Impacts of Trends in Information Technology

Speakers Notes

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1 Trends in IT

1.1 Slide 1 – Opening Slide

Mr / Madam Chairman, Ladies and Gentlemen, Good morning/ good evening. We are living in one of the most exciting times for humanity. We are at a defining point for humanity. For the first time in human history we have the resources, the expertise and the technology to totally transform society and it can all happen in one lifetime.

You, our future managers and leaders of society, will need to address the legacies we have left you and you will face new challenges around the adoption and use of IT. Today / tonight I want to talk to you about some of these.

Now Ladies and Gentlemen, please feel free to ask questions and comment as we go through. There will be time for questions at the end as well.

1.2 Slide 2 – Global Changes of IT

Ladies and Gentlemen: You do not need a crystal ball to see that IT is set to totally transform society. All you need to do is to take a look around you and see what is already happening. As future entrepreneurs, managers and leaders your challenge is to harness this change.

Back in the days of the agricultural revolution, it took us over 600 years to move from an agricultural based society to the beginnings of an industrial based society. We saw, the church become the major landholder and the dominant political power but as we industrialised, the church became a minor player. The arrival of the handgun totally changed political dynamics through our ability to persecute violence.

The days of the feudal landlord and the era of chivalry and the knights in shining armour have passed into history. The church has been replaced by the nation state as the major political force.

In the 300 years that we have been an industrial society, we have seen the rise and decline of trade unions. We gained economies of scale through the centralisation of industrial structures but these large structures became unresponsive and vulnerable to boycotts. The use of the manufacturing assembly line allowed semi-skilled people to acquire wealth and power.

As we leave the industrial age and head into the information age, we see the rise of the corporation as the major political force. High wealth individuals are again becoming increasingly significant and governments are becoming over bureaucratic and out of touch.

Ladies and Gentlemen: you are coming of age in one of the most exciting times for humanity. We are going to see huge societal changes but instead of them taking many centuries to occur, they will happen in one lifetime!

Amongst other changes, we will see are:

1.2.1 Change In Political Power

First, major changes in political power. We are already seeing the rise of the corporation in politics and in setting the national and global agenda. With their own security forces, global reach and wealth; the power of the corporation is set to rise further but whilst the power and influence of corporations is increasing, the large centrally controlled unresponsive monolith of a corporation is in decline, look at Ford and GM in the USA.

Like the corporations, governments that become increasingly bureaucratic and fail to deliver service will also struggle to survive. As governments lose their monopoly on the control of wealth and the persecution of violence, governments will resist societal change and will do everything they can to hold on to power base and maintain the status quo.

If all the councils in Sydney joined together to form Sydney Pty. Ltd. they would undoubtedly be one of the most powerful political forces in the country and could do a lot of good.

Ladies and Gentlemen: Changes like this shall occur in your lifetime. Your challenge is how you harness the change.

1.2.2 Wealth Will No Longer Be Tied To Geography

Next – wealth will no longer be tied to geography. Previously, wealth was tied to countries. To be wealthy you had to live in North America and Western Europe. Now you can operate most businesses without relation to geography and you can transfer wealth around the globe instantaneously. If you want to, you can quickly move your business around the world and many businesses now operate globally.

You can domicile in one country, have your wealth in a tax haven and your business in a third country.

All of this is been driven by IT and is changing the political dynamic.

1.2.3 The Decline Of The Semi-Skilled Worker

Next - How do we manage the future of the semi-skilled worker? In the industrial age, machines allowed semi-skilled workers to perform more complex tasks and allowed them to accumulate wealth. As technology replaces them, their ability to accumulate wealth will be challenged. They will become disenfranchised and will fight their loss of wealth and power.

Your challenge as future managers is how do you manage this?

1.2.4 Wealthy Individual

Individuals can protect their funds and move their funds around the world with minimal government intervention. The changes in technology, the greater encryption and the faster transfers gives high wealth individuals power over governments and strong influence in the political dynamic.

