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**A Prototype of E-forum for Online Expertise
Community (EfOEC)**

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DECLARATION

I certify that this thesis and the research to which it refers are the product of my own work and that any ideas or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.

20 APRIL 2005


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ABSTRACT

This project is to develop a prototype of E-Forum for Online Expertise Community. It is a web-based application using PHP technology with UML approach. The objectives of this project is to identify the procedures that needs to be followed and considered, so that the participants of the e-forum are acknowledged as an expertise or professionals by their professional's board, to define the mode of communication that will be used in e-forum so that it will be used together with the procedure that is identified and to develop a prototype of E-Forum for Online Expertise Community according to the analysis done. Methodology used in developing this application is Unified Software Development Process (USDP). It comprises of four main phases which are inception, elaboration, construction and transition. The purpose E-Forum is to record the information of users that implement this application. It's not just record or store the users information, its also generates and produce announcement, forum, current issues and archive which posted by them. The value change each time new user is added or deleted and data updated. Basically, E-Forum is developed in order to help the people to gain and share knowledge, skills and experiences to with each other.

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CHAPTER 1

INTRODUCTION

1.1 BACKGROUND

As we can see, many e-communities available in our cyber space instead of online expertise community. It is a virtual community which is a new way of communicating in the world today.

Further, the online expertise community gives an opportunity for professionals to have a discussion, exchange ideas and get solution on related issues. Thus, professionals can share their experiences and enhance their skills and knowledge. They also indirectly can promote their marketability as well.

In order to develop an e-forum for online expertise community, the procedure in terms of rules and regulation and who are allowed to participate and involved in the e-forum have to identify and define clearly. Besides that, a criteria of the professionals and their credibility need to be considered. So, everything that will be published will be accepted by people. Thus, it will distinguish online expertise community from e-community. Other than that, mode and type of communication in the e-forum for online expertise community also need to be considered. It can also facilitate an easy maintenance of e-forum.

1.2 RESEARCH PROBLEM

Before develop a complete and good online expertise community, several methods need to be understood. To make easier, those methods is divided into 5 categories:

- **Online Expertise Community**

This is a place where community professionals can communicate, share their experiences and learn from one another and about one another. Most online expertise community is design in properly thus it does not provide enough functions for user, especially professionals.

- **E-forum**

Electronic forum is a platform where every body with similar topic or ideas can discuss and exchange idea. In order to design a proper architecture for electronic forum, all aspects have to consider.

It is very important to identify who will be participated in the online forum. Thus, a business modeling need to be build before building the whole architecture of online expertise community.

- **Rules and Regulations**

In order to ensure the electronic forum inside the online expertise community works as planned, thus it needs to be clearly defined all the rules and regulations within the e-forum. All the factors have to be considered.

- Mode of communication

In order to ensure the effectiveness of electronic forum, the proper mode of communication need to be identified. Participants or members in the community must be clearly informed the type of communication that they will face. They should realized that the existence of one to one, one to many and many to many mode of communication.

- Collaboration Filtering

All issues that are discussed need to be filtered. This includes the issues of privacy, issues that can be discussed openly, closely and which information can be released or declined.

1.3 OBJECTIVES

- To apply the proposed architecture that needs to be followed and considered into prototype.
- To define the mode of communication that being used in e-forum.
- To develop a prototype of e-forum for online expertise community according to the analysis done.

1.4 SCOPE

This research is focused for developing a prototype of e-forum for online expertise community. Because of there is so many expertise exist in the world, the limitation of time to complete the research and development, the researcher will concentrate only on professional architects in Malaysia. All qualified architects in Malaysia are registered under The Institution of Architects Malaysia. Furthermore, the mode of communication in e-forum is variety such as e-mail, chat and forum. So, the convergent for prototype development will be implemented to the forum.

All the procedure that states the criteria for professionals will be identified as acknowledgement so that they can participate in an e-forum for online expertise community. This includes identify their membership in the community including details on their personal information and background as a professionals. Then, the type of communication that will be used in the forum implementation also will be identified.

