledge sharing in the OAI.

The formulation of the OAI objectives helps the researcher in describe of the scholar requirement and successively detailed definitions of the scholar attitudes.

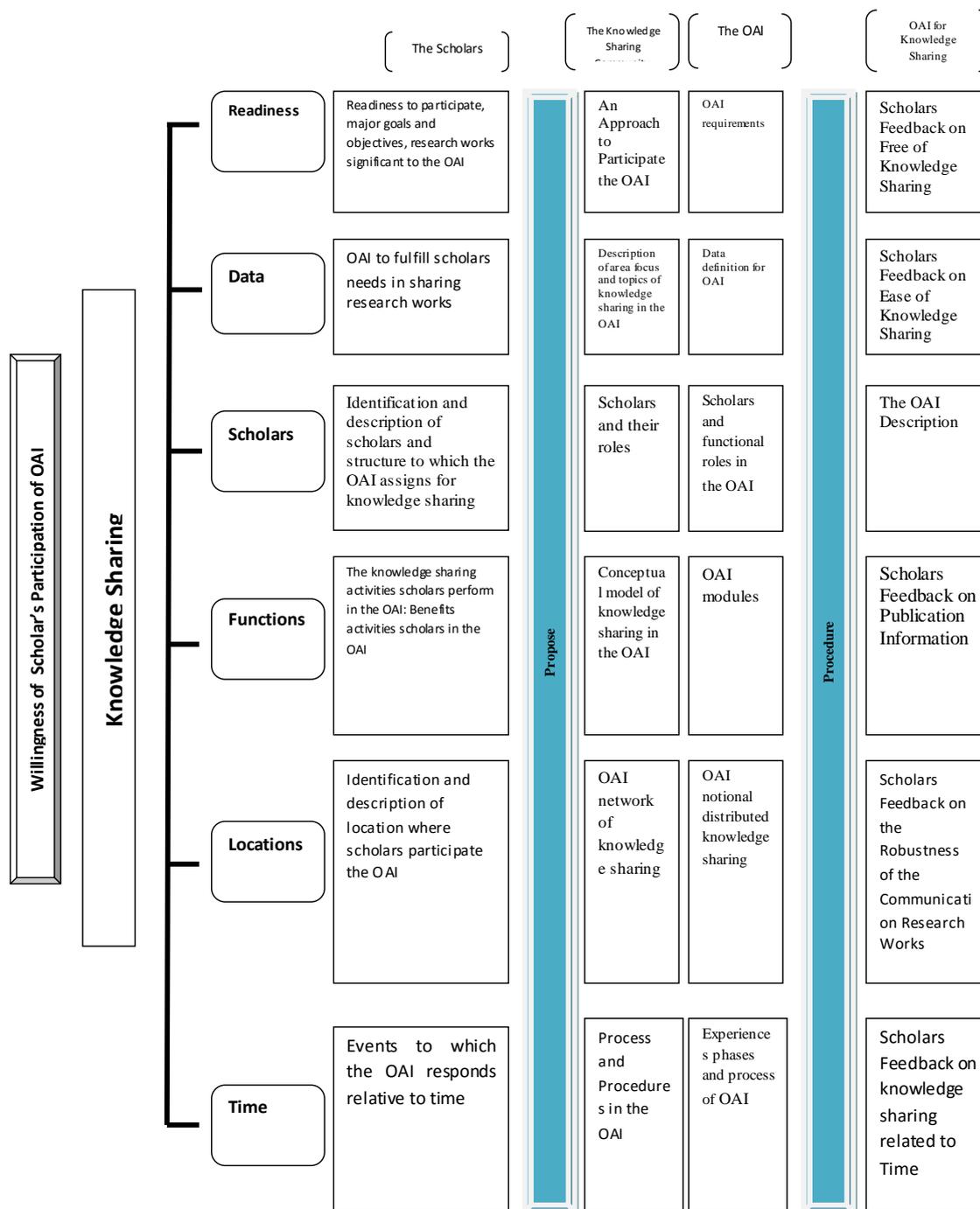


Figure 2. The Requirement Knowledge Sharing in OAI Model

### Conclusion

This study illustrated how framework is used as approach to investigate the OAI relates knowledge sharing. It highlights a detailed readiness knowledge sharing in OAI on framework. The perspective established from the framework in this study help to ensure OAI is relevant to scholar's willingness. The Framework represents the views of the knowledge sharing, scholar and scholar's participation of OAI in the research. The readiness focuses on the goal and objectives in the context to participate the OAI and the functional requirements of the willingness of Malaysia scholar's participation of OAI. The data focus the types of research works, sharing documents and scholar criteria, as well as the description and publication of the research works. The scholars represent the scholars who participation of OAI. These identify the authors and the research works organization, status of scholars and their perspective roles, as well as their roles in the knowledge sharing. The process illustrate the activities scholars perform in the OAI, the conceptual model of knowledge sharing in OAI derived from the activities involved and the scholar modules. The network describes the sites or IR repository locations and the relations between knowledge sharing activities within the OAI. The scholars perspective describe scholars have been consistently concerned with the prestige of such journals and their peer review, which is not the case in practice. The knowledge sharing community perspectives that explain the scholar's hindrance to the access and sharing of knowledge directly affects new insights, discoveries and developments. The OAI perspective illustrates of attempts make research findings freely available on the internet. The Time at the scholar