TRANSFORMATIONS:
ASIA PACIFIC STATES IN THE INTERNET ECONOMY
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I am delighted to be here and grateful to SAP for the invitation.

This is one of the great companies of the information age; its software has been at the centre of the enormous increase in productivity that has sustained this last period of global economic growth. And now it is at the centre of e-commerce as it begins to transform the international economy.

Most of the speeches and panels at this conference will focus on the needs of your businesses. I suppose my job is to put all this discussion into some sort of broader context, so you can think about the implications of the information age and what they mean for the environment in which you and your companies will be working. Because in a globalised world if we are blind to the context in which we are operating, none of us would be operating for very long.

So today I want to bring together two of my interests in life – politics and information - and look at what happens when they meet. Not just at the national level but internationally, and especially for Asia.

As all economists and businesspeople know, once the value of a commodity changes, many other things follow. And the most important impact of the information revolution has been to change the value of information.

We are all familiar with the old saying that information is power. But that reality is changing fast. Thanks to the internet and mobile communications, information swirls around us in great clouds. Digital technology does two things: it disseminates information more widely than ever before and speeds its distribution by orders of magnitude. In other words, information is more accessible and it arrives faster. Information is no longer a scarce commodity. In this sort of environment, the power is not the information itself, but the ability to collate, analyse and assess it.

And there's no lack of hype surrounding the information revolution. Browse through any airport bookshop in Asia and you will see what I mean. But in this case I think the hype is mostly deserved. I do think we are living through one of the transforming eras of modern times. Like the railway engineers of a century and a half ago, software engineers are constructing a communications network which is revolutionising the distribution of goods and speeding connections between people.

Any technological revolution like the one we are going through has unintended consequences. These are often completely unforeseen by those who were there at the beginning. And such consequences are political as well as economic and technological. We are still at an early stage of this revolution, somewhere around the point we reached with the industrial revolution in the middle of the nineteenth century. And like the industrial revolution, the information revolution will change the nature and distribution of power. Who has it and where it is centred. In short, the centre of gravity of politics.

In individual countries, it will transform social structures. What we are seeing day by day, wherever we come from, is the remaking of almost all markets - goods, services, finance, even labour markets. New sorts of skills are needed for the new economy and different groups of people are being rewarded as a result. The coming distribution of wealth will be one of our greatest challenges.

The old divide we know so well between youth and experience doesn't apply any more, because the people with the most experience of the new world are the young. I'm not just talking about their familiarity with the technology, but the fact that they are culturally at home with new ways of thinking. For what the information age and its abacus, the computer, has spawned is a new way of thinking. A new milieu that will produce and spin off all sorts of creative ideas about the world and how it will be fashioned and operate. The young have internalised the social changes the revolution is bringing with it.

Primacy in the new age, unlike the old, will not belong to capital. With the boom in savings, capital is becoming less exclusive; almost a commodity. Knowledge workers in the new industries will be in shorter supply than capital will be. We have already seen how in one of the oldest of the information industries – movies – the top directors and actors are becoming in effect shareholders in their individual enterprises. Tom Cruise is on $20 million a picture. James Cameron, the director of Titanic could name his price. That is a pattern of participation we will see much more widely in other industries in future.

And outside our own societies, the information revolution will change power relationships "between nations". Just as the industrial revolution turned Germany and the United States into global powers a century and a half ago, eclipsing Britain. Some countries will win and others will lose.

But which ones will they be? It's a question all governments must now address. And it is harder to answer than it used to be because the old measures of international power, things like abundant land and physical resources "matter less" in the new environment, while knowledge in all its forms, and all its manifestations, matters much more.

So although this means that the game is open to more players, it is also a much tougher game. Tougher because we can be certain that competitiveness will grow inordinately as the networked world develops.

McKinseys recently made a stab at the size of what they termed the 'globalised market'. That part of the world economy which is subject to true global competition. They measured it at about $6 trillion or 20% of global GDP. In the next thirty years they thought it would rise to about 80% of GDP – worth $73 trillion.

E-commerce will be at the core of this globalised market. Thanks to the internet, the world will be, to a greater extent than we ever previously imagined, a single market and every company in the world will have the potential to be transnational.