Ladies and Gentlemen: It is NOT the IT per se that is the change but it is how the changes are manifested. The major change is through our ability to persecute violence. Whether you like it or not, war and violence has been mans greatest pass time. Look at history and the evolution of the handgun; society is driven by our responses to violence.

Governments basically have a monopoly on the ability to persecute violence. We all pay taxes to governments and in return, governments protect us from violence – armies and police forces. As governments loose this monopoly, as corporations create standing defence forces, as technology allows us to protect and hide wealth, the violence dynamic will change and it is this that shall drive society.

In essence, hang on to your i-pod, you ain't seen nothing yet.

1.3 Slide 3 – Hollywood Film Model

The entire model of business is changing. There are currently two major and seemingly unstoppable forces driving business, that of globalisation and that of IT. These two forces are presently acting in unison to drive major societal and business change.

At the end of the 19th century, the use of the assembly line transformed manufacturing. As the assembly line became more sophisticated, fewer semi-skilled workers were required. Many people were forced to re-skill and for those that remained, their role changed from production to value-added problem solving when the machines went wrong.

We have seen similar trends in agriculture and mining.

Knowledge workers are now going through this same change. As more and more routine operations are now done by computers, the role of the knowledge worker changes, e.g. check-in attendants process large groups but individuals self-help themselves. Again, we see routine production skills replaced by problem solving skills.

Concurrent to the changes in routine processing, is the availability of overseas resources to compete for the more advanced but routine knowledge worker operations.

To remain competitive, we must skill up. We need highly skilled, highly motivated problem solvers doing high-value business optimisation and business growth activities. We are moving from the routine to working in collaborative teams on a project-by-project basis on business development and business optimisation activities.

Ladies and Gentlemen: These trends are driving business towards the Hollywood film model of operation. In Hollywood, core competencies such as research, strategy, design and problem resolution are kept in-house and teams of the best people are assembled to deliver the movie. After completion of the movie, the teams move on and may never work with the same people again.

More and more, this is how we will work in the future. Just as lighting crews work on any movie, network design crews design networks for any business.

You will have 4 to 5 career changes, NOT jobs but career changes.

We may not like working in this way but that's the trend. Now, If only management and HR could keep up with us!

1.4 Slide 4 – Changing Job Role

This is likely to impact upon your careers as follows:

- Until we have fully automated robots, and perhaps even then, there will always be a demand for low value manual labour, e.g. cleaning. Who does this, where they live, how they will travel and what value, we as society places on them, are the questions?
- There will be a continued demand for skilled trades people. Not only will they have to put up a stud-wall but they will need to be able to order and invoice from their hand-held device.
- The adoption of IT eliminates the need for routine processing. Just as robots transformed the manufacturing assembly line, it is IT that is now transforming the knowledge worker assembly line. ATMs dispense cash, we no longer need assistants for routine flight check-ins, we pay bills and query accounts on-line, accounts can be automatically reconciliated etc. All of these are transforming the role of the knowledge worker.
- As we use IT, the role changes to high-end value adding, e.g. complex check-in at the airport still requires people and bank employees change from tellers to financial advisers.
- We require not only a more educated workforce but a change in skill set. The increasing demand is for pro-active problem solvers and not routine form fillers. Meeting this demand and the required cultural change is a major challenge faced by educators, society and business.

- Not only is there a change in skill set as you automate, but the demand for staff initially decreases. As business grows, more staff are hired but with a higher value skill set and a different attitude.

To be competitive, we need a more educated and motivated work force that is highly adaptive. We need people who expect technology, people who will multi-task and who are highly organised and excellent at problem solving.

As future leaders of our society, these are the types of challenges you will face.

1.5 Slide 5 – Evolving Internet

The Internet is evolving rapidly and has become an every day business activity. The major use of the Internet is probably still e-mail, but this is set to change with phone calls and TV.

If we look at the business use of the Internet, we have gone through the brochureware phase. Though this is still the dominant form of Web site, it has been extended through the use of transaction processing.

