

4.0

IT Services

IT Services comprises three sub-sectors—Professional Services, Product Services and Outsourcing Services.

Professional Services includes IT Consulting, and IT Development and Integration.

Product Services includes IT Education and Training, and IT Support and Maintenance. The IT Support and Maintenance market covers businesses involved in both Software and Hardware support and installation.

Outsourcing Services includes IT Process Management and IT Management.

Key Statistics

2001 Global revenue

US\$537 billion

2001 Australian revenue

A\$10.6 billion—or 1% of global revenue

Expected global growth rate to 2005

13% CAGR to 2005 (weighted by sub-sector)

Global market structure: varied

Market share of top 3 firms in each sub-sector market ranges from 6 to 37%

Multinationals (MNCs) in Australian market

All global vendors present

Top 3—IBM GSA, EDSA and CSC—hold 32% of the market (or A\$3.4 billion)

50 Australian listed and non-listed companies hold approximately 18% of the market (or A\$1.9 billion)

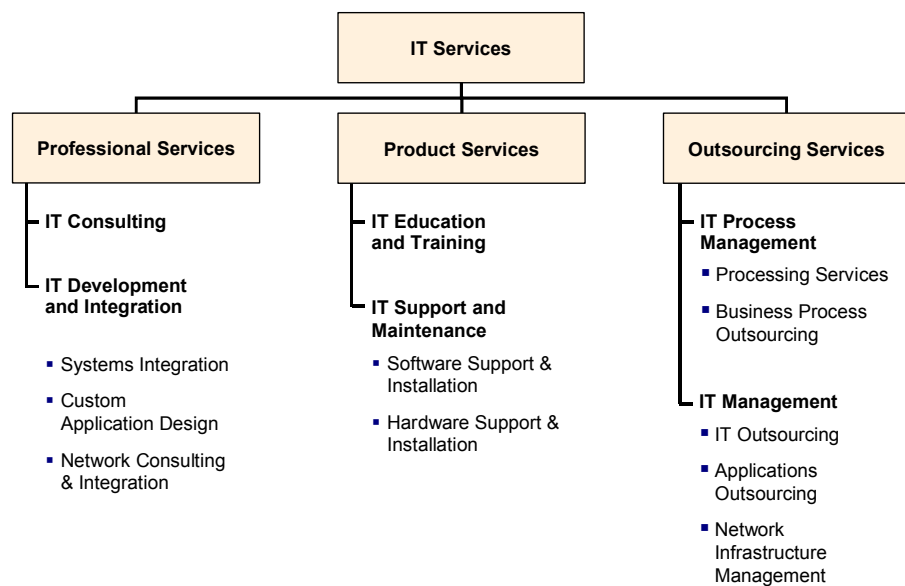
Structure of IT Services

The Services Sector consists of three sub-sectors:

- Professional IT Services
- Product Services
- IT Outsourcing Services.

Exhibit 8

IT SERVICES SECTOR: STRUCTURE



Current state—Worldwide IT Services Sector

In 2001, the IT Services sector earned US\$537 billion revenue worldwide, and is expected to grow at 13% CAGR to 2005 (Exhibit 9). EBITDA margins range from 5% in Applications Outsourcing (within Outsourcing Services) to 25% in Systems Integration (within Professional Services).

Exhibit 9

IT SERVICES SECTOR: CHARACTERISTICS

		Revenue, 2001 US\$ Billions	Annual growth 2001–2005E Percent	Market share of top 3, 2001E Percent	Enterprise share of total demand Percent
Professional Services	IT Consulting	22	12	7	67
	IT Development and Integration				
	Systems Integration	79	14	8	
	Custom Application Design	19	6	21	
	Network Consulting and Integration	21	15	36	
Product Services	IT Support and Maintenance				41
	Software Support and Installation	47	14	29	
	Hardware support and Installation	43	2	14	
	IT Education and Training	25	11	6	
Outsourcing Services	IT Process Management				87
	Processing Services	77	6	22	
	Business Process Outsourcing	104	24	Unknown	
	IT Management				
	IT Outsourcing	63	11	37	
	Network Infrastructure Management	24	13	24	
	Applications Outsourcing	13	26	30	

Overall demand for IT Services is primarily influenced by economic cycles. Within Professional Services and Product Services, demand is also linked to Hardware and Software sales. Growth in Outsourcing Services is dependent on market dynamics and the innovation curve in the industry.