E-commerce alters the way we have to think about business. By making direct relationships between producers and consumers possible in a way we haven't experienced since the first appearance of the mass market, the digital economy is squeezing out the middleman. It changes our ideas about scale, advertising, distribution and marketing. Intellectual property rights will become even more important. Even brands, a signature or guarantee for some sort of standard or style may come under pressure from the custom producers connected directly to consumers.

E-commerce also alters the way we will think about government. Because e-commerce has enormous implications for competitiveness, for trade policy and for government revenues, by eroding the taxation base which supports the provision of services.

It will also make national branding important. Take Australia's case. Our economy has traditionally been built on our great comparative advantages in commodities like wheat, wool, iron ore and coal. These, by the way, will continue to be vital to the next phase of Asian growth. But decisions about where to buy steaming coal are easy ones to make – they are determined by price, quality and assurance and proximity of supply.

But as we become a globalised services economy, the purchasing decisions become far more complicated. Decisions on whether to educate your children in Australia or Britain, to holiday on the Gold Coast rather than Hawaii, to put your regional headquarters in Australia rather than Singapore, or to seek creative support for a web-site from Sydney rather than Vancouver involve a much more complex range of decisions. They are often as much emotional as rational.

That is why the way countries present themselves in the world, and the image others have of them, will matter so much. I might say in passing that it is just one of the reasons why Australians should vote in favour of Australia becoming a Republic next Saturday.

With the information revolution we have entered a new age where nobody can hide.

Asia has learned that lesson brutally over the past couple of years.

Early on in the economic crisis, Alan Greenspan pointed out the way new technology appeared to have facilitated the transmission of financial disturbances far more effectively than ever before. Vicious cycles of ever-rising and reinforcing fears had

become contagious and were emerging more often. Greenspan saw the root of the sharp exchange rate changes in Asia as "a process which is neither measured nor rational, one based on a visceral, engulfing fear." And once such cycles are triggered, he said, "damage control is difficult. Once the web of confidence which supports the financial system is breached, it is difficult to restore quickly."

In part, that is because of the speed and ease with which the new technology lets money flow. $1.5 trillion of currency is traded around the world every day – yet less than 5 per cent of that amount is needed to cover trade in goods and services.

I have been consistently optimistic about the speed with which Asia will recover from the crisis and the new strength its economies will have when it does so. I remain a great optimist about the region. The IMF and World Bank reforms were administered too bluntly, especially in Indonesia, but they are greatly strengthening these economies as growth returns and making them more competitive.

But a fundamental question Asian societies now have to ask themselves is: competitive at what?

Asia's economic crisis had many causes. But a central factor was the global capital spending boom of the mid-nineties and the excess productive capacity it produced. As capital spending surged, capacity utilisation rates began to fall. And because Asia produced the low-tech products like steel, ships, cars and commodities that were the part of world output most sensitive to economic cycles, it happened most sharply here.

Obviously these manufactured goods were an important part of the initial growth spurt of the Asian miracle. They will continue to be important for the region's economies. But present world production capacity exceeds expected consumption by at least a third, and the downward pressures on prices are likely to continue. And compared with the first stage of Asia's growth spurt, competition will be more intense. Many more parts of the world, like Latin America and Eastern Europe, are involved in global commerce.

In other words, Asia won't be able to rely for the growth it needs on the resumption of a bottomless stream of manufactured exports to the United States. It needs to embed itself in the new tech, as well as the old.

The opportunities for it to do so are enormous. Asia already has many of the attributes for success in a digital world. Successful economies in future will be constructed around good education systems, effective research and development, and sound investment in infrastructure. Most Asian countries know this and the best are acting on it. And the region's high savings and young demographics will continue to help it.

In parts of Asia like Singapore, Malaysia, the Philippines and India the internet's lingua franca, English, is widely spoken. India has shown that the potential to out-source back office functions is changing the global distribution of jobs as well. Already India's software exports are expected to top $4 billion. And countries like China have the

capacity to leapfrog generations of technology, moving straight into fibre optics, wireless communications, software and e-commerce.

The Boston Consulting Group has estimated that 1400 Asian websites outside Japan already deal with e-commerce, and that current annual sales are worth $3 billion. But that is only the beginning. 66 million Asians are now on the internet. 375 million will be there in five years' time.

These are all important beginnings, but what will underpin growth in the information age is the capacity of countries to develop a milieu which sustains creativity. That's what is important. Provided the creativity is there, and the venture capital is there to fund it, new industries will arise from this flux. Many of them will have naught or little to do with information itself.