There is still much to be done with transaction processing and in changing the role of knowledge workers. Advances are not technologically constrained but are held back by business integration and the lack of

information management and work-flow. Only if you have existing proven business processes, can you bring them to the Internet and optimise them.

The next great use of the Internet is collaboration. With increasing use of e-mail, integrated messaging and phone calls over the Internet, the business dynamic will change. Global collaboration becomes much easier and the need for lower telecommunication costs will drive much greater collaboration over the Internet.

The new Microsoft alternative to an I-pod and connected entertainment is an example of this.

As occurs with many technologies, the retail user currently leads business in the use of the Internet for collaboration. Manufacturers and telcos are gearing up for collaboration now, except in Australia where Telstra is holding us back[1].

The forward thinking companies are looking beyond collaboration to real time decision making. This is the next big opportunity and will really drive societal change. Real time decision making will empower us to an unprecedented extent.

I will say more on this later but real time decision making is about having the information we need delivered to us at the right time in the right way,

[1] A fine opportunity for nay lawyers in the audience.

i.e. any device anywhere anytime. Real time decision making provides us with what we need to make decisions, so that we can spend our time doing instead of searching for information.

1.6 Slide 6 – Differential Adoption of Technology

We often find that the adoption of IT in the workplace lags that at home. We take in i-pods and PDAs to use at work and then struggle to have them supported because they are not part of the Standard Operating Environment.

Many of us are on a higher version of windows at home than at work.

We also find that there are generational differences in the use of technology.

- Dinosaurs like me have technology. We tend to be slower in adopting the latest of everything and we have a tendency to want to plan everything out more.
- The X-generation use technology. They have a much greater adoption of technology and are easier to re-skill when it comes to technology. Have a tendency to be self-focused and are caught a little between the baby boomers and the Y-generation.
- Conversely, the Y-generation expect technology and have it fully integrated into their lives. They show a rapid adoption of technology,

operate on a collaborative basis and use an evolutionary approach to activities.

As managers and future leaders, you will need to manage this differential use of technology. You will need to work in different ways to get the most out of the people.

1.7 Slide 7 – IT Legacy

Moving on from the previous theme, I want to talk about the legacy of IT that we deal with in the workplace.

Back in the good old days of filing systems, we had consolidated storage of files so that we could share access. We indexed them and we had people dedicated to filing. Access was slow and limited and searching was person dependent.

As mainframes came into being we had consolidated data storage, work-flow was integrated and content was separated from presentation and mechanism of delivery. The down side of mainframes were their cost, their limited computing power, the poor interface (dumb terminal) and the “gods in white coats” syndrome.

The PC was a liberation for business people. PCs were just appearing on peoples’ desks. With the PC we had distributed computing power, an attractive interface, we had flexibility and above all, we could bypass the

“gods in white coats”. In the rush to implement the PC we lost work-flow and consolidated data storage and introduced coordination problems. As the power of the PC became more and more powerful, we put more and more complicated software on them and stored more and more data on them. This is the legacy that we deal with today.

The Internet has empowered us to unprecedented levels. It provides a low cost of entry to business and allows global access but as we rapidly adopted the Internet, the bad trends from the PC were rolled over. The Internet is characterised by poor business integration, lack of work-flow and we are in information overload.

Moving forward, the PC is in decline. The mobile device will be the major tool for accessing the Internet. The trend is to the virtual mainframe with semi-smart end devices accessing everything through the Internet. The end device will become less complicated than the current PC and both data and applications will be accessed from consolidated servers, e.g. Google. This will keep the benefits of distributed computing power with all the advantages of consolidated data storage and reduced coordination problems.

