

An Overview of Internet as a Global Communication Media

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Introduction

According to the Internet White Book '98, Impress, the Internet user population of Japan, as of February '98, is about 10.10 million, which is 176.6% up compared with 5.72 million in the same month of the previous year.

It is also estimated that the number in December '99 will be 20 million, but the domestic use is now only 7.1%.

The Internet is a very convenient epoch-making global communication means, through which we can send or receive beyond national boundaries various pieces of information and mail which can include letters, pictures and sounds mainly in the form of Home Pages and E-mail.

In the business, education, government, and domestic fields the Internet is widely utilized because of effectiveness in cost, speed and contents. For example, via the World Wide Web we can easily access the sites of the White House¹, the British Royal Family, the Louvre Museum in France, CNN, BBC, Jiji press and other sites of interest. Thus, by surfing cyberspace, we can have timely access to various kinds of information, top world news, entertainment programs and etc. on our monitors. Besides these contents can also be kept on hard-disk and be printed out.

It is said that the Internet is now most widely used in the United States where domestic Personal Computer diffusion is about 40% this year. Many households there have more than one PC, including one for the children. The price for a PC is around \$1000, and has now become considered as one of the daily necessities in the United States. In this paper, I shall overview the world of the Internet from the viewpoint of the fields mentioned above.

1. Business

(1) SOHO (Small Office/Home Office)

Because of the rapid development of the various information and communication means as well as because of Internet's expansion in the '90s, office-location and geographical distribution is now greatly changing which has brought many office workers to the big buildings in the center of regional capitals and especially to Tokyo.

This has resulted in the rise of office maintenance costs, a commuting rush and the increase of underpopulated areas outside major cities. In the 21st century, by utilizing 'network' effectively it will be less necessary for both businesses and individuals to have office buildings in the center of the city. They will easily be able to do business by having SOHO.

SOHO means people work at their homes or near their homes away from the firm.

This enables housewives, the aged and the physically handicapped to have employment opportunities, while at the same time easing traffic problems.

The Chunichi Simbun of Aug.5, '98 says that in the Chubu district an employment agency for people with talent or skills has set about registering housewives who have PC or Internet equipment at home, have the knowledge and skills to use them and can work in the form of SOHO. The kinds of work in this case are, for example, translation of English texts, data-input or answering company questionnaires.

(2) Outsourcing

Businesses have also started to utilize effectively people outside their immediate office and other businesses in order to rationalize their systems. This is the introduction of 'Outsourcing'. Outsourcing aims to utilize effectively the high technical competence and know-how of others and to raise efficiency and quality of businesses. Thus, businesses can concentrate on their core competence and improve the quality of their business.

Particularly, by utilizing the information technique of outsourcing and by using Internet, online shopping and placing and receiving orders between businesses and etc. can be possible on the network. This is, what is called, Electronic Commerce, which is not merely the electronization of commercial transaction, but also effects a big influence on commerce in general and individuals consumption.

(3) Electronic Commerce

As mentioned above, EC means using the Internet for commercial transactions between firms or online shopping. The price for a commodity sold is usually paid in cash, but in the EC system it is a premise that payment is by electronic transfer over the Internet. Digital money is the money of which the numerical value is processed by electronic signal and can be used for payments by electronic transfer. With the system of Electronic payment, all payment procedures including receipt of money and remittance can be done over the Internet without transferring cash through a bank.

The electronic payment system is still in the experimental stage. In the Shibuya area, Tokyo, it is now being practised tentatively. To establish this electronic payment system the technique of ciphering and identifying, that is, security is also indispensable to prevent illegal use.

As for the application of EC, in the United States, Office of the Press Secretary of The White House released President Clinton's Message to Internet users on the Internet on July 1, '97. The title is "A Framework for Global Electronic Commerce" and in his message he emphasized that the government would facilitate the growth of EC. The following is the text of his message.

THE WHITE HOUSE
Office of the Press Secretary

For Immediate Release

July 1, 1997

TEXT OF THE PRESIDENT'S MESSAGE
TO INTERNET USERS

I have today approved and released a report — "A Framework for Global Electronic Commerce" — setting out my Administration's vision of the emerging electronic market—place and outlining the principles that will guide the U.S. Government's actions as we move forward into the new electronic age of commerce. The report also suggests an agenda for international discussions and agreements to facilitate the growth of electronic commerce.