A related and important point is this. Power relativities will change in favour of those societies that can handle the full dimensions of information. If Asian economies are to succeed beyond the stage of mass manufacturing, they will need agile and flexible economies. Ones that can understand foreign markets and learn rapidly from them. Ones which can plug into the global community in something like the way companies are already doing.

The ease with which capital, knowledge and specialised labour can be moved around the world has facilitated the creation of what the American political scientist Richard Rosecrance called 'virtual states'. States which, like their corporate counterparts, don't seek to combine all economic functions, but which rely on mobile and related factors of production. States that do not themselves command resources or export directly in order to prosper but which can use technical and research services, product design, marketing, investment and financing to create their own economic sphere and stimulate growth. Singapore is one country which has understood this very well. In future very few countries will have all the components 'in house', necessary, for a technologically advanced society. (It is worth noting, however, that two of the ones which potentially do - China and India – are in Asia.)

I believe it will be impossible to reach the highest levels of economic success without open societies; that is, communities in which information flows freely both between its members and from outside it. Societies which have rapid and effective transmission lines conveying views and reactions to the leadership. I don't believe there is one model of an open society, and it doesn't have to be a western model. But it does have to involve a questioning and involving education system, the easy movement of people and the rapid transmission of ideas. In the information age it is going to be a struggle for countries to be truly innovative and clever. Those societies which keep a clamp on expression and communication will also, to their detriment, clamp creativity.

One of the keys to American success has been its openness to others. It's like a magnet for talented knowledge workers the world over. I was reading in *The Economist* the other day that almost 30 per cent of the 40,000 companies started in Silicon Valley

between 1990 and 1996 were founded by Chinese or Indians. That says a lot about the United States, and it says a lot about the potential for information industries in China and India. Certainly Taiwan is making big efforts to attract people from the United States back to Taiwan. And these issues are well understood there.

But the force of America's attractiveness is not simply the financial rewards or the size of its market alone; it is its cultural openness to all comers. The most successful countries in the information age will be those at one with diversity.

It will mean that governments will have to learn to deal with the constraints which the new technology places on them. The pressures for transparency in every area of life will only grow. We are seeing this everywhere, from the new demands for corporate and governmental disclosure in Indonesia to the handling of Olympic ticketing in Australia.

Governments are having to relate to their people in new ways. In almost every recent political development in Asia from East Timor to the problems of Falun Gong in China we have seen how important the role of mobile communications and the internet has been. It is literally impossible for governments to control information and to run politics in the same way as before. People anywhere have the capacity to gather and make connections at the edges. To form communities in cyberspace. Within individual societies, power is shifting in other ways. Any revolution delivers winners and losers, and just as craftsmen lost out of the industrial revolution, so there are losers here; people whose jobs have disappeared or whose lifestyles have become unsustainable or who have lost out to international competitors in the globalisation stakes. In Australia this lay behind some of the appeal of Pauline Hanson. A wistfulness for an epoch past.

I don't think there is a government in the world that hasn't proclaimed itself an education government in recent years. And it is quite true that education must be at the core of any government's response to the challenge of the new age. But a new sort of education and literacy is required. We may need a different kind of education system to cope with it. One which not only makes better use of the new technology but which understands that kids brought up with computers and the internet learn in new ways.

Peter Drucker recently wrote that 'Fifty years hence we may well conclude that there was no "crisis of education" in the closing years of the 20th century – there was only a growing incongruence between the way late twentieth century schools taught and the way late 20th century children learned. Something similar happened in the 16th century university, 100 years after the invention of the printing press and moveable type.

Let me at this point, inject a few notes about the global environment. About the ambient environment in which the new age will operate.

Although we are in a new age, not everything has changed. Computers and information technology have not ended violence in the international system. In some ways they have made it more possible.

At one level, the impact is obvious. The extraordinary capabilities of stand-off systems, smart weapons and comprehensive intelligence have now been demonstrated in actions ranging from the Gulf War to Yugoslavia. Military platforms have become less relevant than the computer software which goes on them.

In relative terms, military power will be more affordable and attainable for more countries. It will be easier for countries which formerly lacked the technical and professional expertise to operate and maintain high capability systems to do so. That means military capabilities will continue to grow, including in Asia.

