SPEECH BY THE HON TUN DR MAHATHIR BIN MOHAMAD
AT THE INTERNATIONAL ADVISORY PANEL MSC
AT EQUATORIAL HOTEL, PULAU PINANG
ON 8 SEPTEMBER 2005

"Leadership and Innovation in a Competitive World"

1. Leadership is really not something new to Malaysia, even world leadership. We led the world in tin production for a very long time. 40% of the world's tin used to come from Malaysia.

2. Then we went into the rubber industry – a tree that is not indigenous to Malaysia. Very quickly our rubber estates began to produce the biggest amount of rubber for the world. We also produced the highest quality so that Standard Malaysian Rubber or SMR became the benchmark for the world's rubber in terms of quality.

3. Then we went into palm oil. Again within a very short period we became the leader in the production of palm oil. Today we produce more than 13 million tons of palm oil, again achieving the highest grade. With petroleum prices at record highs, palm oil is going to be even more of a money spinner for Malaysia.

4. But the quantum leap in leadership happened when we started producing microchips. We had no technology and no capital. We decided to invite foreign investors at a time when FDI was not known. It was an innovative approach because at that time the newly independent countries were busy nationalising foreign companies. We went the other way. We invited foreign companies to participate more in our economy. In the end other countries began to invite foreign investments.

5. So far so good, one would say. But can Malaysia achieve leadership in the Information Age, an age where competition is fierce. Can we innovate and be one step ahead of others? This is not about planting trees or tapping rubber.

6. Obviously it is not going to be easy this time around. One of the crucial needs is Government leadership. The Government has to decide. Is it going to seek leadership in Information Technology or is it not. If it does want Malaysia to lead, then it must give the necessary signals to the private sector.

7. If we adopt the strategy of our initial industrialisation, i.e. we provide incentives for foreign investors to bring in the capital and the know how, we would be competing against many countries which are giving even better incentives. And they have more workers. Their wages are lower than us.

8. Leading edge technologies require a better educated and highly trainable workforce. We have noticed that even during the first phase of industrialisation the ability to understand instructions given in English on the part of our workers was an important factor in attracting foreign investors. Whether they were German, Japanese, French or Americans, they all use English when giving instructions and during training.

9. But for the new technologies acquaintance with simple English is not enough. There is a need for the English language to be completely mastered. The instructions are no longer going to be simple. A thorough understanding of English and skill in the uses of the computer and I.T. would be needed. There must be a willingness to learn about the latest advances in ICT, as new capacities and technologies develop continuously.

10. The Government has now accepted the need to teach the English language as an important subject. The students and their parents must know that the career of the young people in the future will depend on the ability to speak, read and write English well. It is unfortunate perhaps for the language nationalists but that is the reality today. They must not blight the future generations by objecting to the mastery and usage of English. They must not obstruct Malaysia's progress and development.

11. The teaching of mathematics and science in English from the primary school level is another move by the Government to prepare all Malaysians for understanding cutting edge technology and IT. The fact that we must accept is that most scientific works are available in English. It is too tedious and time consuming to translate. Besides we really do not have the manpower. So it is far better to learn mathematics and science in English so that the latest advances can be accessed directly. Although elementary mathematics and sciences can be taught in the national language, but early familiarity with English will make understanding the more complex advance level of these subjects much easier.

12. Assuming that young Malaysians put their heart and soul into the acquisition of English and mastery of mathematics and science than it will be possible for Malaysia to keep at the leading edge of the new IT based applications and industries.

13. For innovation we need a new mindset very urgently. Traditionally Malaysians are not confident enough to innovate. They like to do what has already been done by others. Even if it is pointed out to them that there is a better way, they would reject it offhand if locally originated. Officials in particular do not like anything new or anything local.

14. This poses a big problem for local innovators. They are not likely to get the funds they need for their proof of concept even. And they would find difficulty

getting those in charge of the funds to understand their ideas and therefore to make funds available.

15. Malaysian civil service officers are now familiar with returns on investments in business. They expect every dollar they allocate for innovative research to yield the same return on schedule. They appear to be very suspicious of researchers and innovators, especially with regard to money. If there is the slightest suspicions than the whole project would be called off.

