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USING THE INTERNET AS A TOOL TO SUPPORT ECONOMIC POLICIES IN MONGOLIA

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Абстракт: Интернет нь эдийн засгийн бодлогыг дэмжих чухал хэрэгсэл болох нь дэлхийн олон улс орнуудын туршлага, судалгаануудаас нотлогдож байна. Интернетийг улс орны эдийн засаг, боловсрол, эрүүл мэнд, харилцаа холбоо, төр засаг-ард иргэдийн харилцааг хөгжүүлэхэд ашиглах чухал хэрэгсэл, хөгжлийн нэг хурдасгуур гэж үзэж байна. Манай улсад Интернетийг үр өгөөжтэй хэрэгсэл болгон ялангуяа банк, санхүү, төлбөр тооцоо, цалин хөлс, бараа худалдаа зэрэг үйлчилгээнүүдэд ашиглан ихээхэн ололт амжилтыг олж байгаа. Тодорхой хөгжил дэвшилд ч хүрч энэ нь ард түмний амьдралын хэв маягт ихээхэн өөрчлөлтийг авчирч байна. Хэдийгээр амжилт ололтууд байгаа ч өнөөгийн байдлаар Интернетийг эдийн засгийн бодлогыг дэмжих хэрэгсэл болгон ашиглах асуудал Монгол улсад эхлэл төдий байна. Энэхүү өгүүлэлд интернетийг Монгол улсын эдийн засгийн бодлогыг дэмжих хэрэгсэл болгон ашиглахын тулд анхаарлаа хандуулах асуудлуудыг авч үзсэн болно.

World Internet Growth and Development Level

The latest data and figures have been published by the Internet World Stats on the basis of data provided by the International Telecommunications Union (ITU) and other research and sources. Let's take a look at such data and figures.

The number of world Internet users doubled in 2006 compared with 2000. That means more than 1 billion people all over the world. Although the Internet is growing at a good rate, it tends to slow down. According to researchers, the growth rate will not increase again until broadband is further developed, and its price rates reduced. The data show that America sees the lowest rate, and the growth rate will

be limited in the future, although the Internet penetration has reached 70 percent here.

The figures relating to Internet usage compared with population as of January 2007 are shown by world and Asian regions in Appendices 2 and 3. The table shows that the number of Internet users in Asian countries making up 56.5 percent of the world population is 35.6 percent, and Internet penetration 10.5 percent of their population. It is quite lower than those of Europe and North America.

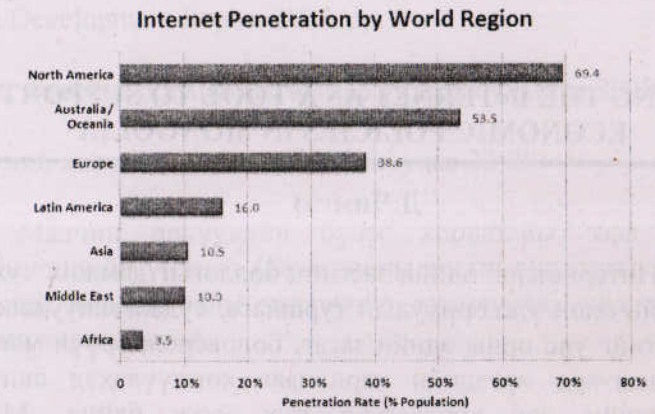

Figure 1

Source: Internet World Stats, 2007

In 2007, the Internet users in Asia is 389.3 million (of which 132.0 million users or 33.9 percent are Chinese), growing 240.7 percent as compared with 2000.

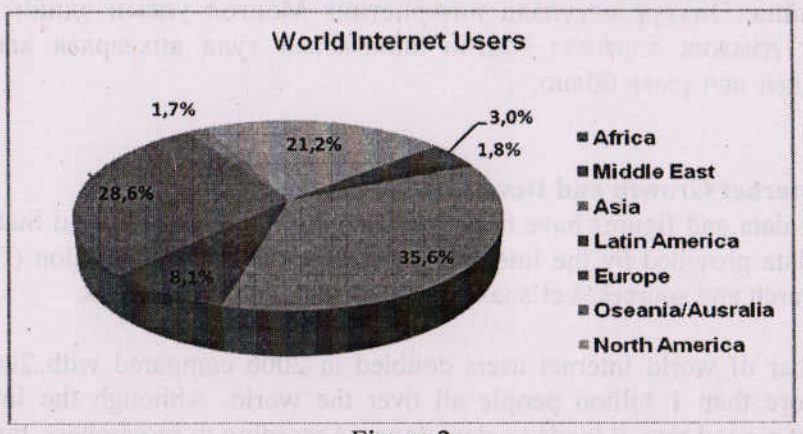

Figure 2

Source: Internet World Stats, 2007

The Internet usage growth rate is not the same depending on the economic situation of each country. The Internet usage growth rate is relatively slower in developing countries, whereas Internet is growing at an enormous rate in highly developed countries, such as Japan, Singapore, and Hong Kong. It is certainly attributed to poorly developed infrastructure, and necessary technology (telephone, modem, PC, etc.) has not developed well enough.