One other trend of note; is the $100 PC. For those of you who have not heard of it, the Massachusetts Institute of Technology wants a wind up PC with Internet access available to third world countries for $100. The $100 PC will allow phone calls over the Internet and will access data and applications via the Internet. Whether or not it is achieved at $100 is not the issue; it is the ramifications of this project that are important. These include:

- First, there is likely to be a strong uptake of the $100 computer in both the developed and developing countries.
- Secondly, it will result in us having many computers around the house. The ability to buy cheap drills from Bunnings Warehouse means that we now have three or four in the house instead of just one in the garage.
- Third, it will drive the virtual mainframe with both data and applications accessed from servers.

These changes are not only a challenge to Microsoft, but to us all. The standardised operating system for the end device is up for grabs. The next generation of killer applications is waiting development. We need strategic approaches and initiatives for IT to meet the demands of the 21st century. Our solution designers need to work with the virtual mainframe concept and integrate the mobility of the end device. We need business driven solutions

that accommodate these trends. Those of us who are far sighted to adopt these trends gain the advantage.

2 Role of IT in Business

2.1 Slide 8 – Introductory Slide

Ladies and Gentlemen: I now want to turn my attention to the adoption of IT by business.

2.2 Slide 9 – Necessary Evil

Make no mistake about this: IT has provided us with staggering gains in performance and productivity. IT has substantially lowered costs and significantly improved customer service.

As business, as a society and as individuals, we have all benefited from IT. So much so, that for many of us, IT is now an essential component of our lives.

IT is now so ubiquitous that we only focus on IT when it does not work. A lot of highly skilled and highly motivated people work very hard in IT to give us all the benefits we enjoy.

Now, when the PC first came out, it just appeared on the desk in the office. At break neck speed we adopted the ATM, the VCR and the DVD player. We demand and take medical advances in IT for granted. We take PDAs into work to make us more efficient and we now use our i-pods for all sorts of things.

Our personal adoption of IT leads that by business.

It is in business IT, particularly in the area of information management and work-flow, where the brand of “Failed Implementations, Money Wasted, Poor Service and Disastrous Out-sourcing” is the face of IT.

Yes, it is better now than it was 5-years ago but still, something like 70% of all IT projects fail to deliver the required outcomes. Something like 80% of CEOs for fortune 500 companies see IT as a necessary evil and believe IT people have nothing to contribute to business development. We still appear to be spending more and more on IT for less and less gain.

We in the business have become disenfranchised from IT. We are becoming increasingly frustrated, if not cynical with IT. We have been sold the panacea and the silver bullet and we have been burnt by IT. IT people lack credibility.

Indeed, companies have out-sourced IT in the belief that things could not get any worse - only for them to become worse.

Now, let us be crystal clear about this. Most of the failings in IT are not the fault of IT. The actual IT, the actual hardware and the software basically works. It is the way that we have implemented, managed and operated our IT that is the issue.

Ladies and Gentlemen: You will not only experience this attitude in the workplace but as managers and business leaders, you will need to address this problem.

2.3 Slide 10 – Role of IT in Shareholder Value

Six major factors impact upon shareholder value: External, People, Process, Strategy, IT and Data.

- External – Not much we can really do there.
- People - Our performance is geared to the operation of our IT.
- Process - By definition, IT is integral to our processes.
- Strategy - Business strategy drives IT strategy but we need to understand what IT can do for us. IT strategy cannot be left in the hands of IT and it cannot be left in the hands of an out-sourcer.
- IT - We have the IT operation itself, which needs to be a customer service driven operation that guarantees service delivery.
- Data - Our data are now effectively IT dependent.

Ladies and Gentlemen: IT plays a dominant role in returning shareholder value. IT is not an adjunct to business. IT is business.

As managers and business leaders you drive this change for the betterment of all.

2.4 Slide 11 – IT Value Cycle

Whether it is Tulips, Kiwi fruit, the housing market or the Internet, we tend to go through a common cycle in adopting to new markets. Along the x-axis is time and the y-axis is the dollar value of spend.

