THE TELEPORT '96 CONFERENCE'
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I am honoured and delighted to be asked to speak at this conference attended by so many distinguished participants on a subject which relates to the future of the so-called Information Age. The presence of representatives of both the developed and developing nations should help to balance the interest of the global society which presently does not have equal access to information. I am confident that the findings will be constructive and will contribute significantly to the peaceful co-existence of the global community.

2. Evolution in our society is by no means influenced by natural processes alone. It is also the result of human reaction to his environment and attempts to influence it. Thus defence needs through the ages had resulted in the fashioning of weapons which later found peaceful usage. Of course the opposite was also true. The process is far from over. Much of today's technology had their origins in the search for more effective weapons of war. But war and defence is not always the reason. Thus the quest for food and clothing resulted in trade initially through barter, then the exchange of precious metal tokens, and now paperless trading.

3. Where before human communities can be totally isolated and independent, we now see not just interdependent societies but a borderless global society emerging. The science fiction writers and futurists are often right about the shape of things to come. But the reality may take quite a different form from what they had predicted. Thus the microchip and its influence on human society and the way we communicate was never really prophesied or thought of. For that reason we were not quite prepared for the information explosion and the advent of the information rich society.

4. This conference will hopefully contribute something towards our understanding of the new information age and indicate the direction and possible usage of mass information and the management of the flood of information which threatens to drown us sometimes.

5. The development in the telecommunications and information industries has given a new definition to what constitutes a rich or a poor nation. Today the defining character of a rich or poor nation is based on its economic wealth and the state of its industrialisation. In the future, the determining character of a rich or poor nation may be the accessibility to information resources and the use they are put to. Through information countries may benefit from the wealth and economic

activities of others or produce goods and services from material and facilities that they may not have locally.

6. The globalisation of trade and industry will accelerate with the progress of information technology. Corporations are now more able to look beyond their national borders to take advantage of cheaper resources, skills and knowledge for research, production and marketing. Cyber business companies or virtual offices are beginning to sprout. Conventional policy instruments for the management and regulation of trade and industry are becoming increasingly ineffective. Governments have to look into new regulatory instruments to deal with these new forms of business entities, indeed to deal with the spread of information itself.

7. In the political sphere, national borders are becoming quite irrelevant in the Information Age. As mass information is disseminated through the fast emerging global communication networks, it will become more difficult for governments to control trans-border social, economic and political interaction. It will be equally difficult to control the access to information within the country's own borders. As citizens avail themselves freely of information, the role of governments and governance will have to be redefined. Since knowledge is power, the availability of knowledge to everyone must disperse power and power centres. These new centres of power will undermine the traditional authority of governments and even international regulatory bodies.

8. With the rise in networked societies and organisations, sharing, in the true sense of the word, will be enhanced. Regardless of social status, economic diversity and distance, people of all walks of life will be able to share knowledge and experiences with unprecedented facility. Multimedia networks will enable this exchange to take place using virtual reality in order to be more authentic. The learning process will thus be more effective as virtual experience can be actually repeated until the lessons are truly learned.

9. Our world today has grown very small due to the web of interconnected information networks such as the internet. With more than 35 million users and still increasing, with worldwide and new networks being added to the existing 35,000 networks, the aggregate number and wealth of information going back and forth is truly unimaginable. The numerous means of acquiring information has ignited a revolution which has profoundly affected us, much more than what the steam engine did to the Industrial Revolution of the 19th century. In the same way that the Industrial Revolution transformed the socio-economic fabric of the past, the Information Revolution will radically change our social and economic landscapes. The

effect defies imagination, challenging mankind's capacity to envision and shape the future. In the not so distant future, I believe informatisation rather than industrialisation may be a better reflection of the development of a nation.

10. The development and speed of the modern information network has facilitated the growth of the global economy. Intra-regional and inter- regional trades have flourished with vast movements of goods, capital, people and technology. Supported by the transportation, banking and financial services, all utilising telecommunications and new commercial data, the movement of goods and services will soar to greater heights. Accessibility to new markets has already fostered the founding of new international corporations even in the developing countries. With the capability to send complete and detailed information, manufacturing need no longer be restricted to the countries possessing the technology and the resources. And so manufacturing will now be truly global, with design being done in one country, engineering in another, sourcing of parts from all over the world and production in the most competitive countries. Technical information can be culled from literature worldwide through the numerous libraries in the networks.

11. Even in the field of social and cultural activities, the information revolution can bring about greater international understanding. People can learn about other cultures and values which can hopefully eliminate the tendency to become insular, regarding other people as abnormal. This can give a new dimension to our lives, reducing narrow nationalism and creating more globally oriented citizens.

12. The new information era brings not only opportunities but also many challenges to the global community. Recent developments necessitate changes in family, social, economic, political and governmental structures. Easier communication tends to create and facilitate new values - most notably freedom of expression, reciprocity in the interchange of views and universality of access. The power of the media to highlight only what it chooses while blacking out counter arguments or opinions will be diminished as everyone can reply through the net without editorial vetting.

13. These freedoms are at the core of the liberal- democratic political system and the free market system which most nations now subscribe to. With the universality of access comes the need for universal public policies, particularly to prevent the abuse of the free access to information. No country by itself will be able to prevent these abuses. It must be remembered that access for everyone means also access for

terrorists and criminals for whom information can mean greater sophistication and sophistry in their unwelcome activities.

14. Of course on the plus side the availability of infrastructures for electronically transferring and accessing information is critical for the realisation of greater economic, social and cultural objectives. For the developing and less developed countries, the availability of the information infrastructure is the only way to leapfrog the development process and to run after the rest. Adequate access to telecommunications facilities will boost industrialisation, reduce the rate of unemployment and contain the exodus from the rural to the urban environment, from the poor countries to the rich. Thus, the previously underemployed programmers in developing countries can now work for and earn good incomes by doing work for industries in many countries without leaving their shores in search of employment.