In a graph showing the Internet growth rate in 1996-2010, one can see how rapidly the number of Internet users has been rising from day to day. Here, the Internet usage growth rate is calculated by the performance in 1996-2006, and the growth trend until 2010 is forecast by the author on the basis of the data of the last 5 years. According to the graph, the number of Internet users is expected to number 1,552 million in 2010, growing 1.9 percent compared with 2005.

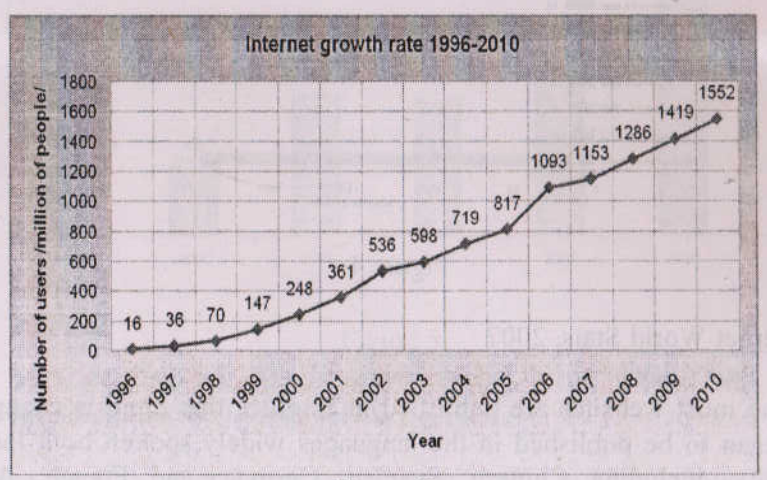

Figure 3

Source: Internet World Stats, 2007

According to the data obtained from the sources, the Internet tends to grow more rapidly in highly developed Asian countries, e.g. Japan, Singapore, and Hong Kong; in particular Japan has the most predominant shares by its Internet usage. Internet usage is growing largely in developing countries and better in cities and towns. Due to poorly developed infrastructure, necessary technology is also unavailable to the most part of the society. Internet penetration is slow in these countries. Some 60-70 percent of population in Japan and Australia has Internet access, and it is said that the most of the population will have high-speed broadband Internet access.

Content Growth in Internet

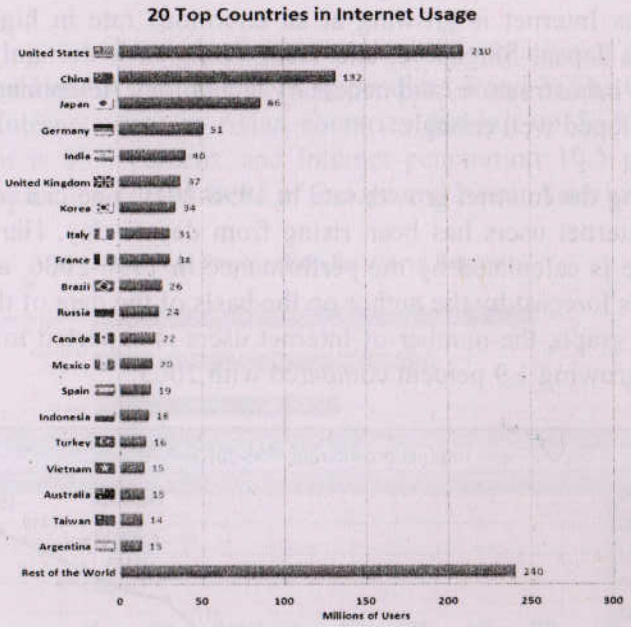

Figure 4

Source: Internet World Stats, 2007

Although the most websites are published in English, this trend is changing, and websites began to be published in the languages widely spoken both locally and internationally, including Chinese, Spanish, German, and French. According researchers, the growth rate of English websites will be lower than those published in other languages.

Internet in Mongolia .

Public electronic mail network (PCMail) was introduced in Mongolia for the first time in 1992. In 1994, the number of users of this network was more than 150. The Internet usage has grown at a good rate since 1996, when Datacom established the first Internet Gateway of Mongolia with the support from the U.S. Embassy in Mongolia, the U.S. National Science of Foundation, and the International Development Research Center (Canada).

Internet usage in Asia provided in Appendix 1 shows that Internet users in Mongolia make up 10.3 percent of the total population, which is 0.1 percent of Asian population. As of January 2007, the number of Internet users has grown approximately 8 times as compared with 2000. According to the above data and

figures, Mongolia ranks the 11th place among 34 Asian countries by its Internet penetration.

The number of Internet service providers was 5 in 2002, and this number reached 26 in 2005. The number of regular Internet users run to 22.0 thousand in 2005, growing 4.3 times as compared with 2000.