The invention of the steam engine two centuries ago and the harnessing of electricity ushered in an industrial revolution that fundamentally altered the way we work, brought the world's people closer together in space and time, and brought us greater prosperity. Today, the invention of the integrated circuit and computer and the harnessing of light for communications have made possible the creation of the global Internet and an electronic revolution that will once again transform our lives.

One of the most significant uses of the Internet is in the world of commerce. Already it is possible to buy books and clothing, to obtain business advice, to purchase everything from gardening tools to high-tech telecommunications equipment over the Internet. This is just the beginning. Trade and commerce on the Internet are doubling or tripling every year — and in just a few years will be generating hundreds of billions of dollars in sales of goods and services. If we establish an environment in which electronic commerce can grow and flourish, then every computer can be a window open to every business, large and small, everywhere in the world.

Governments can have a profound effect on the growth of electronic commerce. By their actions, they can facilitate electronic trade or inhibit it. Government officials should respect the unique nature of the medium and recognize that widespread competition and increased consumer choice should be the defining features of the new digital marketplace. They should adopt a market-oriented approach to electronic commerce that facilitates the emergence of a global, transparent, and predictable legal environment to support business and commerce.

The report I released today raises a number of important issues that must be addressed by governments worldwide as this electronic marketplace emerges. I have had it added to the White House homepage on the World Wide Web (www.whitehouse.gov).

I call upon all Internet users — both in government and in the private sector — to join me in seeking global consensus and, where necessary, agreements on the issues raised in our report by December 31, 1999, so that we may enter the new millennium ready to reap the benefits of the emerging electronic age of commerce.

WILLIAM J. CLINTON

At the same time President Clinton released “a Memorandum for the Heads of Executive Departments and Agencies” on EC, in which he gave 13 directions to U.S. Trade Representatives, the Secretary of Commerce, the Treasury Secretary and the Administrator of General Services, to promote efforts domestically and internationally to make the Internet a secure environment for commerce.

He also said, “According to several estimates, commerce on the Internet will total tens of billions of dollars by the turn of the century and could expand rapidly after that, helping fuel economic growth well into the 21st century.

For this potential to be realized, governments must adopt a market-oriented approach to electronic commerce, one that facilitates the emergence of a global, transparent, and predictable environment to support business and commerce.”

(4) Internet Banking

Some large banks have recently started Internet Banking. This means to exchange funds over the Internet using computers which customers have at home. Though the users need equipment and telephone charges there are some merits. According to the Chunichi Shimbun, The Ogaki Kyoritsu Bank, Ltd². for instance, provides their customers with services like deposit balance information or accepts detailed account statement inquiries, money transfer and the purchase and payment of about 300 kinds of special local products at the Virtual Mall over the net.

Hitachi, Ltd³. will get a contract for building an Internet Banking system from the local banks as one of the outsourcing aspects of its business. The cost of building the system in this case is only about 10% of the required cost in the case of their own expense.

2. Education

Internet is a space full of various pieces of information and ideas. It is now growing very rapidly and becoming the most important communication media since TV appeared. As it is the system which can most easily transfer information worldwide, we can obtain a wide range of up to date news, ideas and other informations on the web.

These data can be used as teaching material as long as they are quality pieces of informations after they are processed or combined and become the original ones. I would like to take the nuclear nonproliferation issue as an example of an important current topic suitable for use in the classroom. When India and Pakistan recently carried out a nuclear test, the Mayor of Hiroshima City⁴ protested against the test on the Internet. The following is the text of the protest note.

Protest against India's Nuclear Testing

May 12, 1998

The Honorable Atal Behari Vajpayee
Prime Minister of India

His Excellency Mr. Siddharth Singh
Ambassador Extraordinary and Plenipotentiary of India
Embassy of India in Japan

Letter of Protest

Yesterday, your country implemented three underground nuclear tests in Pokharan in the State of Rajasthan. The city of Hiroshima finds your action profoundly regrettable, especially coming as it did so soon after the strong reaction to the Hiroshima–Nagasaki exhibitions in Mumbai and New Delhi. On behalf of the citizens of Hiroshima, I hereby strongly protest.