- In the early days, it takes a while for people to understand the technology, so only a few early adopters use it. There is little spend and little business return, e.g. in 1996 VOIP was a card fitted into the PC with complex software and few users. Now it is a plug and play feature in a handset from Harvey Normans.
- As the benefits are seen, there is a rapid democratisation of the technology. This is characterised by an uptake by most people. Democratisation of an industry is where the opportunity to build multi-national organisations from the ground up exists, e.g. Cisco for routers, Compaq for PCs or Charles Schwab for share trading. With democratisation, major investments are seen for major gains in business productivity, e.g. the PC and the Internet. The hype starts and it becomes a must have.
- We then enter the unstable part of the cycle, where people spend silly amounts on stupid projects. Expectations and promises are not realised.

People talk about the end of the boom but it keeps going because of momentum and the vested interests have too much to loose.

- When there is a burst, sanity returns, but it is often characterised by an over reaction. Budgets are slashed, the business becomes very sceptical and we get less for the money spent.
- As we move into a consolidation and maintenance phase, the technology matures and things settle down to become utility infrstructure.

2.5 Slide 12 – IT-Business Integration

4-phases of business integration for IT can be seen.

- Early Development – We see established operations challenged and the use of IT being resolved. This is really the exploration phase.
- Adoption – Characterised by ad-hoc point solutions in business and an increasing diversification of product offerings as the market fragments. Market leaders emerge and categories are defined, e.g. CRM, Document Management, Billing etc.
- Integration – This is where the market matures and business starts to integrate IT into operations. We see the emergence of standards and

leading players in each segment. Much of our IT operation is around this point in the cycle as we grapple with full business integration.

- Reliance – This is about utility infrastructure, highly standardised market offerings and highly standardised business operations. Like electricity, IT is integral to the business operation and is just accepted as being there. IT is getting to this stage but this is the challenge many of us are seeking to address.

2.6 Slide 13 – Failure to Guarantee Service

We noted before that it was in business IT that the brand of failed implementations, budget blow-outs and disastrous out-sourcing was the face of IT.

If you lift the lid on an organisation this is what you often see:

> The customer approaches an organisation, often to go into a world of hold. The first customer service representative needs a Ph.D. in information management to service the customer. They often draw in co-workers to find an answer as they query disparate silos.
>
> If motivated enough, the customer will try again and probably ends up with another representative where they go through the whole process again; getting shunted from department to department and no one takes responsibility or ownership!

If you look under the lid, you will see a high cost, high risk operation that does not guarantee service delivery.

In essence, we do not know what our knowledge workers make, at what cost, in what time frame, to what quality by how many.

Ladies and Gentlemen: As our future leaders and managers this is what we bequeath you.

2.7 Slide 14 - Mumbo Jet

Knowledge workers often produce the mumbo jet instead of the jumbo jet.

Ladies and Gentlemen: Please close your eyes for a moment and imagine. I want you to contrast the highly structured manufacturing assembly line, with that of the knowledge worker.

The knowledge worker assembly line is characterised by:

- A failure to guarantee service delivery.
- Knowledge workers needing Ph.D.s in how to get information and how to use it.
- Having knowledge workers going to the parts, collecting them one at a time and creating multiple instances of parts that are not required.

Everybody, please open your eyes. Ladies and Gentlemen: as our future managers and leaders, I have every confidence that you will address this legacy.

2.8 Slide 15 – Legacy Systems

One of the integration issues in business is the use of legacy systems and their continuance long after the technology has become obsolete. The failure to understand the costs involved in replacement is one of the biggest reasons for failed projects and implementations.

On the one side you have the cost of the new system with its new features and great interface etc. On the other side are the benefits of incumbency, the cost to migrate the data, the cost of re-engineering the business rules and processing logic and the cost of business integration.

The cost to replace a system is not just the hardware and software, it is the pain to move. If IT and the business understood the pain to move factor more, then we would have less failed implementations and project over runs. SAP would be recognised as an industrial strength solution to business processing instead of the benchmark for failed implementations.

3 Knowledge Management

3.1 Slide 16 – Introductory Slide

Ladies and Gentlemen: we are at the dawn of the knowledge age.