Internet Subscribers, thousand of people

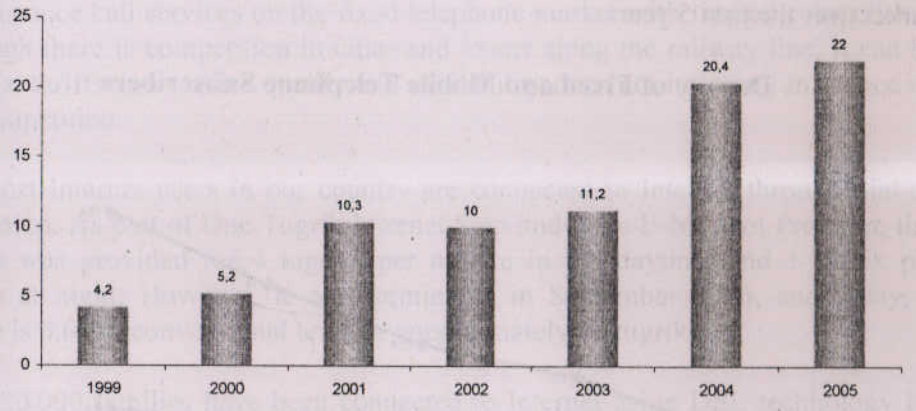

Figure 5.

Source: National Statistical Office, 2006

The installation of the first unmanned Internet station in Mongolia in 2001 was of great significance for local Internet exchange. Today, 8 companies provide Internet service through leased line, dial-up, and converter in Mongolia. The Internet market in Mongolia has free competition, and the foreign Internet gateway broadband width is currently 78 Mbps: 44 Mbps for downloading and 34 Mbps for uploading.

The most Internet users are connected to their service providers, using dial-up technology. The maximum speed of this technology is 56 kbps, which is insufficient for providing users with services requiring high speed. Therefore, Internet service providers offer high-speed Internet access, using ISDN, xDSL, cable and modem, wireless, or local are network technology. At present, Magicnet, Mobicom, MCS, Sky C&C, Ulustnet, and Wirelesscom offer wireless Internet access. Sansar Cable TV has begun to provide cable and modem based Internet connection in cooperation with Magicnet.

Although users are connected to high-speed Internet lines using wide telephone network, penetration is not well enough because of higher prices for such services.

In Mongolia, fixed telephone service is provided by the Mongolia Telecom Joint Stock Company and the Railway, and mobile telephone service by Mobicom and Skytel, and from 2006 by Unitel.

The number of mobile telephone subscribers rose 7.5 times and fixed telephone subscribers 1.4 times in 2005 as compared with 2000. This shows that the mobile telephone market has grown more intensively than the conventional fixed telephone market over the past 5 years.

Density of Fixed and Mobile Telephone Subscribers

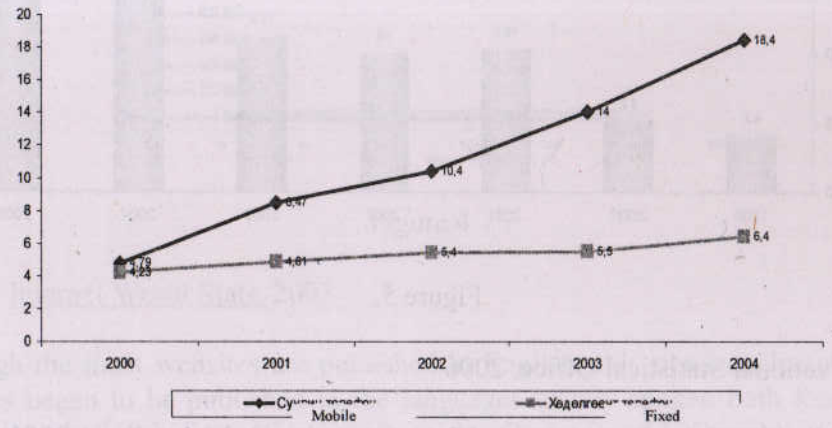

Figure 5. Density per 100 Persons (Fixed and Mobile Telephone Subscribers)

Source: Information and Communications Technology Authority research data, 2005

As of December 2004, the average national rate is 6.4 fixed telephone connections per 100 persons and 18.4 mobile telephone connections per 100 persons.

The number of fixed and cellular telephone sets per 100 persons was 21 in 2004, while it amounted to 30 in 2005, increasing 1.4 times as compared with the previous year. In addition, 3 companies provide mobile satellite service, and the number of their subscribers numbered 300 in 2005.

Thanks to the expansion and modernization of backbone communication networks, Internet public centers, Internet service centers, and Internet cafes are operated in Ulaanbaatar and provincial centers. The total number of Internet cafes reached 115 in 2005, growing by 1.3 times (88) since 2002. Internet cafes play an important role in providing Internet access to those who lack personal computers and Internet connection as well as in improving public computer education.

*** Present Service Tariffs**

2 operators, Mongolia Telecom JSC and Ulaanbaatar Railway, provide local and long-distance call services on the fixed telephone market with limited competition. Although there is competition in cities and towns along the railway line, it can be said that tariffs and service quality and availability does not have any influence on this competition.

The most Internet users in our country are connected to Internet through dial-up connection. As part of One Tugrik Internet Step under the E-Mongol Program, this service was provided for 4 tugriks per minute in the daytime and 1 tugrik per minute at night. However, it was terminated in September 2006, and today, 1 minute is 0.0085 conventional units or approximately 10 tugriks.

Some 20,000 families have been connected to Internet using DSL technology for USD20 per month under the Internet to Every Family Project since 2006. This was an important step to increase the number of Internet users.