The ability to gain or deny access to critical information has always been important in military strategy, but never more so than now. The present challenge is to get the intelligence in useable form down to soldiers on the battlefield as well as to the Generals. For that, you need different sorts of soldiers too, with different sorts of training and different mindsets.

Perhaps too much has been made about 'information warfare' – computer wars - but there is no doubt that attacks on computer systems, including with viruses, or efforts to disable the military or civilian communications networks of adversaries, are an important new area of defence concern. We have seen the use of cyber attacks and the threat of them in Asia, including between Chinese and Taiwanese websites. One of the East Timorese leaders threatened to use computer viruses against the Indonesian banking system.

The Cold War was a period of great danger but that danger was largely controlled. Since it ended, we have been making the unwarranted assumption that violence in the world will continue to managed as it was during the Cold War - at the centre at any rate - with careful strategic planners and reliable command and control systems and, on the former Soviet side, a wary and conservative leadership confident of its own power at home and of its ability to wreak havoc if it wished.

Our faith that violent conflict will continue to be managed as it was in the Cold War is dangerously misplaced. Our dreams can still be derailed by international events. And if we are not vigilant they will be.

At the end of the Cold War we did not try to reform our principal global institutions to reflect the new world. As a result they still mirror the world as it existed at the end of the Second World War, a world half a century ago. The United Nations Security Council consists of the victors of that war, and its membership is co-terminous with the possession of nuclear weapons.

Over the past decades we have spoken constantly about economic globalisation and the need to bring developing countries more actively into the world economy, but wholesale reform of the international financial institutions like the IMF and the World Bank has been put off and China has still not made it into the World Trade Organisation. The

developing countries have not been given roles that reflect their growing importance in the world.

India, which may become the most populous country in the world early next century, remains marginalised from international forums and international debate.

The principal western security alliance, NATO, extended its reach by admitting new members up to the borders of the old Soviet Union, thereby defining Russia out of Europe. Despite its current irrelevance to the Asia Pacific economy, Russia was given membership of APEC to compensate. In this way we ended up weakening institutional frameworks on both sides of the Eurasian landmass.

The Americans and their European allies bombed Serbia unilaterally, because they knew they could not get the green light for what they wanted out of the United Nations. This undercut the U.N.'s legitimacy in the eyes of China and Russia.

Above all, we failed to take the opportunity to make a serious attempt to get rid of nuclear weapons. New technology has given weaponry an accuracy which substitutes precision for brute force and with far fewer risks to civilians than those from nuclear weapons. But while nuclear weapons remain in international arsenals, their eventual proliferation is inevitable. This has been one of the great missed opportunities of our time.

These issues are still live and for all of us. The strategic environment will always matter. As the world knits commercially and economically we also need it to be shaped strategically.

One of the great unanswered political questions of the information revolution so far is whether power will be diffused or whether the immense capacity that technology offers to collate and coordinate will strengthen dominant interests. Will we experience the digital equivalent of the robber baron capitalism of the late nineteenth century? Will the large just get larger?

My guess, and it is only a guess, is that the end result will not be homogenisation and centralisation, but a boost for diversity. But the danger of the alternative is so strong that we ought to be keeping an eye on it.

This brings me to a final point about politics in the internet economy. Someone needs to speak up in favour of states as an essential part of world governance, and it might as well be me. States and statecraft seem to be having a bad press at the moment. The view of some in the information industry is that they have become irrelevant. "I don't believe in countries anymore," one Australian IT executive proclaimed a year or so ago. From every Hollywood thriller, on the other hand, comes the view that states are either incompetent or more often actively conspiring against their people.

I think states are facing enormous challenges – squeezed by powerful global economic forces from the top, and more empowered citizenry below. The answer is not more powerful states in the old-fashioned sense of unresponsive and centralized government. But I certainly think we need healthy, confident, states with strong institutions which link in turn into robust and representative international structures.

The winners and losers from the information revolutions are not yet clear, and their identity hasn't been pre-determined. We all have choices to make.

The technology can create more democratic and equitable societies or societies in which injustice is intensified by unequal access to knowledge.

It can help bridge the gulf between the developed and the developing world or it can make the gulf wider.

It can strengthen our national culture and those of other countries, or by the flood of homogenised 'global' product, it can fatally weaken it.

In other words, the technology is only a means to an end. We still have to make important decisions about what those ends should be - and those, inevitably, will be political decisions as much as technological ones.