

## **MyInternet.com:** **The Issue of Web Personalization**

### **Executive Summary**

The difference between the Internet and other forms of telecommunication is the ability to customize the web. Through new technology and software that is constantly being developed, web developers now have the ability to completely customize and personalize a users experience. The capability to recognize a user every time they return to a site, and the possibilities that come with filtering page content so that only information related to the user is displayed, has a vast potential for the web.

This brief discusses some of the possibilities of web personalization, while further developing on previous summaries published by the Institute of Electrical and Electronics Engineers. Those articles, *Data Mining and Personalization Technologies* and *Distributed Application Service for Internet Information Portal*, authored by Philip S. Yu and Chung-Seng Li, John R. Smith, Rakesh Mohan, Yuan Chi-Chang, Brad Topol, John Hind, and Yongcheng Li, respectively, all argue the potential of different aspects of web personalization.

### **Issues Discussed in the Articles**

The first article, *Data Mining and Personalization Technologies*, discusses how data mining is a necessary tool in web personalization. Data mining is the process of retrieving information about users. That data can be stored in complex databases. These databases can then be queried in thousands of ways to return information about the users. For instance, if a company selling tires wanted to send a free coupon to its users, it could reference a database of the cars its users drive, cross reference that data with a table of what tires can fit on each model vehicle, and then send the customer a coupon for the tires that the customer can use. The capabilities of personalized, pin-pointed marketing over the web is a very powerful proposition.

Data mining has become increasingly popular and is widely used in various application areas. Personalization is what merchants and publishers want to do to tailor the Web site or advertisement and product promotion to a customer based on his past behavior and inference from other like-minded people. E-commerce offers the opportunity to deploy this type of one-to-one marketing instead of the traditional mass marketing. (Yu, 1)

The second article, *Distributed Application Service for Internet Information Portal*, employs a different view on web personalization. One of the industry buzzwords nowadays is Aportal.@ Although everyone seems to need a Aportal@ at their website, few have an actual idea of what a portal is.

According to ZDNet, a portal is a “Web site or service that offers a broad array of resources and services, such as e-mail, forums, search engines, and on-line shopping malls. The first Web portals were online services, such as AOL, that provided access to the Web, but by now most of the traditional search engines have transformed themselves into Web portals to attract and keep a larger audience.” (“Web Portal”, 1)

Simply put, portals are places on the web that try to point you in the right direction. They include links on the main page to everything that they think is important to you. The ability for you to customize your portal to actually suite your needs, and the ability for the portal to personalize itself to what appears to be important to you is the difference between what makes a good portal “good” and a great portal “amazing.”

The article points out that many existing websites have changed their focus from simply providing information to offering channels that will get you to visit and stay at their site. Some sites, such as Yahoo and Excite, have integrated their search tools into a portal atmosphere. Other content providers, such as ZDNet, WebMD, and Netscape have created portals themes around the content offered at their site. The portal should place everything relevant to the user on the main page, and everything else only one or two clicks of the mouse away.

Most portals allow some degree of customization, according to the article. Users have the ability to customize the look and feel of the page to something appealing to the individual, and should

content speaking, should be able add, delete, and specify what “channels,” or categories, of information are displayed. This type of personalization requires a series of complex databases and a strong back-end server application.

The article goes into more detail about the best way to configure the back-end system. According to the authors, the “data flow is mapped to the application servers that are available using a two-stage process: rearrange the data flow in order to minimize the possible communication overhead, and map the data flow to the physical application servers based on the required resource.” (Chi-Chang, 4)

## **Conclusions**

Technology that can not just pull information, but push, too, is where the future of the Internet is heading. Web personalization, through the use of portals, is just one way that the Internet is pushing information to the users. The ability for content providers to specify an advertisement to a specific segment of users is something that needs to occur if websites are going to begin turning a profit, considering banner ads are useless.

Web personalization is a concept that is just now being implemented. Some companies, like Go2Net, Excite, Netscape, and Yahoo are using this technology effectively and are witnessing the results that this form of data processing can provide. Others, like Penn State, are just now beginning to work on personalized portals. But in the future, especially as the Internet and television converge into one unit, web personalization will move more into the forefront and will help lead an Internet revolution.

## **References**

Chi-Chang, Yuan; Li, Chung-Seng; Li, Yongcheng; Hind, John; Mohan Rakesh; Smith, John R.;

Topol, Brad. “Distributed Application Service for Internet Information Portal.” Institute of Electrical and Electronics Engineers Symposium on Circuits and Systems. 2000, May 28-31.

Retrieved April 26, 2001 from the World Wide Web:

<http://ieeexplore.ieee.org/iel5/6910/18613/00858745.pdf>

“Web Portal.” ZDNet Webopedia. Retrieved April 26, 2001 from the Word Wide Web:

[http://www.zdwebopedia.com/TERM/W/Web\\_portal.html](http://www.zdwebopedia.com/TERM/W/Web_portal.html)

Yu, Philip S. "Data Mining and Personalization Technologies." Institute of Electrical and Electronics Engineers 6th International Conference on Database Systems for Advanced Applications.

1998. Retrieved April 26, 2001 from the World Wide Web:

<http://computer.org/proceedings/dasfaa/0084/00840006abs.htm>