15. I strongly believe that the developing and less developed nations must regard it as vital to join the global effort in the formation of the Information Society as it will open windows for quantum leaps in technology development. The availability of global infrastructure for communications will help in the realisation of economic, social and cultural progress as well as reducing the lead of the advanced nations. At this point, the developing and under-developed countries should reassess their paradigm and be bold enough to participate actively in the formation of an information-rich society. The path to a radical change, to a paradigm shift is not without difficulties. There will be many constraints; financial, trained manpower, access to advanced technologies, to name a few. A helping hand from the rich nations will be crucial. If we subscribe to the view that helping others to prosper will eventually benefit ourselves, then the rich should not be reluctant to help the poorer nations join the Information Society.

16. While there may be many benefits, social imbalances may actually be accentuated by information technology, widening the gap between the haves and the have-nots. Already the huge telecommunication companies of the developed nations are grabbing huge segments of the telecommunication networks worldwide. The poor countries may lose their chance of getting a piece of the action even in their own countries. In the process they may lose control of their economy as well.

17. There is also and there will continue to be an increase in unhealthy trends such as more widespread and difficult to detect dissemination of pornography, white collar crimes and loss of privacy and security of information.

18. However, for the global community the benefits of the new technology promises to outweigh these misapplications. The release of man from the more routine and mundane thinking tasks, thus enabling him to devote his thoughts, time and energy to more value-added knowledge work through information technology is in itself sufficient compensation. Man's intellectual contribution to society's development can thus be enhanced.

19. Information technology will of course enable the sharing of information and knowledge much more widely. As far as these are concerned a more equitable level will emerge. It can produce a high level of synergy between global communities to address national and global problems and issues which will, hopefully, help create a more peaceful and a higher quality of life for the world's population.

20. The information technology paradox is that, while current trends may be widening the gap between the haves and the have-nots, it can, if properly guided, bring them closer together. Information technology-based social services such as telemedicine, distance learning and the provision of services over the network can be used to bring the less privileged and more remote communities into the mainstream of social and economic development.

21. Information technology has the capacity to maximise the global potential. Consumers of the world can benefit from the lower cost of research and production by facilitating the sourcing of knowledge, materials and goods from the best and cheapest sources. The economies of less developed nations should gain from this. However, such sharing will only be possible if there are no artificial barriers erected either by governments or the private sector to obstruct the free flow of information or to link them with extraneous political and economic issues.

22. This immense potential of a networked global society should be used in the creation of a one world society which places a premium on the quality of life for all. This can only happen if the information age and the concept of sharing are based on common values and the principles of equality, fairplay and justice. At this moment, the enormous capital required to put in place the infrastructure can only result in a few giants monopolising the commercial benefits at the expense of the capital and technology-poor economies. This is being aggravated by the demand through the WTO for opening up markets. While the developing and less developed countries must be prepared to help realise the vision, they must be helped to develop their human and financial resources together with their management and technological skills. Without some

kind of a head start and affirmative action the potentials of the manpower in these countries to contribute to the Global Information Infrastructure will be wasted.

23. For our part, Malaysia is committed to the evolution of a global information society. As a developing nation, we realise that we need to change our existing paradigm if we want to be part of the on-going process of change. Notwithstanding the constraints, we are prepared to lay the foundation of an information-rich society. Accordingly, we have formed a National Information Technology Council (NITC) to guide the Government and the nation in progressing towards a meaningful role in the global information society that is fast advancing. A joint venture project between the government and the private sector, NITC will coordinate and synergise the functions of the two parties. Its primary task is to evaluate the government's and the private sector's needs and efforts in the development of information technology and other related industries. It will also recommend regulatory public policy that is conducive to the convergence of the telecommunications and broadcasting industries. To this end, we have embarked on an ambitious programme of a sophisticated information technology infrastructure build-up between Kuala Lumpur and the new Kuala Lumpur International Airport called the Multimedia Super-Corridor (MSC). Putrajaya, the proposed new administrative capital of Malaysia, will be built in between. Based on the latest advanced information technology hardware and software, the MSC will in fact become a teleport which will enable real time retrieval and dissemination of information. It will be the nerve centre to steer and lead the nation to meet the challenges of an information-rich society. It is hoped that the MSC will spearhead a structured approach to embrace the latest technologies in accessing information, linking Malaysia to the global information base and expertise, thus providing invaluable assistance for both the public and private sectors to execute strategic decisions as well as optimising productivity and efficiency on a world-wide scale. Computer, broadcasting and communications, as well as multimedia industries will merge along this corridor. Indeed, the MSC will be a significant boost to foreign and local investors from these industries, taking advantage of the advanced technologies to develop multimedia and related products and value-added services, thereby accelerating the pace of Malaysia's progress to become an information-rich society. With the MSC firmly in place, both foreign and local investors can also utilise Malaysia as a springboard to expand their horizons into emerging markets in the Asia Pacific region. Needless to say we are aware that a concerted effort is needed to implement the MSC successfully. A Multimedia Development Corp (MDC) will facilitate direct investments in the project.

24. To predict the future is not easy. But in this case, I have no doubt of the eventuality of the Information Society. The achievement of this vision will require concerted effort on the part of everyone. But it will more than pay off as the reward will be enormous for all. We require a common stand and global cooperation to realise the shared vision. I am happy to note that the members of the G-7 have initiated a bold and farsighted move to provide the necessary support for the developing and less developed nations to have equal access to information and ultimately achieve the formation of a truly Global Information Society.