Australian Presence—IT Services Sector

All the major IT Services companies are present in Australia. MNCs recorded a total revenue of A\$5.4 billion in 2000. The Top 3—IBM GSA, EDSA and CSC—recorded A\$3.4 billion, or 63% of total MNC revenues.

In 2001, the Top 30 listed and 25 unlisted Australian companies in IT Services together recorded approximately A\$1.9 billion revenues. Only about half of these companies are 'profit making', which has led to an overall loss of A\$75 million for the sector.

Australian leading IT Services companies are Dialog, Alpha West, Volante, Protech, KAZ Group, SMS Consulting.

The characteristics of Australian IT Services differ by sub-sector and are set out below in Exhibit 10.

Exhibit 10

AUSTRALIAN IT SERVICES SECTOR: CHARACTERISTICS

		Revenue, 2001 A\$ Millions	Annual growth 2001–2005E Percent	Share of global market, 2001 Percent	Examples of MNCs	Examples of local players
Professional Services	IT consulting	348	12	0.8	• IBM Global Services, EDS, Accenture	• Dialog, Alpha West, Volante, Protech
	IT development and integration					
	Systems integration	2,684	15	1.7		
	Custom application design	850	6	2.3		
	Network consulting and integration	300	16	0.7		
Product Services	IT support and maintenance				• IBM Global Services, HP-Compaq; Fujitsu, Advantra, Unisys	• Volante, MYOB, Solution 6, Powerlan, Hartec
	Software support and installation	765	7	0.8		
	Hardware support and installation	778	-2	0.9		
	IT education and training	198	10	0.4		
Outsourcing Services	IT process management				• IBM Global Services, EDS, CSC, ADP, First Data	• Kaz Group, HPA, Data 3 Hansen Technologies
	Processing services	260	2	0.2		
	Business process outsourcing	351	24	0.2		
	IT management					
	IT outsourcing	3,675	12	3.0		
	Network infrastructure management	280	22	0.6		
Applications outsourcing	80	45	0.3			

Trends—IT Services Sector

Five trends are common within IT Services:

- **Consolidation among vendors and integration across sub-sectors is increasing.** More and more, the largest companies are securing the largest and most profitable customers. This trend is also leading to the exit of second tier and local generalist companies.
- **The institutionalisation of knowledge is increasing.** This practice allows companies to package their service offerings as products. It also creates barriers to entry.
- **Buyers are becoming more sophisticated.** This is leading to an increased demand for integrated business and technology as well as an increased power of buyers.
- **There is an increasing need for security.** Overall security concerns and the rigour of global data laws around privacy and competition, creates demand for secure services.
- **Telecommunications costs are declining rapidly.** This creates opportunities for offshore providers.

Uncertainty—IT Services Sector

The uncertainty in the IT Services sector tends to centre on the degree of technical convergence that is likely and whether Web Services are adopted. Web Services are those services, standards or protocols that enable applications and systems to interact—or 'interoperate'.

- **Degree of technological convergence.** Several waves of near-term convergence are possible—for example, wireless-wireline, voice-data, and iTV. High convergence implies a sustained demand for IT Services as clients realise they do not have the scale and speed to keep pace with technological developments. In this case, IT Services firms with specialised technical knowledge are likely to occupy profitable niches in the relevant sub-sector.
- **Extent of adoption of Web Services** will have implications for the degree of vertical integration between Software vendors and IT Services vendors. A high level of adoption, or 'take-up', of Web Services that facilitates interoperability is

likely to lead to greater opportunities for smaller service providers. Conversely, a low take-up of Web Services will lead to a greater concentration of the sector and a proliferation of 'preferential relationships' between Software and IT Services vendors.



