

ASTUDY ON WEB AND INTERNET COMPUTING

Mrs.S.Geethamani¹, Mrs.S.Saranya²

¹Assistant Professor

Department of Computer Science Sri Ramakrishna College of Arts and Science for Women
Coimbatore-44

²Assistant Professor

Department of Computer Application Hindusthan College of Arts & Science
Coimbatore-28

Abstract

The Internet has become a vital aspect of the profession of Human-Computer Interaction (HCI), both as part of the design backdrop, and as an important resource for information related to HCI and related fields and technologies. This lesson will present an introduction to the technology and history which has led to the current Internet, deliberate some of the services and tools which are usually used to access the Internet, and provide some guidance and experience on how to begin searching the Internet for material. In addition, a specific technology which is rapidly becoming one of the central devices for providing information on the Internet, the World Wide Web, will be presented and explored in detail.

Keywords:- Internet, World Wide Web (WWW), interactive systems plan, HCI resources, hypermedia

1.INTRODUCTION

The Internet is fast becoming a key resource for locating information relevant to a particular field, engaging in professional discourse, retrieving published material, and checking on tomorrow's weather. It has become the basis for tomorrow's electronic community, providing access to government, media, scientists, and friends and relatives. Admittance to the Internet is now becoming a condition of doing business for many enterprises. Commercial use of the Internet is one of its fastest growing uses. The Numerous factors must lead to the dramatic increase in the size of Internet including augmented bandwidth, relaxation of government restrictions, and less expensive connection options. One major factor which has led to the promotion of the Internet is the World Wide Web (WWW), which provides a hypermedia layer over information and capitals available on the Internet. The current Internet connects over 2 million crowds and nearly 25 million users on every continent in the world. Finished the Internet, users can access the latest weather maps of North America, check the New York Stock Conversation quotes for the day, send electronic mail to classmates on

the other side of the world, browse through digital shopping centers, check out the latest electronic magazines, download images from a lecture on eclectic tourist stops in the Southwest United States, amongst many other uses. The Internet influences us as human-computer interaction (HCI) professionals in two major ways: as users and consumers of the information provided on the Internet, and as designer of info sources and network-based computing systems. This tutorial will focus on exploring the technology and history which has led to the Internet of today, and traveling one of the key emerging technologies for providing information on the Internet, the World Wide Web. The tutorial is hands-on, providing direct knowledge with many of the tools for retrieving the Internet and the information gratified available. In totaling, we will design small information spaces based on hypermedia papers using the Hypertext Markup Language (HTML). The tutorial is geared towards HCI specialists who do not have wide knowledge with the Internet or the World Wide Web.

The class will be presented in five parts. Parts one and two will emphasis on the history, technology, and tools which underlie the Internet and provide students with the chance to utilize those tools to explore some of the information and resources which are obtainable. Part Three will introduce the basic concepts behind the World Wide Web, and Parts Four and Five will provide information and experience with designing info spaces on the World Wide Web and writing documents to populate those spaces in HTML.

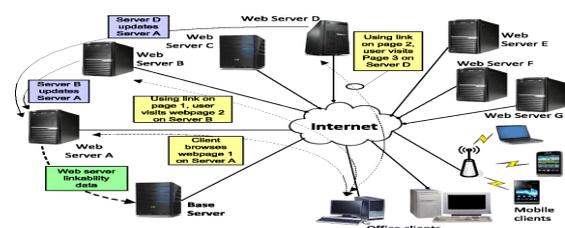


Figure 1 General Overview of Internet System

2. INTERNET

This section of the class will present the history of the Internet, starting with its roots as a research project of the United States' Progressive Study Projects Agency (ARPA) and rolling through the interconnection of the ARPAnet and the MILnet to the foundation of the NSFnet and the present backbone building. We will then present the important underlying skills including the Internet Protocol (IP), and how IP addresses are formed, and what they mean; the domain name system (DNS), how domains are listed, and how to find out information about a specific domain; and packet routing and how information really travels through the Internet. This will be presented at a high level: detailed kind of networking or network styles will not be required. The size of the Internet will then be argued, as well as its current growth rate, and some chat of possible future orders for the Internet. The most usually used Internet services will then be discussed along with some of the security issues and alarms which arise as a result of the use of these tools.