Knowledge is the currency of life, we could not imagine society without it. Knowledge allows us to grow and to develop and knowledge is a great equaliser in society.

And yet, when you go into business, you will find information is scarce, knowledge is lacking and wisdom is wanting. You will be faced with the need to standardise your knowledge workers to lower costs and guarantee service delivery and to do this, you will need to address the knowledge management legacy.

3.2 Slide 17 – Wisdom Wanted

Let us define our terms. We live in a world of data overload. Only when you want it, you need it and you can understand it, does data become information. Just like a number in a database, a company's annual report, although well processed and nicely presented, is still data.

Information is then applied with your skills and experience to get knowledge. You then apply knowledge at the right time in the right way to get wisdom, power or profit depending upon your perspective.

Let me give you an example. You walk into your room in your hotel and you see your favourite wine and give the hall porter a tip. The hall porter created information because he needed and understood the data about your arrival at the hotel, with room number, time and your love of a given wine. The hall porter then managed the relationships between the information and used it as part of a work-flow to gain knowledge. By applying the knowledge at the right time in the right way, the hall porter got money from you.

This simple example raises key issues:

- If you are ever to achieve knowledge management, you need to address data management first.
- You need to not only manage your data but you need to manage the relationships between them as well.
- Data are explicitly tied to work-flow.

3.3 Slide 18 – Eliminating the Ph.D.

In our jobs and our lives, we should not have to care about applications, file formats, versions, locations and remembering where to find things. I just want the right information presented to me at the right time.

To make our lives easier, to optimise our business operations, we need to eliminate the information management Ph.D.

We need to single source information from database data, transactional data, spatial data and documents. We need an integrated search. We need to manage the information relationships and integrate with work-flow and we want it on any device anywhere anytime.

3.4 Slide 19 – Real Time Decision Making

Ladies and Gentlemen: Our lives are about making decisions and how we struggle to make them. We struggle because we do not have the right information, presented at the right time, in the right way.

We spend our time searching instead of doing!

What we need is real time decision making rendered to any device anywhere anytime.

Let me give you some examples:

- Foreign exchange trades – You want to know the best rate, cheapest fee, assured delivery, who to use etc. and you wan all of this delivered when and where you need it so that you can decide to do the trade.
- Travelling home – You want to know the best route, how to avoid the traffic jams, cheapest petrol, tolls etc. All displayed as you need it so that you can make a decision.

- Eating out – your favourite restaurants bid in real time, with incentives and offers, to get you to eat there. This is done through your TV set or on your mobile device.

Ladies and Gentlemen: Real time decision making is the legacy you can leave society.

3.5 Slide 20 – Elements of the Solution

3.5.1 A consolidated repository

Create virtual consolidated repositories to single source information and stop the duplication of effort. Issues with versions, formats, locations etc. are a thing of the past. We combine spatial data, database data, transactional data and documents and separate content, from presentation and mechanism of delivery. The issues of archiving, backup, recovery and version control are performed on the consolidated repository, freeing up the end user and their end-device, i.e. we form a virtual mainframe.

Forming the virtual mainframe is a multi-million dollar opportunity for the right person.

3.5.2 Information integrated with work-flow

Information relationships managed through a metadata framework (data about data). Framework includes classification schema, versioning information, role based access and security, privileges and device specific

information. In the future we will have artificial intelligence to classify information and manage information relationships.

Another multi-million dollar industry awaits you!

3.5.3 A unified knowledge search

Search will be unified across all data types and tightly integrated into work-flow. Searching will include the information relationship framework and role based access.

At best Google is trawling data in a vane attempt to create information. Google is struggling to manage and search information and the searching and managing knowledge is only just on the radar.

Contextual searching is a multi-billion dollar industry opportunity.

4 Utility Infrastructure

4.1 Slide 21 – Introductory Slide

IT is ubiquitous. We need to move away from designing software and IT solutions to the design and implementation of utility infrastructure. That's right, IT is a utility infrastructure. We need a change in mindset of both business and IT in how we design, deploy and operate our IT.