Opportunities for Australia—IT Services Sector

Integrated product and services companies that are focused on specialised areas could be able to expand regionally and/or globally. Securing international product sales would be the first step, so that services could then be cross-sold. Building overseas product distribution, however, does represent a significant challenge. Australian firms could overcome this challenge by partnering with integrated product and services vendors that have complementary product and service offerings.

Independent Services companies (within the Professional Services and Product Services sub-sectors) are likely to remain focused on the local market and face intensifying competition from global and regional providers. Product Services vendors are likely to struggle to compete with the integrated offerings, that many of the MNCs are able to provide through their broad scope and relationships with Software and Hardware providers. If Web Services are widely adopted, providers with greater scope and scale will pose a threat to Independent Services vendors.

IT Outsourcing vendors are likely to compete most effectively in those services where value is a more important consideration than cost—for example, in IT Management and 'high-end' areas of IT Process Management.

With this overview as a backdrop, we now detail the global position and outlook of each of the three sub-sectors:

4.1 Professional IT Services

4.2 Product Services

4.3 Outsourcing Services.

4.1

Professional IT Services

Professional IT Services consists of two markets—IT Consulting and IT Development and Integration.

IT Consulting includes IT strategy development, diagnostics and design of IT architecture and solutions, and IT project management.

IT Development and Integration consists of three service lines. The largest is Systems Integration, which includes the deployment and integration of new and old systems and packaged applications. The second service line, Custom Application Design, includes the modification of customer-facing applications, enhancement of applications, and the development of templates. The third service line is Network Consulting and Integration, which includes planning, building and managing data networks; design; vendor selection; and the installation and configuration of vendor networks.

Key Statistics

2001 Global revenue

US\$141 billion

2001 Australian revenue

A\$4.2 billion—or 1.5% of global revenue

Expected global growth rate to 2005

IT Consulting—12%

IT Development and Integration—13%

Global market structure: varied

IT Consulting—highly fragmented: Top 3 hold 7% share

IT Development and Integration—moderately fragmented:

in each service line, the Top 5 hold between 30 and 40% (IBM and EDS are the most prominent)

Multinationals (MNCs) in Australian market

All major integrated professional services companies present—for example, IBM GSA, EDSA and Accenture.

Examples of Australian vendors include Alpha West, Oakton, Dialog, Protech

Snapshot

Not surprisingly, given that its main asset is individual capability, Professional IT Services is a fragmented, though consolidating market. As the importance of codified knowledge increases, it is expected that consolidation will continue. Industry size and characteristics are dynamic and depend on economic cycles and investment climate within client industries.

The uncertainty in this sub-sector relates to the degree of convergence and the extent of possible changes in the Software industry, such as the adoption, or not, of common operating standards—or Web Services. As these uncertainties unfold, three potential business models are likely—vertically integrated providers; vendor-independent providers; and technology specialists.

If they can expand product sales and cross-sell, there could be opportunities for Australian integrated providers to expand in services regionally and/or globally. Australian vendor-independent providers are likely to remain in the local market and could struggle as the market globalises.

Current State—Professional IT Services

In 2001, Australian Professional IT Services revenues were approximately A\$4.2 billion, and industry analysts predict this to grow at 13% CAGR over the next 5 years. The Australian market represents 1.5% of the global Professional IT Services market.

A number of leading multinationals—such as IBM GSA, EDSA, CSC and Accenture—are active in the sub-sector, as well as a number of Australian companies. Australian leaders in the field are Volante, Powerlan and Data3. Professional IT Services vendors frequently participate in other IT Services sub-sectors, often providing both IT Consulting and IT Development and Integration services.

In 2001, Australian IT Consulting revenues were estimated at A\$348 million. Australian IT Development and Integration revenues were estimated at A\$3.8 billion.

IT Consulting

IT Consulting is a commercial undertaking built around one main asset—individual capability. For this reason, firms in this area have been able to specialise in their capabilities and knowledge and coexist successfully.