The past one year has seen substantial decline in call tariffs for basic cellular telephone subscribers. The fact that the operators have introduced new services and begun to offer discounts for calls made by a specific group of users and within the network as well as the third operator has launched its services was the reason for decline in unit price tariffs. Today, Mobicom and Skytel provides cellular telephone services by using 2 different technology, but the service prices are almost the same, for example 1 minute call within the network is 75 tugriks. As for Unitel, however, it is 70 tugriks within the network.

Although cellular telephone operators gained created their own strengths by introducing a number of additional services satisfying customer demand and needs and by applying innovative marketing policies and take some steps on a regular basis with regard to reducing prices through incentives and discounts repeated within a short period, it is observed that such discounts cannot be so strong that customers feel them and that call tariffs are kept at the same sustainable level. This is attributed to the limited cellular telephone service competition.

Making dial-up connection to Internet service providers in Ulaanbaatar is 12 tugriks per minute, and from the countryside to Micom 20 tugriks per minute,

whereas connection to other Internet service providers from the countryside is made according to the long-distance call tariffs to Ulaanbaatar from that province. Internet access is relatively poor in rural areas. This is attributed to higher costs for Internet connection and poorly developed infrastructure. On this account, it is necessary to reduce Internet service tariffs, increase Internet speed, improve service quality, offer discounts to rural communities on Internet connections, develop infrastructure by introducing fair competition.

*** Web Contents in the Internet**

We know that Internet can not only transmit information, but also has rich information and service resources at international level. In recent years, adding information regarding Mongolia and bringing the Internet nearer to Mongolians have been restored and are still continuing at its development stage.

According to research made by Infocon, there are more than 1,500 active Mongolian websites, of which 73.6 percent are located on web servers operated by domestic Internet service providers under the domain name of ".mn" 50.4 percent of total websites are operated by the private sector, 30.7 percent by non-profit public organizations, 9.8 percent by individuals, and 9.1 percent by government organizations. The above research also shows that approximately 50 percent of all Mongolian websites are published in the Mongolian language.

Presently, the most parts of Internet service focus on network service. In other words, the focus is connecting users to the Internet, and information service focuses on transmitting contents located in foreign countries. Although there has been more service for Internet contents in Mongolian over the past years, this cannot meet demand. Content service includes for the most part websites intended for providing introduction and information. Therefore, it is required to improve the quality and quantity of information available in the Mongolian language. The poor online content of high-speed multimedia service is also attributed to the poor connection speed of users.

In recent years, there have been more efforts in adding information regarding Mongolia and bringing the Internet nearer to Mongolians, and particular achievements in this area have been made:

A. Steps Taken by the State and Government

The first foundation for optimal organization of automated database of public administration on the Internet was made in our country in 1997. At that time, The Cabinet Secretariat of Mongolia began to take steps to develop websites for each government organization and further the Government's central website. As a result, the central website of government organizations of Mongolia, Open Government

Website "www.open-government.mn", websites of all provinces, and the website of the Capital City Governor's Office have been placed on the Internet since 2003.

Currently, on the Internet is http://www.ulaanbaatar.mn, a portal containing a large amount of news and information for citizens, implementing good governance, and improving access to and quality of social service by introducing cutting-edge technology to public service under the E-Ulaanbaatar Program. In addition, an electronic customs, http://www.ecustoms.mn/clearance, is established to provide customs clearance service in an electronic form. The Government has put forth not a little effort in the development of specialized database for each type and sector of civil service, including the establishment of networks. As a result, specialized information networks are established and developing in some sectors of our country, e.g. information networks of the State Statistics, Nature and the Environment, Education, Science, Health, Banking, Civil Registration, Customs, Taxation, and Securities. Presently, the information networks of the State Great Hural, the Government (foundation for the central information network of public administration), and the Law are in their development stages.

According to observation and research, the State and Government pays more attention to the connection of these networks to the single Internet-based network to create the state central information network and further establish electronic government, as the abovementioned networks are operated independently. The establishment of information system of public administration of the Electronic Government will allow us to normalize feedback improving participation of communities in the development and implementation of state policies, provide customers with accurate information of current importance in respect of the state "black box" policy, and help deliver public service to citizens through the Office of the Government providing service in an electronic form to the Prime Minister, the Cabinet, the State Great Hural, the President, and the General Court Council.

In recent years, information networks covering politics, society, economics, law, culture and arts, tourism, nature and the environment, education, public service, and local authorities have been established, and their contents are enriched with online database.

B. Steps Taken by Non-Profit Organizations

Business associations, specialized organizations, research and analysis institutes, and international organizations in Mongolia have paid more attention to the Internet usage and developed websites:

- http://www.ict.mn/midas - MIDAS, the Mongolian Information Development Association, implements projects fostering the development

of websites and Internet usage for small business enterprises and individuals of the city. The website contains information technology documents, laws, statistical data, research, reports, and other information.