1.5 SIGNIFICANCE OF RESEARCH

There are many significance and benefits that will get from this research. Some of the significance is:

- Information gathering.

Many users can access relevant information from the e-forum. Users also can exchange information and discuss about their experts field. Then all the

information will be gathered as a subject that can be retrieved for the future reference.

- **Easy access**

By e-forum, it will makes an easy accessible to the user. Users from different places do not have to travel to specific place to gain information needed. They can access freely their wanted information to the e-forum via Internet at their own place.

- **Interaction richness**

A meaningful interaction with other members of the profession is important to debate idea, issues and problems and to gain new insights relating to their field.

1.6 PROJECT LIMITATION

However, there are many problems encounter in finishing this product:

- Since the developer is new with the PHP environment the process of learning and understanding it is taken more time than plan.
- The process of configures the PHP also difficult and complex to understand also taken more time than plan.

CHAPTER 2

LITERATURE REVIEW

2.1 INTRODUCTION

This chapter will be described about the definition of community, online community, e-forum, mode of communications and architects. It also will describe about how to make a successful e-forum, importance and benefit of e-forum, and also the problem in developing e-forum.

2.2 DEFINITION OF TERM

2.2.1 Community

There are many definition of community. Generally, as stated in Oxford Dictionary, community is defined to the people who living in one place, district or country, considered as a whole. Besides that, it also defined as a group of people having the same religion, race, occupation or with common interests.

Community is widely and often uncritically used to characterize two kinds of groups. The first group is a group that comes together to learn in classes, workshops, and professional associations. Then, the second group is a group that participates in an electronic forum (e-forum) such as an Internet Relay Chat room, a professional LISTSERV, a distance education course or an online auction (Kling & Courtright, 2003).

However, five elements can be defined community as stated in definitive book on business related online community, Net Gain by Hagel and Armstrong. There are distinctive focus, integration of content and communications, a valuing of member generated content, and an openness to competitive information or access and a commercial orientation.

In addition, there are six dimensions of community (Brint, 2001). First, community is a dense and demanding social bind and second is a social attachments to and involvements with institutions. Third, community is ritual occasions, fourthly it is a small group size and fifthly it is a perception of similarity with the physical character, expressive style and way of life or past experience of others. Lastly, it is a common belief in an idea, an ethical order, an institution or a group. However, several of groups share all of these characteristics simultaneously.

Then, Graves (1992) said that community implies to an inherently cooperative, cohesive and self-reflective group entity. They work on a regular face-to-face basis toward common goals regarding to a variety of perspectives, principles and life styles.

In developing a group into community needs a major achievement. It requires special processes and practices to be done. Community must be understood clearly including its people, cultures, values and habits to provide the basis for effective collaboration. It allows gaining a sense of the community vision. A clear look at the community helps in identifies individuals in the community who have power and those who have gifts.

Expertise community is communities that participate by professionals that have acknowledge by their own professionals bodies. To make it effective, it must support the engagement in part by following participants the opportunity to share their histories that is what they have done and what they have been. Orr's (1990) analysis quite considerably about the importance of stories in developing workplace learning. The quality management course proved to be very effective in stimulating participants to share their past and current workplace experiences.

2.2.2 Online Community

An online community can be a powerful tool to bring people together to share their concern for an issue. Online community can be defined as gathering people in cyberspace and perform an online activity including electronic collaboration, virtual networks, Web-based discussions or electronic mailing lists.

Nowadays, fierce competition and the general maturation of the Internet and its related technologies have raised the bar on online community. The Internet users expect more than chat when interacting with a community. They insist advanced and integrated features such as instant messaging, forums, message boards and the ability to present and organize their content into relevant category in an intuitive and attractive approach.

To build an online community, it requires identifying the needs and expectations to accomplish it. So, it will not wasting time and resources. The specification of participants also has to be defined. It will make complicated to a direct discussion

that holds too broad interests or issues. This approach led to greater interaction and exchange of ideas.

Even there has been so much speculation on the affect of online activities on our offline lives. But how we integrate our offline and online experiences is the more relevant question for it. Online communities are seems like the telephone. But there is data that sometimes asynchronous.