Consequently, the IT Consulting market is fragmented—the top firms each have no more than 3% global market share. And barriers to entry and exit are low given the availability of IT talent. IT Consulting firms include systems integrators (such as CSC and EDS), hardware and software vendors (such as IBM and Microsoft), telcos (such as AT&T), accounting firms (such as PWC), management consulting firms (such as McKinsey & Company), conglomerates (such as Siemens), and specialty firms (such as Scient and Viant).

The commercial arrangements for IT Consulting vendors are usually project- and fee-based, and projects run, on average, for 2 to 12 months. These vendors tend to have cyclical utilisation, which follows economic cycles. Large firms have been fast to offload their workforce during downturns, and smaller firms enter and exit regularly.

It is common for Hardware and Software vendors, such as IBM, HP, Microsoft and Oracle, to participate in IT Consulting or build preferential relationships with IT Services vendors—for example, SAP and Accenture's relationship.

Over the last 5 years, global industry revenue has grown at 14% CAGR, and it is expected to reach around US\$25 billion in 2002. Operating margins are currently at 20%.

IT Development and Integration

Over the last 5 years, demand in this area has been solid as a result of updates to legacy systems, Y2K, the dot-com boom and integration requirements resulting from mergers and acquisitions. Capacity in two of the three service lines—Systems Integration and Network Consulting and Integration—has more than doubled in this time. It has, however, only increased incrementally in the Custom Application Design service line.

Typical IT Development and Integration contracts involve anywhere from 5 to 200 engineers and/or consultants who perform fee-based work that could last from 3 to 36 months.

Revenue from IT Development and Integration has grown at 15% CAGR to 2005, and is expected to reach around US\$135 billion in 2002. Within this, Systems Integration accounts for around US\$90 billion revenue and is expected to grow at 14% CAGR to 2005. Custom Application Design accounts for around US\$20 billion and is expected to slow to 6% CAGR to 2005. Network Consulting and Integration accounts for around US\$25 billion revenue and is expected to grow at 15% CAGR to 2005.

An Australian IT Systems Integrator: Dialog Information Technology

Dialog is one of Australia's leading IT services providers. It was established in 1979 and employs over 500 specialists. It provides a broad range of services including IT strategy, systems integration, project management, business process analysis and design, applications design, development and testing, implementation, training and maintenance.

Dialog provides these services across a wide range of applications and solutions, for example, e-business applications, information management solutions, data warehousing applications, collaborative solutions, groupware solutions, distributed and networked solutions, multimedia applications and knowledge management solutions.

Dialog provides support services for various industry sectors, such as Aviation, Financial Services, Utilities, Government, Food & Beverage, Hospitality & Gaming, Healthcare, Manufacturing, Media and Retail.

Trends—Professional IT Services

There are five trends within the Professional IT Services sub-sector.

Trend 1: Codified knowledge is becoming more important and creating a barrier to entry for knowledge-poor providers. Firms are seeking to gain competitive advantage by capturing and repackaging their proprietary knowledge, or 'productising services'. This process of codification enhances the level, relevance and applicability of knowledge initially internally, but over time, to external customers and reduces the costs of standardised solutions. In the long term, the base of codified knowledge among incumbents also raises a barrier to entry for new entrants and drives smaller players to focus on niches or become acquisition targets.

Trend 2: The industry is consolidating. The most important supply trend in Professional IT Services is the likelihood of further industry consolidation. Economies of scale in IT Integration and Development will create further impetus for

large firms to merge or acquire smaller firms. Economies of scope of large IT Services players (even beyond professional services) will allow them to maximise their share of customers' wallet. An example of consolidation is Tata's purchase of CMC.

Trend 3: Buyers of professional IT services are becoming more sophisticated, leading to business-focused technology solutions. With the rise of the CIO role, IT buying is becoming more professional and increasingly centralised. The main implication of this is that business will increasingly demand solutions that fuse business and technology.