- http://www.adb.org – The Asian Development Bank – Contains project information and reports, press, economic and statistical data, reports, and information about cooperation.
- http://www.undp.mn/new - The United Nations Development Program in Mongolia – Provides electronic information and database of reports and analyses of projects and research with regard to democratic governance, poverty alleviation, human development, and sustainable natural resource management as well provides press, reporting, and forum organization services and other information.
- http://www.usaid.gov.org – The United States International Development Agency – Contains information about Mongolia, development issues, ongoing programs and projects, and their surveys sand reports.
- http://www.soros.org.mn – The Open Society Institute Soros Foundation – Provides a large amount of support and assistance in the Internet development in Mongolia, operates the Open Internet Center, introduces the Internet to schools of general education, and provides electronic library service, EBSCO, containing research and public newspapers and magazines for Mongolian readers.
- http://www.forum.mn – Open Society Forum – Intended for supporting participation of communities in the social life, publishes articles and holds discussions on development policy issues of Mongolia, provides electronic information and database containing the latest research reports and analyses of development issues, completed by donor organizations, research centers, researchers, government organizations, and non-governmental organizations, and gives information about events in policy development and implementation.

C. Information Service Providers

Some information service providers have begun to provide paid market information on the Internet. They include:

- Mongolian newspapers began to develop Internet press.

  - Mongolnews.mn – *Unuudur* Newspaper
  - Ubpost.mongolnews.mn – *UB Post* Newspaper
  - Dailynews.mn – *Udriin Sonin* Newspaper

- Distance training programs have been launched.

  - CISCO Academic Distance Training Program – Being implemented at the School of Computer Science and Management of the Mongolian University of Science and Technology
  - Distance Training Center is established at the School of Communications and Information Technology.

D. E-Business on the Internet

Obtaining, analyzing, and making conclusions promptly on any information is one of the necessary actions in every sector, in which business is done under current market competitive circumstances. Those of economic sectors, in which Internet technology is being introduced most intensively, are the banking, financial, and trade sectors, where substantial achievements are made to cut back costs, enhance productivity, and boost profits and revenues. Today, our commercial banks, including Golomt Bank (Golomtbank.com), Zoos Bank (Zoosbank.mn), Anod Bank (Anod.mn), Trade and Development Bank of Mongolia (Tdbm.mn), Mongol Post Bank (Postbank.mn), Capitron Bank (Capitron.mn), and Zoos Bank (Zoos.mn), provide electronic services through their websites. It is now possible to check our card balances, transfer money, purchase currencies, and pay fees for apartments, electricity, and cable television services through the websites of banks.

E-commerce is only beginning. There are e-commerce websites, including www.eshop.mn, shop.olloo.mn, and www.shopping.isee.mn. Prior to making purchases on www.eshop.mn, users must have e-pay cards, which can be used for making payments for apartment services, telephone, and Sansar Cable TV service. Payments can be made over the telephone, by electronic mails, or through online connection. Presently, network speed is insufficient for connection to e-commerce websites.

As Internet tourism service is not dependent on boundaries, it is much convenient for advertising and promoting the country to the foreign world. For that reason, tourism companies pay much more attention to Internet advertising and attract customs and take reservations by using websites. For example, there are websites, such as http://www.adventuresinmongolia.com (fishing, hunting, trekking, and horseback riding), http://www.discover.mn (Khuvsgul and Arkhangai tours and Naadam Festival tours), http://www.mongoltour.mn (Naadam festival tours and other tours), etc.

In addition, major hotels of the country take room reservations on the Internet. MIAT has started providing ticket reservation services on the Internet. 650 member organizations and 132 member economic entities of the Mongolian National Chamber of Commerce and Industry have their own websites. Every economic entity or organization has its own electronic mail address.

ECONOMIC POLICIES AND INTERNET

Economic policies include policies on agriculture and manufacture, in particular on communications, finance, trade, investment, money, and a number of other policies, which are intended for boosting the economic growth and accelerating economic and social development. According to scholars and researchers of the world countries, general information about Internet-based business and commerce, market situation, price, and investment research, electronic business, and other business services which can influence the economic growth have certain influence on the improvement of economic policies. Scholars say that the Internet is a tool to support economic policies of a country, and that competitive market prices for Internet services themselves can serve as a leverage for pursuing economic policies in the right direction in the current situation, in which it is possible to have access to any possible information resources to obtain necessary information and conduct comparative research regardless of any boundaries.

According to the latest international studies, economic globalization is vitally important to the information flow. These studies confirm that the information flow is increasing the impacts of the governments and peoples thanks to the modernization of information and communications technology.

USING THE INTERNET AS A TOOL TO SUPPORT ECONOMIC POLICIES IN MONGOLIA

It is acknowledged internationally that the Internet plays an important role in the local and external connection of an organization, and that it is an important tool of much effective communications for distributing information to the society and to the public.

Practice in developed countries where the most of the population use the Internet service confirms that the Internet is being efficiently used for supporting the economic development and policies, whilst it is understood in developing countries that the Internet is a tool which may support the economic growth, and the first steps have already been taken.

According to the latest foreign and local research and data, it is obvious that the Internet will play an important role in supporting economic policies which may accelerate and keep at sustainable level the economic growth of our country, which is located remotely from other countries, has vast open territory and low population density.

Research confirmed that the Internet is used in Mongolia for electronic mails and searching for information. It is just being understood that the Internet can be a tool

to foster the economic growth, and first steps are being taken. Although some 10 percent of the Mongolian population has access to the Internet today, it is required to pay attention and take significant steps to use the Internet as a tool to support polices for the economic growth. World practice also suggests it.

