

## **Information Technology in the 1000<sup>th</sup> Anniversary Program of Thang Long - Hanoi**

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of Thang Long - Hanoi**

Distinguished scientists,

Ladies and gentlemen,

In 1010 King Ly Cong Uan who founded Ly dynasty, made a smart decision to move the capital from Hoa Lu to Dai La and named the new land as Thang Long, it was also the time when the history of Thang Long was established and developed. Thang Long - a home to everyone, had attracted national elite to forge and crystallize it into the cultural distinct and heroic tradition of the thousand year imperial capital.

From Thang Long to Hanoi, the history of a thousand-year land has faced with a lot of sufferings. The prosperity, declination of dynasties seems to gradually create opportunity for Thang Long - Hanoi to develop. The glory after great victories against Tong by the Ly dynasty, Nguyen by the Tran dynasty, Minh by the Le Loi had given way for the establishment of the Le dynasty. And Nguyen Hue hero, with terrific fight against Thanh enemy in Thang Long... then the French Resistance War and American War had reaffirmed the name of heroic Capital. Not only so, Thang Long-Hanoi had a proven record of 1000 years bearing permanent cultural values. Thang Long - Hanoi is wealthy thanks to physical cultural values with thousands of religious cultural centers including temples and pagodas. There are some buildings aged thousand years. Historic and revolutionary heritages are found in all districts of the City, ancient architectural buildings are mixed with French villas. Hanoi with 36 streets, with ancient quarter and beautiful scenery namely Hoan Kiem Lake, West Lake has boasted the city's distinct cultural values. The immaterial cultural values of Thang Long - Hanoi are also potential and diversified: hundreds of traditional festivals are held annually in Spring and Autumn, wedding ceremonies, life style of Hanoi people.. have gone into the traditional idioms:

*Ba Vi is the highest mountain*

*Thang Long people is the most polite and sweet.*

Recently, the investigation, preservation and maximization of historic values of Thang Long - Hanoi has attracted attention from not only the Hanoi people, the local public but also international friends. This explains the reason for the fact that research and application programs on culture have been gradually taking place. Especially in preparing for 1000 years of Thang Long - Hanoi, the Vietnam Communist Party, the Government and the city authorities have developed and directed a master development program for Hanoi city. In parallel with the identification and completion of

socioeconomic objectives and major projects, an emphasized attention is the development of capital culture and people. The program focuses on the followings.

**First**, to preserve and renovate historic heritages, revolutionary cultures, beautiful scenery, for example, the old quarter, Co Loa heritage; to maintain and renovate famous heritage and sightseeing including Phu Dong pagodas, Ngoc Son temple, Bich Cau Dao Quan temple and pagoda; to improve and renovate Tu Tran, Y Mieu, Vo Mieu. To develop trial project; to preserve key streets in the old quarter; to maintain, renovate and upgrade revolutionary heritages, namely, the House No.5A-5D Ham Long; No. 90 Tho Nhuom, No. 48 Hang Ngang, the House of Mrs. Hai Ve, No. 105 Phung Hung, Uncle Ho's heritages in Hanoi; to develop plan and upgrade traditional trades village Bat Trang; to revitalize some famous traditional trades like popular picture of Hang Trong, Buoï poonah-paper...; to start the project "*Archeology in Hanoi city*", "*Develop mapping of Thang Long citadel through dynasties*". And as you are aware, in 2003 on 19,000m<sup>2</sup> at Ba Dinh Hall, archeologists had discovered many significant traces of architectural projects, palaces in Thang Long citadel with many heritages and relics of different dynasties within about 1,300 years (Dai La and Thang Long in the dynasty of Ly, Tran, Le, Nguyen). With millions of invaluable items and architectural traces, it can be confirmed that this is a unique archeological project of Vietnam and the region.

**Second**, to develop plan and preserve, maximize immaterial cultural values, especially popular culture. To develop a center for conservation and development of traditional culture and art: *Develop civilized, polite and modern Hanoi people*. The main content is to educate patriotism, traditional historic culture of 1,000 year Thang Long - Hanoi among the city people. To implement the Project "*Education of Thang Long – Hanoi history, cultural lifestyle for city students*". To organize competition "*What do you know about Hanoi*" not just inside Hanoi but across the country, even in other countries in the region and the world".

