M-2009

WEB PORTALS AS AN OPEN EDUCATION RESOURCE

Černá, Miloslava, University of Hradec Králové, Czech Republic

Co-Author: Poulova, Petra, University of Hradec Králové, Czech Republic

Summary

The Internet is a magnificent source of knowledge but it represents an enormous time burden on people.

The empirical study "Web Portals as an Open Education Resource" consists of two parts; the first one is focused on rate of portal visits including time spent in selected kinds of portals and in the other part the issue of portal applications utilized by respondents of the survey is explored. The survey was based on a questionnaire and interviews. In respect to a smooth run of the survey a *simplified own categorization* of web portals was developed: *Search Portals, General Portals, News Portals, Educational Portals, Language Portals and Other Portals.* Out of the wide range of portal tools and services which are offered in common portal solutions the following ones were selected and placed into the survey: *Search, E-mail, Chat, Forum – discussion section, Information, Listening to music, Dictionary, Shopping basket, Education, Others.*

The empirical study proves that time spent on the Internet is enormous and the width of web applications utilized is significant so that it is worth studying this issue, it can serve as a suitable starting point for web design, e-commerce e-learning, life-long learning as it proves the overwhelming impact on our lives.

INTRODUCTION

Browsing the Internet, searching for information, studying on the Internet, etc. is a common matter nowadays. The Internet with its specific services represents up to now an unlimited space enabling publishing of current information, supporting new channels of communication, storage of all kinds of documents and their subsequent processing corresponding to the professional needs or just the needs of our interest. Beside this magnificent source of knowledge and new channels of cooperation and communication, the Internet represents an enormous time burden on people. The study in here described focuses on this time burden spent in the portals and the width and frequency of utilised services.

OBJECTIVE OF THE EMPIRICAL STUDY

The empirical study "Web Portals as an Open Education Resource" consists of two parts; the first one is focused on rate of portal visits including time spent in selected kinds of portals and in the other part the issue of portal applications utilized by respondents of the survey is explored.

The aim of the study is to find out what time burden utilization of web portals and their services currently represent; how much time people spend in selected portals aside from professional or nonprofessional reasons. The survey was run in last year; sixty-five students and twenty-five teachers from the Faculty of Informatics and Management, University of Hradec Králové took part in it.

METHODOLOGICAL FRAME

Definition of a web portal

Discussion can be opened by a sceptical statement *"Portal is like a Loch Ness – everybody is speaking about them, but has anybody seen them, aren't they only just web-pages which appear and fade."* The truth is that web-portals really developed from web pages. At present this issue is little bit chaotic; there is such a wide scale of portal definitions due to the fact that each of them, as a rule, reflects specialization of their author and area of study.

Isaacs defines portals as `an integral approach to the search of needed information via search engine´ [1].

Current authors enlarge the original main role of a web portal as an entirely information retriever and data storage facility. Web portals represent an approach to integrated applications in the area of internet technologies [2].

Internet portal is known as a dynamic web – environment based on roles, specifically tailored to suit selected groups of users [3].

For the needs of this study a *simplified definition* was developed:

`*Portal is a website providing a wide scale of services to its visitors where aggregation of information from various multiple sources is one of the essential missions´.*

Portal Categories

When it comes to portal categories, the situation is similar. There is no universal portal categorisation; those which had been studied were found quite complicated for a common user. Just to illustrate the complexity of this issue one scientific approach to the categorization of portals follows. Collins enumerates four portal categories [4]: Enterprise information portal, E-business and commercial portal, Mobile commercial portal and Internet portal.

In respect to a smooth run of the survey a *simplified own categorization* was developed:

Search Portals, General Portals, News Portals, Educational Portal, Language Portals and Other Portals

Questionnaire and Interview

A *questionnaire, ´*Web Portals and their Services`which is focused on commonly visited portals, was created.

On the basis of *the interview* which preceded the final version of the questionnaire a few modifications were made. Especially professional terminology had caused misunderstanding within respondents. They found it difficult to choose the proper answer when they did not understand clearly the meaning of expressions like `horizontal or vertical portals´ they needed and asked for further explanation so as they could complete the questionnaire.