India has long taken a positive stance toward the abolition of nuclear weapons. During the negotiations toward the adoption of the CTBT by the Conference on Disarmament in Geneva, you demanded that the nuclear powers set a concrete deadline for abolishing their nuclear weapons. In December last year, you were among the countries that signed a resolution put forward by Malaysia and 45 other countries demanding that negotiations begin in 1998 toward a total ban on nuclear weapons.

Now, despite these positive efforts, you have conducted nuclear tests of your own. Though the context of your testing is one in which the US and Russia have conducted repeated subcritical nuclear tests and in other ways are clearly not demonstrating the good faith effort toward nuclear disarmament they promised in the Nuclear Non–proliferation Treaty (NPT), you have nevertheless committed an act that can only heighten tensions in Asia and increase the danger of reigniting a nuclear arms race.

We demand that you immediately halt your nuclear testing. We request that, rather than seeking nuclear weapons for the narrow security interests of India alone, you open your ear to international public opinion demanding a world free from nuclear weapons, and we invite you to work in concert with the cities of Hiroshima and Nagasaki for total nuclear abolition.

Takashi Hiraoka
Mayor of Hiroshima

May 29, 1998

His Excellency Muhammad Nawaz Sharif
Prime Minister of the Islamic Republic of Pakistan

His Excellency Miss Durray Shahwar Kureshi
Charg'e d'Affaires of the Islamic Republic of Pakistan
Embassy of the Islamic Republic of Pakistan in Japan

Letter of Protest

With the international community still loudly condemning India's repeated tests, and despite communication from the city of Hiroshima and numerous concerned parties both in and out of Pakistan urging you to show restraint, you proceeded unilaterally with your own underground nuclear test. That test amounted to a violent act of disdain for the voices in the international

community calling for the abolition of nuclear weapons, and in the name of Hiroshima, I hereby strongly protest.

The actions of Pakistan and India in attempting to achieve national security through nuclear weapons heightens in Southwest Asia, generates momentum toward a nuclear arms race, and runs the risk of destroying the NPT system. I urge you in the strongest possible terms to heed international public opinion overwhelmingly in favor nuclear abolition, halt all nuclear testing immediately, abandon your policy of brandishing nuclear weapons to make a show of strength, and make genuine efforts to build trust and a cooperative relationship with India.

Takashi Hiraoka
Mayor of Hiroshima

While in Hiroshima in '97 I copied the inscription on the monument in front of the A-Bomb Dome⁵. The following is the content of the inscription.

A-Bomb Dome

The A-Bomb Dome is the ruins of the former Hiroshima Prefecture Industrial Promotion Hall which was destroyed by the first atomic bomb ever to be used in the history of humankind on August 6, 1945.

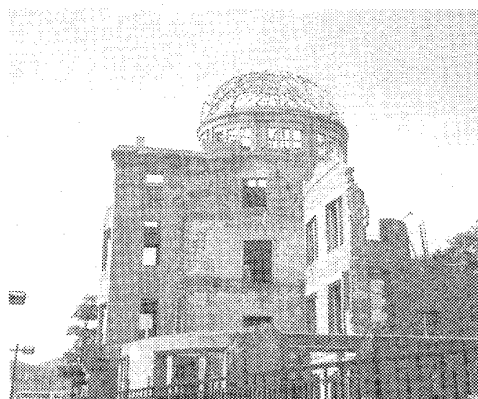
The atomic bomb was detonated in the air at an altitude of approximately 600 meters almost right over the hall.

The explosion by a single bomb claimed the lives of over 200,000 people and the city area of about 2--km radius was turned into ashes.

In order to have this tragic fact known to succeeding generations and to make it a lesson for humankind, the reinforcement work of the ruins has been done by the contributions of many people who desire peace within and out of the country.

The ruins shall be preserved forever.

August 6, 1967 Hiroshima City



Copied and photographed
by Hiroshi Yoshimoto on May 23, 1997.

World Heritage Site Hiroshima Peace Memoria I (Genbaku Dome)

As a historical witness that conveys the tragedy of suffering the first atomic bomb in human history and as a symbol that vows to faithfully seek the abolition of nuclear weapons and everlasting world peace, Genbaku Dome was added to the World Heritage List in accordance with the "Convention Concerning the Protection of World Culture and Natural Heritage (World Heritage Convention)."