4.2 Slide 22 – Industrial Strength Utilities

For over 200 years we have designed and delivered industrial strength solutions. We guarantee service in the delivery of power, water and gas. Let's take the proven utility principles and apply them to IT:

- Redundancy – built in at many levels including operating at 60% capacity so that extra load can be absorbed, through to multiple-layers of safe guard like the guidance system in an aeroplane or a Martian probe.
- Failover – self-initiation and self-configuration is part of the solution but we also need self-healing solutions. We need multiple layers of safeguard built in so that if one fails, others will automatically kick in, i.e. control of the situation is maintained.
- Load bearing capacity – proven ability to handle the load and scale.

- Not the latest everything – uses proven solutions and technology that are known to work and have been subject to exhaustive testing.
- Kept simple – solution is clean, simple and each element does what it was designed to do. It does not try to be everything to everybody.
- Standardised and modularised – each element is standardised and can be swapped for a twin without collapsing the system.

4.3 Slide 23 – Utility Characteristics

Utility infrastructure includes the following:

- Accommodate change.
- Assume that failure will occur - like the guidance system of an aeroplane, try to ensure that the points of failure do not align.
- Achieve scalability - if it cannot be automated, it is not scalable. We need to stop spending hours developing interfaces that are tedious to use and focus on what it takes to get the job done.
- Standardisation - hardware, configurations, recovery, setups etc.
- Best of breed – solutions are made from the best of breed to provide an assembly line for the processing of jobs.

- Form an emergent behaviour – standardised components do what they do best and are brought together to form an emergent behaviour that delivers an industrial strength utility solution: the ant colony concept.
- Testing – exhaustively tested and brute force tested.

Ladies and Gentlemen: moving from IT solutions to utility infrastructure will make you stand out in the workplace.

5 Out-sourcing & Off-Shoring

5.1 Slide 24 – Introductory Slide

Ladies and Gentlemen: Out-sourcing is here. Out-sourcing is part of business and can provide us with many advantages and efficiencies, particularly in the out-sourcing of non-core competencies.

As well as the successes with out-sourcing, we have all heard of the horror stories, particularly with regards to IT out-sourcing. Whether it is the government contracts (both state and federal) or Commonwealth Bank with EDS, many of us have either had or have heard of frustrations with out-sourcers.

Now, let us be crystal clear about this. Issues and failures with IT out-sourcing are not an IT issue. They are as ever, a business management issue.

5.2 Slide 25 - Organising Out-sourcing

Let us start with first principles. IT is the assembly line for knowledge workers. As a business, we need to own and to be able to define and to operate the assembly line. Nissan, Toyota, Nokia and L.G. etc. would never consider do anything else.

Why?; Because this is their core competency and their assembly line is their core business.

- Nissan does not interrupt the operation of its assembly line by out-sourcing parts of it. Nissan ensures the integrity of its assembly line.
- Nissan does not neglect the quality of hand-off along its assembly line. Nissan goes out of its way to assure the quality of hand-off because Nissan knows that this is pivotal to product quality.
- Nissan does not abdicate its responsibility when the assembly line does not deliver. Nissan takes ownership and responsibility for it.
- Nissan does not give away strategy.
- Nissan does not surrender product creation and the ability to design its assembly line. Nissan keeps problem resolution in-house.

The same principles apply to IT!

Ladies and Gentlemen: You know that if you loose ownership you loose control. So why do we loose control of IT in out-sourcing agreements?

Why is the passing of a problem to someone who has not been commissioned to fix it, going to result in the problem being fixed? It is NOT. Just passing over non-performing IT to an out-sourcer means you loose control of non-performing IT and your costs escalate!

We need to distinguish between core and non-core competencies. Yes it maybe more effective to out-source non-core activities such as catering and cleaning for a bank but the ability to manufacture derivatives and futures trades is a core competency for a bank.

IT is the assembly line for knowledge workers and so, IT is a core competency that must be kept in-house.