16. For as long as there is this mindset, inventors and innovators are not likely to make any progress. They will not be able to come up with any new ideas. Certainly they will not be able to experiment and test the initial products.

17. What those in charge of research funds need to understand is that research is not business, with a certain percentage of profits guaranteed in a fixed period. Research takes time, a lot of time. Research cost money. And of course sometimes research fails completely.

18. Those making decisions on financing research must have some rudimentary understanding of the subject. If they don't they should ask people who do. And they must accept failure rates of as much as 90% as normal.

19. In pharmaceuticals for example it is not uncommon to study thoroughly and in detail a hundred or more chemical compounds before one is found that is promising. Then there would be time consuming tests and trials on animals and men. The cost for these would be prohibitive but when gold is struck the payback would be simply enormous.

20. Frequently several laboratories would be doing the same line of research. The pressure to speed up is tremendous. Once a pattern is registered as Intellectual Property, it becomes difficult for late-comers to register their original and independently developed products.

21. One of the more positive aspects of the Information Age is that we, the small developing countries are able to enter into the field at the same time as the leaders which we could not when the Industrial Age began. We may not have the research and development capacities as the old developed countries have but sometimes the cost of research and development, the cost of software development for example can be very low. Indeed our lower cost of living and therefore our wages make us the preferred location for certain kinds of research and development.

22. Malaysia has become the third biggest location for back-office processing. Today much of the office work need no longer be where the business is done. It is possible through modern telephony to process applications and data thousands of miles away.

23. Malaysia has a remarkable advantage here. The three ethnic groups can handle three different language groups, Malay, Chinese and Indian, with several dialects thrown in. At the same time Malaysians can handle English as spoken anywhere in the world. China and India have between them one-third of the world's population. And they are developing fast. Their calls and applications for whatever would be huge.

24. Leadership in creating an innovative and competitive country requires Government initiative. The Government must set the tone by showing interest in the needs of a society wishing to lead and to compete. More then incentives for the private sector, there must be a business-friendly atmosphere. Even if the FDI funds are not so big and much of them would go elsewhere, the friendly attitude of the Government can offset the attractions offered by countries with lower-cost labour and potentially larger market.

25. But it is about time that Malaysian investors and entrepreneurs themselves are looked upon as friends and co-players by the Government in the bid for leadership in an innovative and competitive world.

26. Malaysian entrepreneurs have now developed quite sophisticated industrial know how and capacities. They are not yet big enough to take on the multi-nationals. But with some help from the Government, especially through Research and Development grants, they can provide the alternative to the FDI. Once they feel more confident they will be like the two Northeast Asian countries, where much of the R & D and investment in new technologies come from domestic sources.

27. If we look at the countries with the most number of new products resulting from Research and Development we will find that these are hospitable countries. They have accepted a lot of foreigners into their countries and have given them opportunities to work and to maximise the application of their particular skills.

28. Albert Einstein was a foreigner to the US and so were many of the scientists who became citizens of the US and contributed to American cutting edge technology. Today Silicon Valley is full of Pakistanis, Indians, Iranians, Chinese and even Arabs. These are the people doing research in ICT, in the design of chips and software, in the innovative products. A number of them working in universities have won Nobel Prizes.

29. These countries are big, with populations several times that of Malaysia. Yet they welcome foreign scientists and trust them to do sensitive research work. These refugees from Europe and other continents are well-treated and easily gain citizenship of the country.

30. Malaysia is a multi-racial country. In the future all countries will be multi-racial. For Malaysia to accept a few foreign scientists will not change the composition of the population of this country much. Of course we should treat them well.

31. It is obvious we are short of scientists. With what we have it may not be possible for us to compete in innovation, much less achieve leadership. But if we are prepared to accept foreign scientists, and we treat them well, providing them with good research facilities, these foreigners can contribute to our capacities in research and development and probably help us achieve leadership in some fields.

32. This is not about asking foreigners to take over what is rightfully ours. This is about research. If we don't take them, others will.

33. In time we will produce enough of our own scientists with the mindset suitable for research and development. And perhaps those in charge of funds will understand that doing research and development is not like doing business. There can be no projection on returns on investments. Much of the money will probably go down the drain. But if we strike gold then we will really make it.