December 7, 1996 Hiroshima City

Combining these two, the protest note and the inscription, I used them as teaching material in a Media English class.

3. Government

(1) The Central Government Office of Japan

Exploiting the rapid spread of the Internet the information system of the Central Government Office of Japan has begun to aggressively utilize the Internet as a means to transmit their administrative information to Japanese citizens.

The Prime Minister's official residence⁶ and all other ministries now have their own web pages, through which the publicity and the public hearing activities of the government are carried out. In order to transmit such information to the nation, these offices now usually use the Internet.

Published information includes the summary editions of white papers, system charts, report materials, minutes of the councils, explanatory materials for new state measures and others. The volume of information stored in the web-server is increasing, therefore, it's not easy to search quickly for information wanted. The general guidance system to access the administrative information is necessary.

In the United States Federal Government information is controlled by law and people can always quickly access the necessary information on the web through the general guidance system from the UNITED STATES GOVERNMENT PRINTING OFFICE⁷. An example of this is attached.

Keeping America Informed

UNITED STATES GOVERNMENT PRINTING OFFICE

NOTICE The Independent Counsel's Report to the United States House of Representatives and the White House responses are now available.

House Document 105-311(Appendices to the Referral to the United States House of Representatives Pursuant to Title 28, United States Code, Section 595(c) Submitted by the Office of Independent Counsel)

About the Government Printing Office

What's New Page

Access to Government Information Products

Services Available to Federal Agencies

Business and Contracting Opportunities

Employment Opportunities

Establishing Links to Documents in GPO WAIS Databases

Navigation Aids and FAO's

Access to Government Information Products

Superintendent of Documents

What Is GPO Access ?

Search Databases

New/Noteworthy Products from GPO

Find Government Information

Browse Federal Bulletin Board Files

Find Products for Sale by GPO

Government Information at a Library Near You

Commission on the Roles and Capabilities of the United States Intelligence Community

Bureau of Land Management(Colorado Office)

Congress of the United States

Department of Interior Office of Inspector General

Executive Office of the President

Council of Economic Advisers

Office of Management and Budget

Federal Labor Relations Authority

Food and Drug Administration

General Accounting Office

Merit Systems Protection Board

National Archives and Records Administration's Office of the Federal Register

National Bankruptcy Review Commission

National Council on Disability **NEW**

National Gambling Impact Study Commission

National Labor Relations Board

Occupational Safety and Health Review Commission
Office of Compliance
Office of government Ethics
Office of Special Counsel
Office of Technology Assessment
United States Commission on Civil Rights
United States Trade Representative
U.S. Equal Employment Opportunity Commission
U.S. Nuclear Waste Technical Review Board

Entering chosen search terms, we can reach White House and obtain relevant information. For example, we can easily view President Clinton's statement below relevant to the recent scandal in the United States.

17 August 1998

TEXT:CLINTON TELEVISION STATEMENT ON HIS GRAND JURY TESTIMONY

(President admits misleading people about Lewinsky relationship) (590)

Washington — Following is the text of President Clinton's statement to the nation, broadcast live on television August 17, after the president testified for several hours via closed-circuit television to a grand jury about his relationship with Monica Lewinsky :

(begin text)

STATEMENT BY THE PRESIDENT

THE WHITE HOUSE

Office of the Press Secretary

August 17, 1998

THE PRESIDENT: Good evening. This afternoon in this room, from this chair, I testified before the Office of Independent Counsel and the grand jury. I answered their questions truthfully, including questions about my private life — questions no American citizen would ever want to answer.

Still I must take complete responsibility for all my actions, both public and private. And that is why I am speaking to you tonight.

As you know, in a deposition in January I was asked questions about my relationship with Monica Lewinsky. While my answers were legally accurate, I did not volunteer information. Indeed, I did have a relationship with Ms. Lewinsky that was not appropriate. In fact, it was wrong. It

constituted a critical lapse in judgment and a personal failure on my part for which I am solely and completely responsible.

But I told the grand jury today, and I say to you now, that at no time did I ask anyone to lie, to hide or destroy evidence, or to take any other unlawful action.

I know that my public comments and my silence about this matter gave a false impression. I misled people, including even my wife. I deeply regret that. I can only tell you I was motivated by many factors: first, by a desire to protect myself from the embarrassment of my own conduct. I was also very concerned about protecting my family. The fact that these questions were being asked in a politically inspired lawsuit which has since been dismissed was a consideration, too.