describes the experience and publication of OAI, at the knowledge sharing community level describes the chronology of experiences indicating the processes that take place in the OAI, and at the OAI the processes in the make research articles available on the internet, which cause specific sharing data and knowledge sharing to take place.

Framework portray the knowledge sharing positioning the OAI for knowledge sharing, which is the result of the make research articles available on the internet. It represents what the scholars have in mind for participation of OAI. It integrates scholar's survey of the OAI prototype to evaluate the viability of a useful and willingness of OAI for knowledge sharing and shows that the readiness to participate, major goals and objectives, willingness to share knowledge and the scholar requirements set in the willingness of the Framework. As OAI known as knowledge sharing more to show capabilities and to serve research communities as has been reflected by the positive feedback on make research articles in all academic fields freely available on the internet. The scholars considered themselves competent to make research articles. The beta tester demographics and survey results indicate that the OAI is get to its target scholar communities, and can potentially show how OAI help scholar communities. Although the scholars were faced with difficulties make research articles available on the OAI, observations and interview indicated that they felt satisfied upon making their research works, in which they were get information and that are easily searchable by anyone. The next study summaries the findings of this research discussion of the result.

### References

- Alavi, M. & Leidner, D. E. (2001). Review: Knowledge management and knowledge management systems: Conceptual foundations and research issues. *MIS Quarterly*, 25(1), 107-136.
- Alavi, M. & Leidner, D. E. (2001). Review: Knowledge management and knowledge management systems: Conceptual foundations and research issues. *MIS Quarterly*, 25(1),

107-136.