Simplified portal categorization with typical examples of particular portals was set together with defined time periods. For example, Google and Yahoo represented *Search Portals*, people who use also some other search portal could mention it in the part - *Other search portals*.

Survey sample

The questionnaire was distributed to students and teachers at the Faculty of Informatics and Management, University of Hradec Kralove. *The accessible sample* represented twenty five teachers and sixty five students. Move in the Internet environment was for the whole accessible sample natural due to their specialisation. The questionnaire was anonymous.

ANALYSIS AND FINDINGS

Data from 90 respondents were collected and processed in statistical programme NCSS 2000.

Age categories of teachers were more various then in case of students. All students grouped into the category up to twenty five years old.

Ten teachers belonged to the age category up to thirty five years old, eight to forty-five years old, six teachers to sixty-five years old and only one belonged to the age category like all the students to the category up to twenty-five years old.

When it comes to proportion of men and women in the sample, their number was balanced; 46 women and 44 men.

Time spent in web portals

  ➢ The research showed that factors like: age, work position or sex hadn't played any influencing role in the case of this accessible sample of people from the Faculty of Informatics and Management.

  ➢ As for time spent in search, general, news, educational and other portals the gained results were nearly identical; the same for teachers and students.

  ➢ The only difference was in language portals, which were more often visited by teachers.

  ➢ **One third of asked people spent in Search portals two to five hours a week**. Another third of them spends there about one hour weekly; nearly every fifth person has chosen the astonishing category ´more then five hours` a week.

  ➢ When it comes to **General portals more than a third of people (37%) spent in these portals two to five hours a week**.

  ➢ People spent little bit less time in the News portals. 26% respondents visited them regularly about half an hour a week. One fifth of them spent there about an hour and another fifth of respondents stated that they browsed through News portals two to five hours a week. Only 15 % spent there more than five hours a week.

  ➢ **Highly visited portals are educational portals. One third of people states that they spend in them two to five hours a week during the semeste**r. The number may seem high but it is due to the fact that students and academic staff at the faculty work systematically in a learning management system WebCT.

Portal services

Out of the wide range of portal tools and services which are offered in common portal solutions the following ones were selected and placed into the survey: *Search, E-mail, Chat, Forum – discussion section, Information, Listening to music, Dictionary, Shopping basket, Education, Others (This section comprises all other services which have not been enumerated).*

Rate of occurrences of these services was searched.

  ➢ In accordance with the gathered data there are no significant differences between academic workers and students like in the previous case which dealt with the rate of

portal visits. Rate of occurrences of portal services is documented in the chart 1.

	daily		weekly		monthly		yearly		never	
	Teachers	Students	Teachers	Students	Teachers	Students	Teachers	Students	Teachers	Students
Search	17	60	5	3	0	0	0	0	3	2
E-mail	24	58	0	3	1	1	0	0	0	3
Chat	3	2	4	8	0	4	0	2	18	49
Forum	1	12	3	15	1	3	0	0	20	35
Information	22	45	0	13	0	0	0	0	3	7
Listening to music	6	8	3	14	1	7	1	1	14	35
Dictionary	16	15	7	36	1	5	0	1	1	8
Shopping	0	0	3	5	10	20	2	11	10	29
Education	14	24	3	20	4	2	0	1	3	18
Others	1	13	3	3	2	1	0	0	19	48

Chart 1: Portal services utilization by students and teachers

Insight into Findings - teachers

 ➢ Nearly 100% of teachers use E-mail daily.

 ➢ **Up to 88% are daily interested in Information** but on the other hand 10% out of them do not use this service at all.

 ➢ **Dictionary is used daily by astonishing 64% respondents** and nearly 30% use it al least once a week.

 ➢ As for Shopping 50% of academic staff do some shopping on the Internet but there are 40% who do not do any shopping at all there.