Today, we will discuss the following methods of using the Internet to support policies for the economic growth of our country. They include:

Economic Research and Analysis. Why? It is greatly important to collect actual, reliable, and good information for analyzing and formulating economic policies. The Internet is updated with new information every hour and every minute, while enriching its database. The Internet is not only an important tool to collect information for economic research and analyses, but also is a rich reserve and provides an opportunity for exchange of views and joint research among specialists of many different countries.

How to support? The Internet has huge information resources, and there is not any difficulty in searching for required information. Google, Yahoo, Netscape, Excite, and other search engines can help you find your wanted materials out of thousands of materials.

As the Internet is rich in figures, statistical data, and information, it provides researchers opportunities to conduct research and analyses, get acquainted with economic policies of other countries, compare their news and information, express their opinions, plan joint research work, and exchange information by using the Internet.

Today, we can obtain online information about Mongolian political, social, and economic figures and data as well as annual statistical digests regarding the economic growth (economic system, foreign trade, agriculture, manufacture, energy, transportation, tourism, etc.) from the website of the National Statistical Office of Mongolia (http://www.nso.mn); Mongolian monetary policies, figures, and studies from the website of the Mongol Bank (http://www.mongolbank.mn); information helpful for foreign investors and individuals interested in doing business in Mongolia from the website of the Foreign Investment and Foreign Trade Agency (http://www.investmongolia.com); information about trade and economic situation and opportunities in Mongolia from the website of the Mongolian National Chamber of Commerce and Industry (http://www.chamber.mn); figures, data, and information about Mongolian markets from the website of the Market Research Institute (http://www.mri.mn); legal documents and approximately 100 laws regarding business activities in Mongolia, including the Law on Accounting, the Law on Audit, the Company Law, the Labor Code, etc. from the website of the Mongolian Business Development Agency (http://www.mbda.mn); and monthly and annual statistical figures and data from

the website of the State Central Library (http://www.mcl.mn). It is useful for our scholars, research workers, project implementing organizations, donor countries, and foreign investors to analyze the Mongolia's social and economic situation, compare it with other countries, and implement further policies, programs, and projects.

It is essential to organize training courses and provide consulting services to policymakers, scholars, and research workers of our country on how to make a search on the Internet, and it is required to provide opportunities and develop methodology and recommendations on collection of information necessary for research and analyses comparing the economy of the country with those of other countries. Appendix 3 contains some information on the Internet for economists.

Public Transparency and Advocacy. Why? In order to implement any state policy successfully, it is required to provide and promote relevant information to the public and increase the level of knowledge among the public. Providing information to the public plays an important role in helping the people to understand economic policies implemented by their government and conducting research comparing with the policies of other countries. Promoting to the public is important to a particular group of people to influence government decisions and change and improve the particular situation of the country.

Although the Internet can cover a very large scope, the extent of making information available to the public on the Internet is directly linked to the existing policies. For example, the limited Internet service in the banking system is provided only to give information in respect of banking laws and regulations and decrees, whereas the information, such as electricity and water usage fees, covers all customers.

How to support? While making available policies for the economic growth, the Internet allows us to conduct research comparing with similar economic policies in other countries. The Internet helps special interest economic groups to carry on their policy changing campaigns and delivering information to the public. Non-governmental organizations influence the Government to improve or change policies. In modern times, it is now possible to establish tripartite cooperation among the Government, non-governmental organizations, and the private sector through the use of Internet technology, and social needs for such cooperation are now emerging.

The Internet will play a significant role in delivering laws, regulations, and decisions made by the State and Government of Mongolia accurately and without delay, enabling interested individuals and businesspeople to obtain such information promptly, reducing bureaucracy, such as requiring a number of applications to issue permits or licenses, and getting rid of corruption. Government

resolutions, decisions, and regulations, coordination issues, documents, and forms, which are very important to citizens, economic entities, and public and government organizations, will be made available to the public through the Internet information networks. Mostly, they will be websites and web pages on the Internet. For instance, http://www.open-government.mn (open government) plays an essential role in introducing state and government policy documents, laws, regulations, and action programs to the public, receiving public opinions, and holding discussions. Furthermore, in recent years, public discussions are held first of all prior before passing new laws or making amendments to existing laws, and the Internet serves as the key tool to disseminate information to the public and hold discussions. The specifics of this stage is that citizens are allowed to express their opinions about draft bills proposed by legislative bodies and those with rights to initiate laws, and that opportunities are provided to improve participation of communities and reflect their suggestions, conclusions, and criticisms in the state policy and decision making process.

What's more, G2B service, e.g. http://www.procurement.mn, containing government bidding documents, rules, regulations, and instructions, is of significance for providing information to business organizations, getting rid of corruption, and reducing bureaucracy.

Additionally, in 2005, the members of the Government of Mongolia are provided access to information networks connected to the Internet, helping them to work in a paper-free technology environment as well as deal with a large amount of information and database.