Trend 4: Recent investments in software and systems will influence near-term demand. Branded vendors with excellent track records are likely to see sustained demand. For example, clients will need their enterprise resource planning (ERP) software purchases to be web-enabled. Clients will also need other enhancements made to software, including customer relationship management (CRM) and supply chain management (SCM) software.

Trend 5: Professional Services providers increasingly cross-sell outsourcing services. Professional Services providers are responsible for designing and building IT solutions for their clients. They are therefore in a unique position to ensure the stability and longevity of these solutions. As such, many of them are beginning to play a significant role in Outsourcing Services.

Uncertainty—Professional IT Services

There are two sources of uncertainty in Professional IT Services—the degree of convergence and the extent of possible changes in the Software industry.

Convergence refers to the integrated delivery of services that were once distinct—for example, broadcasting, voice telephony and online computer services. Several waves of convergence are expected over the next 5 years. These include wireless and wireline voice services such as shared voicemail; integrated voice and data services such as voicemail, email and fax; and iTV or interactive advertising. However, the degree to which the convergence will occur is still largely unknown.

The other area of uncertainty involves changes in the Software industry that will affect interoperability among systems, applications and companies. The key uncertainty driving these changes is the adoption of Web Services—those services, standards or protocols that enable applications and systems to interact, or 'interoperate'. The adoption, or not, of Web Services will affect Professional IT Services by reducing the need for these services providers to create interfaces for their clients.

The uncertainty from these factors gives rise to three possible scenarios.

Scenario 1: There is swift convergence and Web Services is widely adopted. This scenario could see any or all of the following:

- A dramatic increase in the interoperability of applications and other inter-business links.
- Sustained demand for technical IT services as clients realise they do not have the scale and speed to keep pace with technical developments.
- Service firms with specialised technical knowledge occupy profitable niches.
- An increase in the number of smaller 'best-of-breed' providers. Their sustainability is likely to be linked to reduced integration cost.

Scenario 2: There is slow convergence and Web Services is widely adopted. This scenario could see any or all of the following:

- Incremental and relatively slow changes in networks, services and products.
- A dramatic increase in the interoperability of applications and other inter-business links.
- Providers focus on business process integration rather than on technical services.
- Vendor-independent providers grow in importance, and offer integration services for products from multiple vendors.

Scenario 3: There is low convergence and only a low level of adoption of Web Services. This scenario could see any or all of the following:

- Incremental and relatively slow changes in networks, services and products.
- Continuing multiplicity of Web Services standards and ongoing integration challenges.
- Large IT (usually integrated) Services firms with scale offer generic solutions at low cost.
- Exit of many second tier and local firms.

It is important to note that if there were only a low level of adoption of Web Services, it also would limit the opportunity for convergence. For this reason, a combination of low Web Services adoption and high convergence has not been included here as a scenario.

Potential Business Models—Professional IT Services

Depending on how the uncertainty in Professional IT Services unfolds, there are three business models that could prevail.

Vertically integrated vendors are likely to be particularly successful if the level of Web Services adoption is low—and, as a result, convergence is slow. These vendors offer development and integration services around their own products as well as IT consulting. In this model, successful vendors would benefit from:

- Access to global distribution and a global client base that allows them to cross-sell.
- A strong reputation and in-depth knowledge of business processes.
- A competitive cost base, which could involve outsourcing offshore despite the fact that the services will continue to be delivered to customers locally—for example, in the case of custom application development.

If the take-up of Web Services is low, those vendor-independent providers will find it difficult to compete given the integration challenges involved.

Vendor-independent companies are likely to be successful if Web Services are widely adopted. In this model, successful companies would benefit from:

- Offering development and integration services around the plug-and-play products of many different product vendors, as well as offering IT consulting and business consulting.
- Strong relationships with most, if not all, important product vendors.
- Partnerships with business consultancies. This is one way service companies could succeed in the standardising market that results from a high take-up of Web Services. In this market, the knowledge of both product integration and industry-specific business processes will be a differentiating factor. An example of this kind of relationship is IBM and PWC.