**Third**, to commence the organization and creation of cultural and spiritual works, for example, development of documentary historic film of Thang Long - Hanoi (12 volumes), feature film, television film and cartoon film on the history of Thang Long - Hanoi; to organize promotion campaign about literature art composition "Thang Long – Hanoi, age-old culture" (including literature, poem, music, painting, sculpture, theatre and architecture...)

**Fourth**, to implement scientific program at the State level "*Study and maximize natural conditions, economic, social and cultural historic values of 1000 years Thang Long - Hanoi for the entire development of Hanoi capital*". This is a macro research project which is directly approved by H.E. Prime Minister Phan Van Khai.

**Fifth**, to newly develop historic and cultural projects, to gradually implement some monuments in accordance with the historic events like Thanh Giong, An Duong Vuong, Ly Thai To, August Revolution, French Resistance War etc; to develop the project "*The Southern gate*"; the monument "*City for Peace*" on the main of entrance of the City, to

develop Hanoi museum, historic culture park under the name “*To commemorate 1000 years Thang Long - Hanoi*”; to complete upgrading infrastructure system around the West Lake and other lakes of Hanoi; to renovate To Lich, Luu, Set, Kim Nguu rivers and other cultural heritages in the surroundings.; to develop the project for renovating Long Bien bridge to become a bridge for bike riders and pedestrians.

*Distinguished guests,*

It can be stated that the details contained in the 1000<sup>th</sup> anniversary program of Thang Long has been maximizing its impact. It contributes to the value of the old age culture and the hero of the Capital. However, an issue occurred in the program is the absence and poor infrastructure, experience and technology. In this Conference, we would like to address the application of information technology in the work relating to digital information. Basically, most of the work is implemented manually, or if there is digital technology, it is just at the initial stage. For example, archeological items are just processed by Scan technology (image processing) and managed by computer. The products of research project are recorded in VCD and installed in the Internet. However, we would like to emphasize the inconsistency and in-complexity in the application to preserve, and renovate cultural historic values. Assumable, if Long Bien bridge, Hanoi old quarter, Thang Long citadel map of dynasties, cultural historic heritages were processed with the support of information technology like 3-D photographing and managing with historic data, color, size and technique, the conservation values brought to the 1,000<sup>th</sup> Anniversary Program of Thang Long would be much more significant.

From the above mentioned, the Office of National Steering Committee for 1,000<sup>th</sup> Anniversary Program of Thang Long has developed a plan to gradually expose and apply information technology. It also worked with Vietnam-Japan Geo-informatics Consortium. We are pleased to learn that this Consortium was set up in 2001, aiming to strengthen the incorporation of information technology and communication to solve the issues of environment, nature and society. This Consortium acts as a bridge between Japanese and Vietnamese scientists in order to develop research, technology transfer, energy development in geo-informatics, including history and culture. The application of information technology in research, conservation, renovation of historic cultural values has been applied by Japanese professors in the project to revitalize the images, location of “Silky Road” in China, mapping set in Thailand, conservation of cultural heritage Angcovat in Cambodia. During the working sessions, the two Parties also principally agreed that it was necessary to apply information technology in the research, preservation and renovation of historic cultural heritages in the city. Subject to the attention and support of national and international organizations for resources and technology, the Office of National Steering Committee for 1000<sup>th</sup> Anniversary Program of Thang Long - Hanoi commits to make the best efforts to turn the idea into Feasibility Study. I would like to brief the main content of such idea as below:

## **1. To collect and manage historic documents**

This is an important content of the Project, a basic step to progress further. At present, there are a large number of materials in country and overseas written by Vietnamese and foreigners about the history of Vietnam, in which Thang Long – Hanoi was mentioned. There are also works studying about individual aspect of Thang Long - Hanoi, and newly published works, scientific research projects... And, recently, as stated above, to prepare for the Anniversary Program, the Government of Vietnam has decided to implement a scientific research project at the State level - an overall research program comprising many major topics to study and maximize natural, economic, social and environmental condition of the capital. By saying so, it can be seen that presently, Hanoi has huge material resources. The task set forth is that it is necessary to continue collection and, more importantly, to systemize, computerize such materials. Materials will be divided into topics, stages and will be input and managed by a separate software system.