Professional networking. Why? It is equally important to specialists to keep in touch and work together on a regular basis in prompting economic policies. It is insufficient for economic policy experts to make analyses only on the basis of information of their country without latest information and world economic indicators expressed in figures. It is also essential that macroeconomic policy experts, financial market managers, agricultural economists, industrial policy makers, and other specialists always work together with their counterparts in order to understand changing world economic indicators expressed in figures, obtaining information about changes, and keeping pace with the present situation.

Some expert networks organize informal open meetings on the Internet, which are becoming largely popular in recent years. Such meetings help cut back expenses to a large degree, exchange the latest information, distribute knowledge, and hold discussions.

How to support? The Internet has a number of Internet methods and technologies used in the expert networks. They include **Mailing Lists, Listservice, Bulletin Board, News Groups, and video conferences**, which are all widely used in the

expert networks for upgrading education and distributing and exchanging information. Prompt electronic mail service and transfer of documents play an important role in helping professional associations maintain continuous activities. The major expert networks on the Internet are the American Economic Association, American Agricultural Economic Association, etc. In Mongolia, the Environmental Consortium, the Mongolian Leasing Association, the Mongolian Tourism Association, the Mongolian Banks Association and other professional associations are connected to expert networks of other countries to exchange information, learn experience, work on joint projects, and hold open discussions on policy issues.

Institutional networking. Why? Specialists of any economic policy making organizations, no matter the state, business associations, or universities, have to work together with both local and international organizations to analyze their situation and develop suitable policies. If organizations unite and are connected to networks under a single program or according to their interests, such networks can work well enough and make more achievements. For instance, the Erdemnet network connecting universities, institutes, and research organizations in Mongolia has already connected 16 universities, institutes, colleges, and approximately 40,000 teachers, lecturers, and students of these organizations.

How to support? All tools used in the expert networks are also used in the corporate networks. In recent years, Internet-based technology, including telephone and video conferences, is used more widely in expert and corporate networks.

It is required to connect research networks to international research networks in accordance with interests of Mongolia, conduct joint research, exchange experience, participate in meetings and conferences, and improve professional career opportunities. Through the system connecting the National Information Science Center of the Republic of India and the School of Communications and Information Technology, the lecturers and students of this school receive training in the area of information and communications technology. This system for distance training and video conference uses VSAT, a satellite system.

The information network connecting government organizations of Mongolia plays a significant role in providing organizations with information necessary for economic policy development, implementation, and control, exchanging information, and holding discussions on policy issues.

Providing distance technical Assistance. Why? The use of the Internet is now important to provide technical consulting service, render distance assistance, and give training according to economic programs and projects implemented with the help of international organizations and donor countries. Providing high quality, short-term technical assistance is expensive; in particular it requires huge expenses on travel and business trip, as well as takes much time when traveling. It is

common in practice that we waste time, when waiting for consultants, due to flight schedules or weather conditions, beyond control of individuals or organizations. For that reason, it is becoming now popular to give technical advice, talk to each other, transfer files and reports, and give training through the use of the Internet.

How to support? Sending electronic mails, transferring files, and working together on reports help consultants save time and expenses on business trips and transfers. Research proved that specialists largely provide short-term consulting services from their offices through the use of the Internet. In Mongolia, economic projects, such as banking, finance, accounting, audit, and business administration projects, always give advice through the Internet to their employees on issues arising during research and analyses, search for information, and preparation of reports and documents.

Distance Training. Why? Generally, training is part of economic policy programs. Distance education has more advantages than conventional training, such as lower costs and coverage of more students. Most universities and colleges in developed countries, including the United States, develop and implement distance education and degree programs. There are distance training programs, such as radio training for herders covering remote places where it is difficult to reach in person, but such training programs are not always designed for economic policy and decision makers.

How to support? Let me name some achievements in distance training. The purpose of the Mongolian Farmers Club is to give intellectual support for the development of farming in Mongolia. This club gives online training to agriculturalists, such as farming economics, farming technology, agricultural extension, and project management. Furthermore, the CISCO Academic Center established at the School of Computer Science and Management gives distance training to information technology students and provides learning environment for obtaining lessons through the website of the CISCO Academy.

An Internet-based distance training project is being implemented in Mongolia with funding from the International Development Research Center (Canada). The purpose of this training is to help lay the foundations of electronic training technology and prepare English and information technology lessons (http://www.elearning.mn). Furthermore, an online dictionary is completed under the MIDAS1 project in our country. The teleconference center connecting Ulaanbaatar and 13 provinces has created an opportunity to receive real-time training. We would like to mention that http://www.mongoleducation.mn, a portal funded and developed by the Mongolian Open Society Institute, plays an important role in helping teachers of general education schools exchange experience and upgrade their knowledge and education. In addition, schools of the Mongolian University of Science and Technology and the Mongolian Health Sciences

University have developed some e-training programs which are now being implemented.

Local Internet Connection. Why? Local Internet connection plays an important role in supporting policies for the economic growth of that area. It is now essential to connect local economic and business organizations, research centers, and universities and institutes to the Internet networks.

How to support? Rural areas in our country have had very low Internet usage to this day because of a large gap between urban and rural areas. It is evidenced by research that 5 percent of total Internet users in Mongolia are users from rural areas. The Internet is not only an important tool to make contracts and agreements among cross-border countries and do business at local level but also has positive influence on policies for the economic growth of that area. We believe, for instance, that the establishment and use of the Internet information network between Zamiin-Uud and Erlian will serve as an important tool to support policies for the economic growth of the regions.

