

A PORTAL FOR CONFERENCES

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***Abstract :** Portal originally came to exist to help users to find information on the World Wide Web (WWW). A conference is a kind of forum for discussion of some broad subject. This project attempts to develop a web-based information centre that specializes in promoting new conference. Therefore, a portal for conferences is seemed to bridge up the communication between both organizations and users. This paper discusses the features and functionalities of a portal that were gathered and identified from different sources of research. A prototype system was built and further tested by potential users. Recommendations of improvement to enhance the system were also conferred.*

***Keywords:** portal, conference, web-based application*

INTRODUCTION

Portal a gateway to the Internet; is a web-based application that is able to provide facilities for visitors to access needed information. Telecom Glossary (2000), defines portal as a website that aims to be the 'doorway' to the World Wide Web (WWW). Portal typically consists of a search engine or links to useful pages, and possible news or other services. By virtue of the fact that these services are provided free of charge, the owners hope that visitors will make the site as their default homepage and many way return visits. Many other portals being to generate income for their owners. They may focus on a specific group of users and may also be a part of an intranet or extranet. According to Winkler (2003), the term portal was used to refer to well-known Internet search and navigation sites that provided a starting point for web consumers to explore and access information on WWW such as a search engine.

According to Beer (2004), a portal is seemingly a website that is or sets out to be a major starting point consisting of services and resources for users who connected to the web. A portal is also similarly defined as a 'super site' that provides an all-inclusive entry point for an immense range of resources and services. Furthermore, a portal is also capable of

authenticating and identifying users. This capability enables them to provide users with a personalized and insightful interface that facilitates access to content which are not only relevant, but also of their primary interest.

Currently, portals can be a window that interacts with various functions. It is not improbable that in future, portals will be able to be integrated into various mobile phone devices and also other types of portable devices. In Malaysia, many conferences are organized by local institution such as government agencies, Higher Learning Institutions, Non Government Organizations (NGOs), and private sectors. Conference is a place where participants obtain knowledge as well as exchange ideas among them. It is feasible to use web-based technologies to the conferences at national or international level. These technologies can help people or organization who wants to organize a conference or want to join the conference.

However, in Malaysia there is no such centralized portal for conference. The potential participants find difficulties to know about the conferences and the important dates. This situation is not very efficient and needs to be improved because it will effect the communication between the organizer and potential participants. Beside that, potential participants also have difficulties in getting the latest information about the conferences. Hence, to solve the problems a special portal for conferences is needed.

Traditionally, conferences are manually organized and promoted. Conference information is disseminating for example being done by mail and electronic mail (e-mail) by attaching the conference pamphlet or brochure. In addition, the potential participants also find difficulties in getting more information on the conference such as the important dates, the venue, and papers to be presented and so on. Beside that, a specific website for a certain conference is developed and has been used as one of the information broadcaster. However not many people are aware of the existence of the website. Even though the organizer may have promoted the website information through e-mail and search engines, the information may take some time to reach the potential participants. This is due to the fact that the search engines usually take time to index the website. Therefore it is hard for potential participants to get the latest information about the conference, and thus, the organizer could not promote or distribute their conference information effectively.

TYPES OF CONFERENCE

According to Portal Community (2004), portal terminology has become very generic and abused and the word portal means different things to different people. The portal concept and

technology is rapidly emerging and changing, making it increasingly important to understand and focus on the various types of portals and their appropriate role and application. However, it is important to recognize that a significant portal implementation can be comprised of multiple types of portals and blended into a hybrid solution. The four different types of portals are not mutually exclusive and must be able to be integrated and coexist. Each of the four portal categories are briefly defined and described below:

- i. Corporate or Enterprise (Intranet) Portals - Business to employees (B2E) portals:
 - Enterprise Information Portals (EIP) - These are portals that are designed for B2E processes, activities and communities to improve the access, processing and sharing of structured and unstructured information within and across the enterprise. EIPs also incorporate roles, processes, workflow, collaboration, content management, data warehousing and marts, enterprise applications and business intelligence.
- ii. e-Business (Extranet) Portals - e-Business portals have three sub-categories:
 - Extended enterprise portals - Examples of extended enterprise portals are: business to customer (B2C) which extend the enterprise to its customers for the purpose of ordering, billing, customer service, self-service, etc.; and business to business (B2B) which extends the enterprise to its suppliers and partners. B2B portals are transforming the supplier and value chain process and relationships.
 - e-Marketplace portals - An example of an e-marketplace portal is CommerceOne.net. Commerce One.net focuses on the North American Maintenance, Repair and Operations (MRO) market. information.
 - ASP portals - ASP portals are B2B portals to allow business customers the ability to rent both products and services. Examples of an ASP, B2B portal is Portera's ServicePort, Salesforce.com, SAP's MySAP.com and Oracle's oraclesmallbusiness.com.
- iii. Personal (WAP) portals - There are two major types of personal portals:
 - Pervasive portals or mobility portals - These are portals that are embedded in web phones, cellular phones, wireless PDAs, pagers, etc. Personal or mobility portals are becoming increasingly popular and important for consumers and employees to obtain product and services information, prices, discounts, availability, order status, payment status, shipping status, scheduling and installation information, etc.
 - Appliance portals – These are portals that are embedded in TVs (WebTV),

automobiles (OnStar), etc.