2.2.3 E-Forum

An e-forum is a form of group discussion that uses text messages stored on a computer as a communication medium. It is not include the other various type of real-time or synchronous communication such as chat rooms and video conferencing.

E-forum has played a key role in online community since the first such networks began. E-forum permits direct interaction among it community members. They provide a place where local or current issues can be discussed and information can be shared quickly and easily. Consequently, e-forum is a potential useful and cost effective innovation (Anderson, 1996).

In addition, e-forum allows members to post their messages to a board that remains available for users to notice it within days, weeks and even months after it was posted. This technology is an ideal complement to chat rooms which expect people to be present in the chat room at the time a message is send.

E-forum is a good way for generating research ideas and stimulating debates involving researchers and practitioners. Web is a common place for supporting

discussions and providing pointers to existing information resources. Furthermore, the richness of data types that the web provides can be exploited to the fullest by creating e-forums centered on the web as opposed to other Internet discussion systems like the newsgroup (Barua, 1995).

According to Schön (1987) and Cervero (1988), professionals development activities responsible to provide information with assist professionals in developing a critical and analytical way of considering knowledge, provide opportunities for professionals to practice using their judgment skills and assist professionals in developing new knowledge based on practice. Professionals seek to identify and solve work-related problems through the use of new and better systems of action. In addition, it provides an opportunity for professionals to improve the technique of increasing their unique body of knowledge through a critical and analytical process of acquiring, practicing and adopting new knowledge. The best way to achieve is through the rich resources of practical knowledge acquired by other professionals. When professionals search for similarities from across the profession, it can "yield a fresh exchange of ideas, practices, and solutions to common problems" (Cervero, 1988). So, e-forum has a potential to facilitate this kind of learning.

The important is e-forum provides a freedom for time constraints, time for reflection, opportunities to research and back up assertions and support for cost effective global communication. Successful of e-forum can create a stimulating and supportive learning environment without forcing participants to congregate at a particular location or time (Anderson, 1996). Lastly, e-forum introduces

participants to a potential effective learning and communication technologies which provide a valuable training and exposure function.

E-forum can be defined as an asynchronous communication tool where people do not need to be logged on to a computer at the specific time to participate. It is a place for public and experts to communicate by sending questions and posting answers.

2.2.4 Mode of Communication

On the network, one-to-one communication is a powerful method for transferring ideas, opinions or information. Interpersonal communication plays a major role in the process of diffusion of ideas and innovation and it has more dramatic effects than other forms of communication (Littlejohn, 1995). One-to-one communication usually takes place by email which combines features of telephoning with those of writing. But like a letter, the recipient does not have to be there at the time you send it. It is also easy to keep a copy for reference if you realize that some of what you have written for someone may be useful to the others later such as instructions on how to do something.

Nowadays, many people communicate with colleagues and friends through email and sometimes count among their friends who they have never met face to face. It is encouraging that a new form of communication open up possibilities that were not there before.

One-to-many communication is one person or organization who are working collectively provides some information to many people. It can be a passive form

such as my preparation of this document for many people to read. Then, the recipients typically pick the information up as part of their many-to-one communication as an active form in which the writer sends a message (usually by email) to many recipients. If the recipients can reply to the author and to the other recipients, the communication becomes many-to-many.

On the Internet, it is rarely found one-to-many communication. An example would be the secretary of an organization sending a bulletin to all the members. Typically, people will want to reply to and discuss such announcements, in a way which was not so easy when organizations had to send out their newsletters on paper. Besides that, many network users prefer to pick up information selectively rather than receiving an entire newsletter in their mailbox. They would prefer to be sent just an announcement that a new issue is available for them to browse on a specified server.

Many-to-one communication is happening when someone is searching actively for information about something. The information that they have provided will have been made available by someone else to act one-to-many communication.

Many people find many-to-one communication is particularly pleasant as they set the pace and do not have information pushed at them. It is more like using a library than entering a discussion. It is done using the World Wide Web and sometimes with the help of search engines.

Many-to-many communication usually takes place by email. A huge amount of information is pushed into people's mailbox by discussions using mailing lists.