Business Service. Why? The Internet is used efficiently for international trade and investment. For that reason, most organizations want to connect to the Internet. The Government of Mongolia pays much more attention to creation of opportunities for Internet connections, obtaining information, receiving e-services, and participation in e-commerce through the Internet. In the first place, banking services and coverage of household payments for apartments and communications, insurance, and wages for citizens are now being implemented intensively. Skytel, Mobicom, and Unitel offer WAP service and YoWap service. These services enable us to send emails, obtain daily news, purchase services, such as bank account information, flight and train schedules, games, horoscopes, and voice data, download images and characters, use an English-Mongolian dictionary, and download information from Yahoo and Hotmail.

How to support? Presently in our country, business-to-customer (B2C) e-commerce is used by a particular number of users, including electronic and credit card payments. The current main drawback in electronic banking service is the lack of the central card service and the central card service center. This may have negative impacts on the development of the electronic payment system.

Business-to-business (B2B) e-commerce is used to a very little extent, or for some freight forwarding companies. The development of the Mongolian Wholesale Network established in 1997 for the B2B e-commerce system was an important step to supply rural communities with consumer goods and factories with raw materials of animal origin. Currently, there are approximately 10 online shops (www.rose.mn, www.mgl.mn, www.erdemshop.mn, www.babyshop.mn, etc.) in

our country, taking orders for and selling some goods and products, including flower and some foods.

CONCLUSIONS

There have been much more achievements in using the Internet as an efficient tool in our country, particularly banking, finance, payments, wages, and trading of goods, and these achievements influence all our lifestyles, making large changes. Although there are achievements, the issue of using the Internet as a tool to support polices for the economic growth is only beginning. It may seem almost impossible to put it into practice, because we face some obstacles. Some of the main obstacles are:

Higher Internet Service Prices, Low Speed, and Insufficient Quality. Although we see improvements in infrastructure, service prices are not reduced substantially. Research also confirm it. In a survey conducted by Infocon, 32 percent said that higher Internet service prices limit the usage.

Poor Understanding, Knowledge, and Skills in Using the Internet among the Specialists of Government, Business, and Public Organizations as Well as among the Public. Nowadays, there is lack of, incorrect, or insufficient understanding of the Internet among the specialists of any organizations, economic policy makers, and the public. Although some specialists and individuals have understanding of the Internet, they have poor knowledge and skills in using the Internet. Research also confirm it.

Language Barrier. Although educational institutions of all levels provide English language training courses, the level of English and other business languages among the communities is not satisfactory. Some 50 percent of Mongolian websites on the Internet and software are mostly in the English language, negatively affecting the number of Internet users.

Management Attitudes to Information. The management of some organizations does not want to disclose figures and data. This is linked to the idea that economic information, research, and analyses should be disseminated to the public only after the Government has verified and analyzed. This attitude is the main obstacle in the Internet usage, especially in using it as a tool to support policies for the economic growth. Over time, a jump in the Internet development will change the management attitudes to information.

Management Limits of Internet Usage. The management of some organizations takes measures to limit Internet usage for the purpose of controlling information received by and sent from their organizations, for the reason that it is impossible to know where, who is connected to the Internet, by giving Internet access to

particular employees, or by placing personal computers with Internet connections in the rooms of officers. At some universities and institutes, the management limits Internet usage by locking Internet rooms and not allowing students to conduct research or searching for information through the use of the Internet.

Insufficient Human Resource Allocation. Although mane information technology specialists are prepared in recent years, the most of them are centralized in Ulaanbaatar. Many of them work in different areas because of lack of jobs in rural areas or lack of interest.

PROPOSAL

We should understand the Internet as a huge opportunity for improving the country's economic growth, education, health, communications, and relationship between the government and citizens, consider it as one of development accelerators, and take substantial steps in this area as soon as possible. We should develop and implement new initiatives and programs without seeing it impossible. As a result, we will able to make significant contributions to the acceleration of the economic growth in our country.

Practice and research in many countries have proved that the Internet is an important tool to support policies for the economic growth. The following issues should be addressed in order to use the Internet as a tool to support for policies for the economic growth in Mongolia:

- To create opportunities to connect more people to the Internet as soon as possible
- To reduce Internet service prices, increase speed, and improve service quality by creating fair competition
- To develop Mongolian contents on the Internet: update and enrich website contents and establish central database of economic and statistical figures and facts
- To organize training courses to upgrade understanding of the Internet and relevant knowledge and skills among specialists of organizations, economic policy and decision makers, and the public
- The state and government, the public, business organizations, universities, institutes, and research organizations should put forth efforts in making available economic policies, data, research, and database. The state and government should give support in this area.
- To support and develop information service providers
- To focus more on getting distance technical assistance under economic policy implementation programs and projects or as part of cooperation with international organizations

- To develop and provide distance training programs for economic policy makers
- To support training centers of organizations giving distance training
- To improve knowledge of languages, particularly English language proficiency among the public and translate into Mongolian or develop Internet-based software
- To used widely the mass communication media to provide Internet and information education to the public

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