Incumbent product vendors are likely to participate in this business model as they seek to protect the revenue streams originating from their core products and business skills.

Technology specialists are likely to be successful if the degree of convergence is high (and, as a precondition to this, Web Services are widely adopted). In this model, successful companies would operate in the following way:

- They offer services for specific products and technical needs—for example, wireless systems integration.
- They have distinctive technical knowledge needed to deal with complexity and convergence. They recruit the right talent and capture and codify useful proprietary knowledge.
- They have strong relationships with complementary technology specialists as few firms possess all the required capabilities to provide a full service offering. These partnerships are for both local and global delivery.
- They have the commercial skills to rapidly convert local operations into global businesses.



Opportunities for Australia—Professional IT Services

There are likely to be opportunities for established vertically integrated providers to expand in IT Services, regionally and/or globally, if they are able to build international product sales and then cross-sell. Australian vendor-independent services companies are likely to remain locally focused.

Specifically, there are three areas of opportunity for Australia in the Professional IT Services sub-sector.

Develop vertically integrated providers. All the major integrated professional services companies are currently present in Australia—for example, IBM Global Services Australia, EDS Australia and Accenture. While the market continues to be dominated by these global firms, Australian firms can succeed as professional services providers of proprietary products if they possess a certain set of capabilities:

- **Distinctive skills in a defensible niche.** A number of Australian companies have built specialised products that have been recognised globally—for example, cheque clearance and superannuation. They also offer systems integration services with these products. For these types of companies, expansion into Professional IT Services would rely on the sustainable competitive advantage of their products and integration skills.
- **Access to global distribution and international product sales.** Limited overseas product sales are likely to result in limited services opportunities for Australian integrated product vendors. Their participation in Professional IT Services would rely on product expansion through sharing distribution networks with other small product vendors or leveraging networks of larger overseas product vendors. They could then attempt to cross-sell services off this base.
- **Strong business and strategic focus.** Relatively few Australian product firms have a business or strategy offering such as business consulting or business process analysis. Australian firms would need to expand their offering in this area as end-users demand combined technical and business perspectives.

Grow specialist vendor-independent providers. If Web Services are widely adopted, IT Services firms that integrate

products from multiple vendors are likely to be successful. The Professional Services incumbents such as Accenture are likely to pursue this opportunity aggressively and will have the advantages of scale and presence across multiple regions and locations.

There could still be an opportunity for smaller companies in niche industries, locations or business processes. Australian firms could develop as local vendor-independent firms, but growth beyond the Australian local market is likely to be challenging.

A few leading Australian firms have overseas distribution, usually focused in Southeast Asia. But most Australian firms lack regional distribution. In order to seize this opportunity, Australian multi-vendor firms would need to possess the following capabilities:

- **Distinctive skills in a defensible niche.** A large number of Australian Professional Services vendors offer consulting and systems integration around a range of software and hardware products. The expansion of these types of companies would rely on their distinctive skills in designing and developing systems architecture using 'best-of-breed' products.
- **Relationships with most, if not all, main product vendors.** Most local vendor-neutral companies have an impressive set of relationships with major product players. The top 5 Australian players all partner with between 10 and 25 large Software and Hardware firms.
- **Strong business or strategic focus.** Many of the listed Australian Service vendors have business offerings that are limited to project management, business analysis and performance management. In order to serve their clients in an environment of high interoperability and multi-vendor service, Australian firms would need to develop a stronger service line in management and strategic consulting.

Develop specialists in particular areas of technology. If the degree of convergence is high, a number of firms competing in global arenas in a specialised technical area are likely to be successful. Many overseas technology specialists operate in Australia in one of three ways. Some are here on a standalone basis such as the security specialists, Computer Associates and

Symantec. Others are here as a 'practice group' of a global major, such as IBM's Network Consulting and Integration division. Others sell into our market through their Asia-Pacific offices, such as the electronic design automation specialists, Cadence and Synopsys.