## **2. To develop geo-informatic and historic material system in order to provide information for researchers and tourism sector.**

Base on the geographical materials, existing history and collected and collecting materials, information technology will be applied to develop mapping system of Hanoi throughout different stages, that is, Hanoi at present and old Hanoi, which is computerized and digitally processed. The maps will reflect differences and changes of the City, the “shrinkage or expansion” of urban in each stage. This will facilitate a lot to the urban management, archaeological exploration, investigation, identification of location in the history in order to study cultural tourism routes. For example, for Thang Long citadel, the application of mapping technology will help to identify rough location as well as accurately border the Hoang Thanh area throughout historic changes in the dynasty of Ly, Tran, Le, Nguyen to present – a task that challenges many scientists at present. There are a lot of other work like incorporating the image of Hanoi with historic heritage including Co Loa, Co Thanh, the old quarter, Long Bien bridge... beautiful scenery like Hoan Kiem Lake with Thap Rua, Dai Nghien, But Thap, West Lake with surrounding heritage, as well as One Pillar Pagoda, Khue Van Cac, Ho Chi Minh Mausoleum, demonstrating 3-D images with accurate data and material system, most accurate and interesting images about Hanoi. These will actively help to attract researchers, Hanoi lovers and tourists.

## **3. To develop digital museum**

It should be noted that this is my personal initiative, a person who have limited experience and knowledge about informatics. The idea was struck in a talk with an expert of Vietnam–Japan Geo–informatics Association, Prof. Shibayama. He encouraged the initiative, therefore we would like to present here.

To develop a digital museum. This is a general museum about 1,000 years of the City. It introduces the exact location of Hanoi ancient citadel. It briefs about the route that Ly Thai To had reallocated the capital from Hoa Lu to Thang long. Ancient items, heritages

will be displayed in the 3 – D image, which enable viewers to thoroughly observe and to combine all historic events. Museum visitors in all over the world will have a chance to view ancient items in details, from different perspectives, which make it much more interesting compared to the items displayed in a traditional museum. This type of museum will retain all images about historic heritages, invaluable items of Thang Long – Hanoi being attacked by time. At the same time, it facilitates the conservation and renovation work, and it also helps to raise awareness of the public over the values of historic culture values.

#### **4. Preserve excavated historic heritage**

As you are aware, in the 1000<sup>th</sup> Anniversary Program of Thang Long, the city is implementing Archaeology Project. Archeological institutions have excavated in Dinh Chien, Lien Ha Commune, Bai Men, Co Loa Commune, Dong Anh; Kim Lan ancient ceramic commune in Kim Lan commune, Bao An pagoda in Duong Quang Commune, Gia Lam and a lot of archaeological items were found. Especially in 2003, the Archaeological Project in Ba Dinh Hall, in an area of 19,000 m<sup>2</sup>, excavators had discovered many significant heritages. Not only so, the result of collection reflects invaluable heritages with millions of invaluable items of different civilization, from prehistory to medium, modern and contemporary. Therefore, it is necessary to build a software system of archeology in Hanoi, system of archaeological vestiges and collected items. The information about image, epoch, materials, colour, size of items will also be managed with the vestiges and items. This software system will become material resources for City collection and archaeology. This will become a basis for scientists to address accurate arguments about the history of Thang Long – Hanoi culture and then to gradually restore, preserve archaeological items of Hanoi.

The above are four major contents that we and the scientists of Vietnam-Japan Geo – Informatics Association have discussed and planned to implement in the Project “Applying Information Technology in Conserving Historic Cultural Heritages of Hanoi”. The Project is divided into two stages:

##### **Stage 1:** two work items will be implemented

- Collect and manage of historic materials;
- Develop collected geographical, historic materials in order to provide information to researchers and tourism sector.

##### **Stage 2:** two work items will be implemented

- Develop digital technology or historic materials and digital technology museum.
- Preserve excavated historic heritages.

*Distinguished guests,*

I would like to comment that the above four details are closely connected with each other. One of them may be expanded to further four or even more branches. It can be divided into stages or implemented concurrently. One can assume that if the project is successful, it will offer a lot of convenience, however, the significance to 1000<sup>th</sup> anniversary is even much higher. However, we should not be too rush to ignore challenges and complicity of prerequisite conditions (including human resources and technique). Therefore, I would like to take this opportunity to ask for your attention and support to make our dream become a reality.

Although there are many details that should be clearly expanded at the Conference, however, within this presentation, I would like to address the most generic issues. Any question please put them in written note, and we will discuss further. Finally I would like to thank you for giving me the chance to speak and I wish that we can start applying the Project in 1000<sup>th</sup> Anniversary of Thang Long – Hanoi as early as possible.

Thank you for your attention.