 ➢ Over 70% of teachers do not go chatting and even higher percentage does not enter any discussion forums.

 ➢ Over a half of teachers do not listen to music but those who listen to they listen to quite often, one quarter of them listen to the music on the Internet daily.

 ➢ **Over a half of academic staff stated that they use Internet daily for educational purposes.**

It seems that other services are not for this group of high importance.

Insight into Findings - students

 ➢ **More than 90% of students use daily Search** and E-mail applications.

 ➢ **A portal is a frequent source of Information for 89% of students.**

 ➢ The rate of use of a Dictionary tool is opposite to the rate of academic staff. It is used daily by a quarter of all students and weekly by a half of them.

 ➢ Various kinds of forums are visited by a half of students in comparison with academic staff where it was just about one fifth of them.

 ➢ Shopping on the Internet is not done by nearly 50% of students, about one third of students do some Internet shopping monthly and 10% weekly.

- ➢ **Service Education is equally divided into three parts: about one third of students use it daily, one third weakly and the last third do not use it at all.**
- ➢ As for category "Others" the situation is comparable with academic staff, three quarters stated that they do not use it at all but one fifth uses it daily.

CONCLUSION

Portals partly enable its visitors to make an organized view of the expanding world of on-line information. By the time this phenomenon has developed and implemented more and more applications in accordance with current needs reflecting the enormous expansion of information technologies. The study deals with the current portal phenomenon: visit rate of selected portals and width and frequency of portal services were searched.

With respect to the fact that participants in this study were people from the Faculty of Informatics and Management it could be presumed that move in the Internet environment would be natural. The main question was to find out how much time they spend in this virtual environment – what time burden portals represent at present.

No statistically significant difference was revealed between teachers and students in time spent in selected types of portals: in Search, General, News portals. Specialized language portals were the only difference, but this finding cannot be generalized due to a limited number of respondents in one group.

Findings prove that portals represent a big time burden to their visitors:

- ➢ Over 35% of all respondent spend in Search portals like Google or Yahoo one to five hours a week, 32% at least an hour a week and 16% maximum half an hour.
- ➢ As for general portals 37% of respondents are there from one to five hours weekly.
- ➢ Surprisingly News portals are visited less. About one quarter of respondents stated that they spent here one to five hours a week.
- ➢ From the section Other Portals it is worth mentioning that about one quarter of all respondents visit a portal Wikipedia.

The most significant findings from the second part of survey which dealt with portal services are following:

- ➢ E-mail and Search are the most frequently used portal services by both groups.
- ➢ Generally speaking services were just slightly more utilized by students.
- ➢ **Visiting portals because of getting Information represents the third place**.
- ➢ **Education via the Internet is used by one half of teachers and one third o students.**
- ➢ Three quarters of students as well as teachers do not chat in Portal solutions if they chat they use another media.
- ➢ Discussion is often omitted service.

Web portals with a wide offer of their services have become a common part of our everyday life. This empirical study proves that time spent on the Internet is enormous and that it is worth studying this issue, it can serve as a suitable starting point for web design, e-learning, e-commerce and other linked areas as it proves the overwhelming impact on our lives. The space on the Internet with its extending services and sources is not limited; contrary a man/woman is limited by time, besides abilities of people which were not taken into consideration in this case.

References

[1] ISAACS, N. *Types of portals.* [online]. [cit. 2008-1-20]. Available from z WWW:http://websrv.cs.fsu.edu/~/projects/ cgibin/scavenge/a2/portals.html.)

[2] PLACHÝ, P. Web applications and portals. IT Systems. 2007, N.3, pg.68-69

[3] JAFARI, A. - Sheehan, M. Designing Portals : Opportunities and Challenges, Information. Suite : Science Publishes, 2003. 302 s. ISBN 1-59140- 108-9

[4] COLLINS, H. The Enterprise Knowledge Portals : Next Generation Portal Solutions for Dynamic Information Access, Better Decision, and Maximum results. New York : AMACOM, 2003. 430 s. ISBN 0-8144-0708-0