We also need to know what we are out-sourcing. We need to know how the out-sourcing interrupts business operations. We need to know the quality of hand-off at points in the process, i.e. we need our standard recipes. Only when we have our standard recipes can we make an informed decision of what to out-source.

5.3 Slide 26 - Organising Out-sourcing

Many IT out-sourcing arrangements were made on the basis of cost. Therefore, we should reward out-sourcers accordingly. Just as your sales team is paid by performance, pay the out-sourcer by cost savings realised and penalise them for non-performance. If they are that good and that confident in their abilities, then this will not be an issue.

The true cost of out-sourcing needs to be taken into account. It is time to stop blaming IT and make the accountants accountable and responsible for the decisions they make. The fact that they did not understood what was being out-sourced is not an IT issue, it is a business issue.

I want you to consider the cost associated with:

- the lose / preservation of intellectual property
- the interruption of process
- provision of out of scope services – often a crippling cost in out-sourcing arrangements

Having an IT out-sourcer provide strategy, then tell you what you need, how much it will cost, deliver it, then QA the outcomes and operate it going forward is NOT good business. There is no brake in the cycle and this leads to out-sourcer dependency.

Once we loose the ability to problem solve, we are in trouble.

Once we loose the ability to take responsibility, we are in more trouble.

Once we expect someone else to fix the problem for us, we are not going to move forward. Ask any recovering alcoholic. Ask TNT about the out-sourcing of its administration to PWC.

Out-sourcer dependency is common, particularly in IT. We brake the dependency as follows:

- Take responsibility for our actions.
- Take strategy back in-house.
- Spin up new work without out-sourcers.
- Progressively skill-up in-house and take ownership.
- Trap intellectual property in-house.
- Reach the point that you no longer need the out-sourcer and brake the contract.

If you are an out-sourcer, I want you to remember one thing. Control creates alienation but the more you empower someone, the more reliant they become on you!

5.4 Slide 27 – Off-shoring Outcomes

Allied to out-sourcing is the trend of off-shoring, the moving of jobs overseas. The issue is NOT how we stop the trend but how we ride that trend and benefit from it.

Many of the traps seen in out-sourcing apply to off-shoring.

- Interrupting the knowledge worker assembly line – Similar to out-sourcing. Make sure you know what you off-shore, assure the quality of hand-off and guarantee service delivery.
- Risk – The risk needs to be managed properly and included in the cost justification, e.g. power outages. An out-break of avian bird flu is more likely to occur in India than in Australia or the USA. This means that trades could be ordered on the trading floor but no back office settlement occurs and you would need to fly bird flu kits from Sydney to India. If you out-source IT, then you will need to give bird flu kits to your out-sourcer! Just manage the risk.
- Loyalty – Similar to out-sourcer dependency is off-shorer dependency. Make sure that your offshore operation is set up as a branch office of your company and that they all of the staff have your company name tattooed on their foreheads. Their loyalty is to you and not some intermediary.
- Ownership - Loose ownership and you loose control. Avoid having the price jacked up on you and making you agree to perpetual blackmail because you no longer own nor have the expertise to fix the problem.
- Collaboration – Jobs that require extensive collaboration and interaction, e.g. requirements gathering, selling and contract negotiation need to

take place at source. With off-shoring, you need to assess the extent of interaction required and the cost of poor communication.

Ladies and Gentlemen: Off-shoring is inevitable. Your challenge is th manage it smartly.

6 Moving Forward

6.1 Slide 28 – Coming of Age

Ladies and Gentlemen: This talk is about you: our future managers and leaders.

You are coming of age in one of the most exciting times for humanity. You are in a time of unprecedented opportunity. For once in the history of humanity, we have the resources, the expertise and the technology to transform society for the betterment of all. Wealth is no longer tied to geography, poverty need no longer exist and there is access to knowledge for all.

Ladies and Gentlemen: What do you want to do with it?

6.2 Slide 29 - Questions

Ladies and Gentlemen: Questions please.