3. SURFING THE INTERNET

This section of the lesson will present the Internet tools which are most usually used to search for or browse information which has been "available" onto the Internet. These tools include: WAIS, Archie, Gopher, Veronica, and World Wide Web browsers such as NCSA Medley. Students will have enhanced to use these tools to access information on the Internet. Ideas will be provided to the students for how they might approach pointed for various materials on the Internet.

4. WORLD-WIDE WEB CONCEPTS AND BACKGROUND

These sections of the class will current the ideas behind the World Wide Web. These ideas include: hypertext, multimedia, and the client/server model of network interaction. The history of the World Wide Web and account of the most common WWW browsers will be presented along with a description of how browsers and WWW servers interact.

4.1 Designing Information Spaces

Planning material spaces are not too different from the project of any processor interface, but it is a design exercise. To support this design exercise, this section of the lesson will current a case study, some approaches to designing material content, and a 15 step model - the Hypermedia Systems Growth Model - for designing information spaces. Students will have the opportunity to explore the system presented as a case study over the Internet.

4.2 How to Define Internet Computing

What exactly is Internet computing? Many people think they know, but they are shocked to learn that they don't. Are you one of the select few who have a grasp of the subject?

Shops today face a good marketplace with unprecedented tasks and opportunities. Increasing labor costs. Hiding of market segmentation. Reduced buyer loyalty. You know the list. But, now there is a whole new set of challenges brought on by the Internet:

- Retailers are being "dot-commend" right out of their markets.
- Price visibility is allowing customers instant access to the lowest cost merchant.
- Manufacturers and new competitors are removing some retailers from the supply chain altogether.
- Online auctions have fundamentally changed the way merchandise is sold and purchased. This list continues to grow as people think of more and more ways to leverage the Internet.

5. E-BUSINESS OR OUT OF BUSINESS:

It is a new world. For brick-and-mortar retailers in particular, the Internet is creating enormous disruption. But, it is also presenting unprecedented opportunities for those who understand the use, implications, and terminology of Internet technologies, and for those who move quickly and intelligently to become an e-business themselves. Increasingly, the choice facing retailers is simple: its e-business or out of business.

Unfortunately, it's not as simple as deciding to become an e-business. Terms like e-business, e-commerce, Web-deployed, Internet-enabled, customer relationship management, and the like all seem to have different meanings to each retailer and software vendor. For retailers, one fundamental term that must be clearly understood to succeed, is the true meaning of the words "Internet computing."

Why? Because the differences between true Internet computing, and the faux offerings that mimic the look of true Internet computing, are subtle to the untrained eye. However, they are dramatic in the capabilities and benefits they provide.

5.1 Defining Internet Computing:

Internet computing is the foundation on which e-business runs. It is the only architecture that can run all facets of business, from supplier collaboration and merchandise purchasing, to distribution and store operations, to customer sales and service. Internet computing is the only architecture that supports all information flows and

processes over the Internet — providing access to all applications. With Internet computing, all a user needs is a standard Web browser and security clearance.

The Internet computing model represents a fundamental shift from the traditional client/server enterprise application model. The four-walled efficiency that was once the goal of monolithic enterprise resource planning implementations — known as business process redesign (BPR) — has been replaced. The new environment is one in which economic gains are a result of systems efficiencies and collaboration across the extended network of customers, retailers, manufacturers, and suppliers.

5.2 Shift In Focus:

There are three tiers in true Internet computing. These three tiers provide the benefit of centralized data that supports a unified view of the retailer's financial, human resources, inventory, logistics, trading partner, and customer information. The business logic at the next layer accesses and transacts the data. The user interface is a simple, non-proprietary Web browser. No complexity resides on the users' device, which can be anything from a PC to a mobile phone, or even a uniquely purposed mobile unit.