In addition, I had real and serious concerns about an independent counsel investigation that began with private business dealings 20 years ago — dealings, I might add, about which an independent federal agency found no evidence of any wrongdoing by me or my wife over two years ago.

The independent counsel investigation moved on to my staff and friends, then into my private life, and now the investigation itself is under investigation. This has gone on too long, cost too much, and hurt too many innocent people.

Now this matter is between me, the two people I love most — my wife and our daughter — and our God. I must put it right, and I am prepared to do whatever it takes to do so. Nothing is more important to me personally. But it is private. And I intend to reclaim my family life for my family. It's nobody's business but ours. Even Presidents have private lives.

It is time to stop the pursuit of personal destruction and the prying into private lives, and get on with our national life. Our country has been distracted by this matter for too long. And I take my responsibility for my part in all of this; that is all I can do. Now it is time — in fact, it is past time — to move on. We have important work to do — real opportunities to seize, real problems to solve, real security matters to face.

And so, tonight, I ask you to turn away from the spectacle of the past seven months, to repair the fabric of our national discourse and to return our attention to all the challenges and all the promise of the next American century.

Thank you for watching, and good night.

(end text)

(2) Local Government

Local government which consists of prefectures, cities and towns, has also increased the number of web pages established. The contents have mainly been tourist information. Now, however, governments are trying to have interactive communication with residents

using the internet.

After disclosing to the public its present situation and other information, opinions are exchanged and this prompts public participation in policy formation.

4 . Online shopping in Consumer Life

Online shopping means doing shopping via the Internet. As the number of Internet users increases, the online shopping system is developing and the number of businesses with a home page on the web site without having a shop is growing. Accordingly, transactions carried out on the net are increasing.

There are two types of shop, one of which opens its home page independently for online shopping and the other which forms a shopping mall where more than two shops get together on one home page under the name of Virtual Mall.

The categories in which online shopping is often utilized are air ticket sales and hotel reservation service and book and personal computer sales. The characteristics of these is the abundance of the kind. Therefore, these goods and services require a search operation.

Through these home pages it will be possible to get more detailed data information, performance and specification than we can get at a shop. The goods we are familiar with are suitable for online shopping.

As an example, Maruzen Book Store⁸ has an online shopping site for books. The procedures for purchasing books on the net are as follows:—

- (1) The application form for membership registration is filled in.
- (2) The ID number and password of the applicant is sent to him or her from the company by registered mail.
- (3) After searching the books wanted on the net the above ID number and password are entered and the order is placed.
- (4) The money for the books is transferred from the customer's credit card account previously registered.
- (5) The books are then delivered to him or her.

Recently, Toyota Motor Co. Ltd. has opened the web site called GAZOO⁹. We can ask for a catalog, an estimate of a new car, a negotiation appointment and make an automobile inspection booking on the net. In the United States Auto-By-Tel is well known as the largest online car dealer.

As mentioned above, the Internet can dispatch interactive information world wide. The environment it offers is an environment where human beings can communicate on a global scale and it will also become an indispensable social basis in the 21st century as all kinds of information sources useful for improving our life.

Notes

URL:

1. <http://www.whitehouse.gov>
2. <http://www.okb.co.jp>
3. <http://www.hitachi.co.jp>
4. <http://www.city.hiroshima.jp>
5. <http://www.csi.ad.jp>
6. <http://www.kantei.go.jp>
7. <http://www.access.gpo.gov>
8. <http://www.maruzen.co.jp>
9. <http://www.gazoo.tns.ne.jp>

Major References

1. Internet Association of Japan (ed.) *Internet White Book '98*, Impress, 1998
2. Ishibashi, T. and others, *Hajimeyo Internet de Keizaigaku (Let's begin Economics using Internet)*, Nihon Hyoronsha, 1998
3. Murai, J. *Internet II*, Iwanami Shoten, 1998
4. Osumi, N. and Miyata, H. *Internet & Education*, Reimei Shobo, 1998
5. Rin, S. *Internet Kigyo Senryaku (Internet Enterprise Strategy)*, Toyokeizai Simpo, 1998
6. Sadahira, M. *Small Office Home Office*, Businesssha, 1998