iv. **Public or Mega (Internet) portals** - Organizations that fit into this category are becoming "new media" companies and are focused on building large on-line audiences with large demographics or professional orientation. There are two major types of public portals:

- General public portals or mega portals address the entire Internet versus a specific community of interest and include: Yahoo, Google, Overture, AltraVista, AOL, MSN, Excite, etc. General public portals or mega portals will become fewer and consolidate over time.
- Industrial portals, vertical portals or vortals. Vertical portals or vortals are rapidly growing and they are focused on specific narrow audiences or communities such as consumer goods, computers, retail, banking, insurance, and etc.

The above-mentioned types of portals are rapidly evolving to support the natural evolving information, collaboration and community needs of individuals, employees, customers, suppliers and partners (Portal Community, 2004).

FEATURES AND FUNCTIONALITIES

The early web portals were essentially simple search engines, returning a list of websites containing user-specified keywords and/or phrases. After the creation of web-enabled search engines, users needed more than an unsorted list of thousands of web sites containing the specified keywords. The natural progression to this is the development of web portals. The early portals were essentially web search engines containing various categories that could be searched and explored independent of the rest of the web. Many search engines today still have this feature (IEM, 2001).

Kounadis (2000) explains that portals gather information from one or more servers as far away from each other as being on opposite ends of the globe and from the Internet. This information is then delivered through a single, consistent interface. This allows users only one interface to all the documents, e-mail, Web sites, competitive information, databases and other aspects which they need to do their jobs. A corporate portal is a portal that has similar functions as the My Yahoo! (<http://www.yahoo.com/>), the difference being that it is an overly simplified one. The best way to embark on a portal project is to select the target users and understand what information they need. Kounadis (2000) categorizes the information into the following:

- Unstructured content (documents, hypertext content etc)
- Structured content (data stored in relational or other types of databases)
- News (either free or for a fee)
- Groupware application data (such as Lotus Domino or Microsoft Exchange)

A portal enables a joint, personalized access to data, expertise, and applications. With the turning away from completely self-referential web pages and the promise of a single platform which allows the integration of different data types and applications adjusted to the specific (Dataquest, 2003).

According to Wikipedia (2004), the Open Directory Project requires that sites listed as a portal contain these features:

- Search Engine/Directory
- Groupware and Collaboration
- Knowledge Management
- Content Management
- Work Flow
- Multi Channel Facilities
- Single Sign On
- Business Intelligence and Integration of Applications
- Identity Management Integration
- Infrastructure Functionality

According to Beer (2004), portal customization allowed for two methods namely profile-and preference-based. Profile-based customization refers to users belonging to a predetermined group and thereby inheriting the group's customization settings, for example Faculty of Engineering staff will be presented with all Faculty of Engineering content including news, events, research items, links, etc. Preference-based customization refers to users specifying their unique customization settings based on relevance, for example users select the content that is of particular interest to them and with which they wish to be presented. However, a third method of customization, based on usage patterns, is identified and discussed in this paper to determine whether it would be possible for a learning and adaptive system to analyze each user's unique usage patterns in real-time and dynamically build a personalized portal, based upon predetermined groups and information resources as well as the user's unique, everyday habits.

Ovum (2000) described in their study "**Enterprise Portals: New Strategies for**

Information Delivery", - the ideal portal is based on eight functionality areas:

- search and navigation
- information integration (content management)
- personalization
- notification (push technology)
- task management and workflow
- collaboration and groupware
- integration of applications and business intelligence
- infrastructure functionality

Some features were gathered by comparing and analyzing the existing conference portal Web sites (as depicted in Figure 1 to 8) such as Conference Alerts (<http://www.conferencealerts.com>), Papers Invited (<http://www.papersinvited.com>), Association for Information Systems (AIS)- Conferences Page (<http://www.isworld.org/forthcoming/conferences.asp>), Gurteen Event Calendar (<http://www.gurteen.com/gurteen/gurteen.nsf/id/events>), Association for Computing Machinery – Events & Conferences (<http://www.acm.org/events/>), IEEE Computer Society Conferences (<http://www.computer.org/conferences/>), Netlib Conferences Database (<http://www.netlib.org/confdb/Conferences.html>), and Logic-Related Conferences (<http://cm.bell-labs.com/cm/cs/who/libkin/lics/logic-confs.html>). Then, the following Table 1 shows the comparison among the web portal features was performed.

Although most of the functionality is not new, what is new is the idea that the business value of the whole is considerably more than the sum of its parts. Thus, a successful portal does not only consist of either a good collaboration support or a good integration of the information sources. Rather it consists of-just like a successful cooking recipe-a well-integrated mixture of the basic portal functionalities (Ovum, 2000).