(Note: A unique "tool set" that allows writing in multiple languages allows Web deployment functionality to occur within the application server.)

An Internet computing architecture provides:

- universal access to any person with a browser
- unified views of critical data across the enterprise
- scalability to support retailers of any size
- flexibility and agility that allows retailers to quickly implement new business rules
- lower total cost of ownership resulting from simplified IT administration and the adoption of self-service applications
- Streamlined communication processes and simplified distribution of critical business information across the enterprise.

5.3 What Internet Computing Is Not:

The most common misnomer equated to Internet computing is "Web-deployed," meaning a self-service application that allows a particular transaction to occur through a browser. For example, checking the status of a UPS delivery is a Web-deployed application conducting a pre-defined task. For some casual users of applications, that's sufficient. But Internet computing is more than that. It is about deploying all business applications — for casual and power users — across the Internet, using the most streamlined architecture available.

To appreciate the benefits of Internet computing, it's useful to compare and contrast the alternative architectures — including two-tier, three-tier with proprietary user interface, and four-tier. Most IT professionals are familiar with the two-tier alternatives and understand the drawbacks of each. In fact, the desktop administration headaches featured by the fat client version of two-tier architecture are what precipitated the move to the Internet computing model. The fat server version, while causing a less painful desktop administration headache, still requires vendor-specific software to be installed for the client.

5.4 Avoiding Upgrade Problems:

Internet computing, which grew out of two-tier architecture, supports scalability at a much lower cost. There is, however, an alternate three-tier building to Internet computing. But, it does not provide the benefits of Internet computing. The key area that distinguishes the two models is the client layer. The alternative includes a proprietary presentation layer. Oftentimes, this user interface is on a different upgrade path or is unique to specific application versions. So, when the process to upgrade applications occurs, another upgrade must occur throughout all the desktops. While this alternate model offers a much thinner client when compared to the two-tier fat client, it fails to provide the low-cost administration benefits of Internet computing.

5.5 Avoid Additional Complexity:

Finally, there is the four-tiered environment, which can give the magic of Internet computing, because users can access information through a browser interface. But, it still distributes complexity through the IT system. In this option, users have access to a limited number of predefined pieces of information over the Web. However, the IT staff accomplishes this by making an additional layer of difficulty through servers that convert proprietary applications (not based on Internet standards). This allows users access through a browser. This fails to lower the overall cost of the IT environment and lacks the flexibility of open Internet standards. Moreover, it adds additional burdens to network performance.

6. CONCLUSION

People today should embrace Internet computing. With the Age of the Internet well under way, the need for retailers to convert into e-businesses is increasingly apparent. Acceptance true Internet adding is the way to contest in the new millennium — to expand into new markets, improve extended enterprise efficiencies, and attract and retain customers. It's either that or getting "dot-commend."

Reference

- [1] Hassan Artail* , Ammar El Halabi, Ali Hachem and Louay Al-Akhrass "A framework for identifying the

linkability between Web servers for enhanced internet computing and E-commerce” Atrial et al. Journal of Internet Services and Applications (2017) 8:2 DOI 10.1186/s13174-016-0053-9

- [2] Ting I “Web-mining applications in e-commerce and e-services” Online Information Review, Vol. 32 Iss: 2, pp.129-132
- [3] <https://www.computer.org/internet-computing>
- [4] www.supplychainmarket.com/doc/how-to-define-internet-computing-0001
- [5] www.polyu.edu.hk/334symposium/PDF/Session%20II/DavidRossiter.pdf
- [6] <https://www.comp.polyu.edu.hk/files/COMP5322.pdf>
- [7] <https://pdfs.semanticscholar.org/8f93/a040dbfec27bab9b43fa8307fe406547c1fb.pdf>