- American Productivity and Quality Centre (1998). Benchmarking benchmarking. APQC Report. USA.
- Anbu, J. P. (2008). Institutional repositories: Time for African universities to consolidate the digital divide. Retrieved from <http://www.ascleiden.nl/Pdf/elecpublconfanbu.pdf>
- Bock, G. W. & Kim, Y. G. (2002). Breaking the myths of rewards: An exploratory study of attitudes about knowledge sharing. *Information Resources Management Journal*. 15 (2), 14-21.
- Connelly, C.E. & Kelloway, E.K. (2003). Predictors of employees' perceptions of knowledge sharing culture. *Leadership & Organization Development Journal*. 24(5), 294-301. Retrieved from [http://www.emeraldinsight.com/order\\_form.htm?ref](http://www.emeraldinsight.com/order_form.htm?ref)
- Corletey, A. (2010). The role of ICT applications in open access. Paper presented at the 2010 Ghana Library Association AGM. Retrieved from <http://hdl.handle.net/123456789/1440>
- Cummings, J. (2003). Knowledge Sharing: A Review of the Literature. Operation Evaluation Department working Paper, World Bank.
- Davenport, T. H. & Prusak, L. (1998). Working knowledge. Boston, Massachusetts: Harvard Business School Press.
- Gupta, A. K. & Govindarajan, V. (2000). Knowledge Flows within Multinational Corporations. *Strategic Management Journal*. 21 (4), 473-496.
- Hall, H. (2001). Input-friendliness: Motivating knowledge sharing across intranets. *Journal of Information Science*, 27(3), 139-146.
- He, W., Fang, Y. & Wei, K. (2009). The role of trust in promoting organizational knowledge seeking using knowledge management systems: An empirical investigation. *Journal of the American Society for Information Science and Technology: JASIST*, 60(3), 526-537.
- Hsiu-Fen Lin, G.-G. L. (2006). Effects of socio-technical factors on organizational intention to encourage knowledge sharing. *Management Decision*, 44(1), 74-89.
- Iligenti, M., Coetzee, F., Lawrence, S., Giles, C. L. & Gori, M. (2000). Focused crawling using context graphs. In Proceedings of the 26th International Conference on Very Large Databases (VLDB), Cairo, Egypt. (p.527-534)
- Kankanhalli, A., Tan, B.C.Y. and Wei, K. (2005). Contributing knowledge to electronic knowledge repositories: An empirical investigation. *MIS Quarterly*, 29(1), 113-143. Retrieved from <http://aisel.aisnet.org/misq/vol29/iss1/7/>
- Kiran, K. & Chia, Y.P. (2009). Open access initiatives in academic libraries: challenge to the user. Paper presented at World Library and Information Congress: 75th IFLA General Conference and Assembly: Libraries create futures: Building on cultural heritage, held on 23-27 August 2009 at Milan, Italy. Retrieved from <http://www.ifla.org/annualconference/ifla75/programme2009-en.php>
- Lee C. K. & Al-Hawamdeh, S. (2002). Factors impacting knowledge sharing. *Journal of Information and Knowledge Management*, 1(1), 49-56.
- Matthews, D. (2016). German research ministry demands open access. Times Higher Education. Retrieved from <https://www.timeshighereducation.com/news/german-research-ministry-demands-open-access>
- McDermott, R. and O'Dell, C. (2001). Overcoming cultural barriers to sharing knowledge. *Journal of Knowledge Management*, 51(1), 76-85.
- Papachristopoulos, L., Tsakonas, G. & Papatheodorou, C. (2008). Enforcement of information seeking behavior through digital library services, 97-105. In *Libraries In the Digital Age*

- 2008, *Dubrovnik and Mljet, Croatia, 2-7 June 2008*. Retrieved from <http://eprints.rclis.org/handle/10760>
- Prusak, L. (1999). What's up with knowledge management? A personal view. *The knowledge Management Yearbook, 1999-2000*. Boston, MA: Butterworth Heinemann. 3-7 Publishing. 17. 157-167.
- Shin, C. H., Ramayah, T. and Jahani, S. (2008). Using Theory of Reasoned Action to explain intention to share knowledge among academics. Retrieved from [http://www.apera.nie.edu.sg/activities/.../APERAO8\\_Day\\_3\\_Programme.pdf](http://www.apera.nie.edu.sg/activities/.../APERAO8_Day_3_Programme.pdf)
- Swan, A. (2005) Open access self-archiving: An introduction. Technical Report. Retrieved from <http://eprints.ecs.soton.ac.uk/11006/>.
- Swan, A. (2006). Open access: Key strategic, technical, and economic aspects. In Jacobs, N. (ed.). *Overview of Scholarly Communication*. Oxford: Chandos Publishing. (p.3-12)
- Teece, D.J. (2000). *Managing intellectual capital: Organizational, strategic, and policy dimensions*. Oxford, U.K. : Oxford University Press.
- Tenopir, C. (2004). Online scholarly journals: How many? *Library Journal*. 2(1). Retrieved from <http://www.libraryjournal.com/index.asp?layout=articlePrint&articleID=CA374956>
- Ware, M. (2004). Institutional repository and scholarly publishing. *Learned Publishing*. 17(2), 12-115.