Figure 1: Conference Alerts



Figure 2: Papers Invited



Figure 3: Association for Information Systems

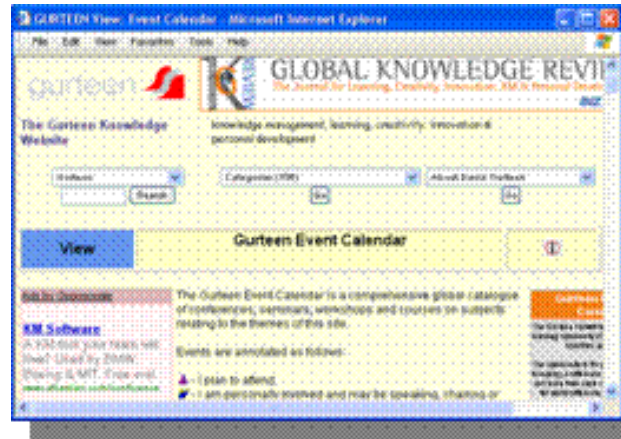


Figure 4: Gurteen Event Calendar

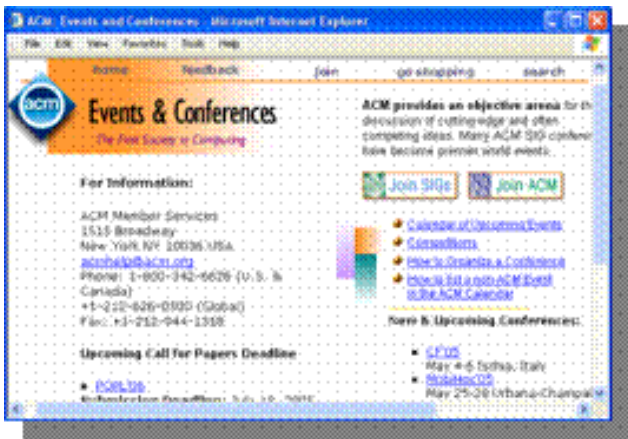


Figure 5: ACM- Events & Conferences



Figure 6: IEEE Computer Society Conferences



Figure 7: Netlib Conferences Database



Figure 8: Logic-Related Conferences

Table 1: Comparison of features between conference portals

Features	CA	PI	AIS	Gurteen	ACM	IEEE	NetLib	Logic
Search	√	√	X	√	√	√	√	√
Advanced Search	√	√	X	X	X	√	√	X
Browse by Category	√	X	X	X	√	√	√	X
Subscription/Registration	√	√	X	X	X	√	X	X
Add Event/Conference	√	√	√	√	√	√	√	√
Promote Conference	√	X	X	X	X	X	X	X
Edit Event/Conference	√	X	X	X	X	√	√	X
Related/ Relevant Links	√	X	√	√	√	√	X	√
Event Spotlight	√	√	X	√	√	√	X	X
Display Event/Conference	√	√	√	√	√	√	√	√
Event/Conference Alert System	√	√	X	√	√	√	X	X
Login	√	√	√	X	X	√	X	X
Refer a friend	X	√	X	X	X	X	X	X
Suggestion	X	√	X	√	X	√	√	X
Summary	12/14	10/14	4/14	7/14	7/14	12/14	7/14	4/14

Abbreviations:

- CA : Conference Alert
- PI : Papers Invited

AIS : Association for Information Systems
Gurteen : Gurteen Event Calendar
ACM : Association for Computing Machinery – Events & Conferences
IEEE : IEEE Computer Society Conferences
NetLib : Netlib Conferences Database
Logic : Logic-Related Conferences

THE PROTOTYPE SYSTEM

This chapter is the design and development of portal for conferences. The prototype development is necessary to provide organization, mailing list and administrator of a way to view the system's functionality. The functionality of mailing list such as is search conferences by name, mailing list registration, login, edit profile, view conferences by field, register field, change their password and email. Organization functionality quite same with mailing list but has other functionality such as registration organizations, view conferences, edit conferences that have been registered and register for new conference.

The functionalities for administrator view organization, view conferences, view mailing list, view conference by field and delete conference. All functionalities are illustrated in this chapter via the prototype that was developed. The next chapter discusses the prototype evaluation phase.

The main page displays the home page of the system (Figure 9). From the main page, user is provided with the list conferences, search conference, news conferences, calendar and have button for organization, mailing list and list of the conferences. Figure 10 shows the conference detail from the news conference link. From this page user can view the detail of conference such as conference name, start date, end date, location, city, country, web site, contact name, email, and the field type. If user would like to search conference (Figure 11), type in the keyword of the conference name in the field provided and then clicks the search button. The screen will be displays the search result for any conferences title that contains similar word.



Figure 9: The main page a Portal for Conferences



Figure 10: The conference detail



Figure 11: Search conference by name

CONCLUSION

The objective of this study is to discover and compare features and functionalities of a conferences portal. Then, the collection of the features and functionalities was used to develop a prototype for a conference portal that can benefit both potential participants and organizers. Basically, this study involve five phase such as, construct a conceptual framework, develop system architecture, analyze and design the system, build the prototype system, and observe and evaluate the system. From the literature and comparing different portal for conference environments, a list of features and functionalities were identified. The collection of features and functionalities can be used for other development of portal for conferences.

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