Australian technology companies are naturally smaller—all but one has revenues of less than A\$50 million. (The exception is Commander Communications, which earned A\$199 million revenue in 2001.) To succeed and be profitable in a specific area of technology, Australian professional services firms would need to build the following attributes and capabilities:

- **Global operations—or local operations that can quickly increase in scale.** Possibly due to their small size, few Australian specialists have global operations. At least one firm, SMS Consulting, has presence in the UK and South East Asia. A few others have some distribution in Asia. However, the vast majority adopt a purely local focus. If an industry structure based on global specialists predominates, some of these positions could become untenable.
- **Distinctive technical knowledge.** A number of Australian services, or product and services, firms specialise in technical niches—for example, security, network convergence, electronic design automation and mobile applications. The challenge for Australian companies is to match product innovation in their area while competing with much larger companies.
- **Relationships with other technology specialists.** Most Australian specialists have a range of links to other firms in their respective areas. For example, our security services firms typically partner with specialist software companies and our network convergence specialists partner with both IT specialists and telecommunications companies.

4.2

Product Services

The Product Services sub-sector consists of two main areas—IT Education and Training, and IT Support and Maintenance.

IT Education and Training Services embraces a wide range of education software products, hardware systems architecture, technology certification, and developer education.

IT Support and Maintenance encompasses Software Support and Installation and Hardware Support and Installation. Each of these service lines covers roles such as installation, configuration, support and maintenance, diagnostics and upgrades, and replacements and releases.

Key Statistics

2001 Global revenue

US\$116 billion

2001 Australian revenue

A\$1.7 billion—or less than 1% of global revenue

Expected global growth rate to 2005

Software support and installation—14%

Hardware support and installation—2%

IT Education and Training—11%

Global market structure: varied

Software services—Top 3 firms hold 29% share

Hardware services—Top 3 firms hold 14% share

IT Education and Training—Top 3 firms hold 6% share

Multinationals (MNCs) in Australian market

Leading integrated vendors are present

—for example, IBM, HP and Compaq

Local integrated vendors exist

—for example, Solution 6

Vendor-independent providers exist

—for example, CPT

Snapshot

The market structure of IT Product Services ranges in its characteristics—from the fragmented IT Education and Training to the more vertically integrated Software Support and Installation.

Overall, this sub-sector is affected by the trends shaping other product and services. That is, demand for IT Product Services will follow demand for Software and Hardware products, and supply will be affected by consolidation in other services. Most Product Services vendors are vertically integrated with product vendors and horizontally integrated across other IT Services lines, such as Professional Services.

The uncertainty in this sub-sector relates to the level of product complexity due to convergence and the extent and sophistication of offshore providers.

Against this background, there are three business models that could prevail—vertically integrated vendors; independent offshore providers; and technical specialists.

Opportunities and challenges for Australia in Product Services are broadly consistent with those in Professional Services. There are likely to be opportunities for existing Australian integrated technical specialists to expand in services, regionally and/or globally, if they can expand product sales and cross-sell their services. Opportunities for Australian vendor-independent providers are likely to be local.

Current State—Product Services

Within Product Services, the market is fragmented.

Overall, Product Services revenues track the sales growth in the Software and Hardware product lines. Hardware and Software companies often support their own products. There are also a few pure IT support companies, and value-added resellers, which often act as subcontractors to product vendors.

Support and Installation revenue has grown at 8% CAGR over the last 5 years, and is expected to reach around US\$95 billion globally in 2002.

Within this stream, Software Support and Installation revenues account for around US\$50 billion globally. Hardware Support and Installation revenues account for around US\$45 billion globally.

Over the last 5 years, IT Education and Training revenue has grown at 13% CAGR and is expected to reach around US\$30 billion globally in 2002.

In this sub-sector, the contractual arrangements of existing vendors present barriers for new entrants. These contracts usually cover periods of 1 to 3 years and often include automatic renewal provisions.

Most major integrated product services vendors have a presence in Australia—for example, IBM Global Services, HP, Fujitsu, Advantra and Unisys. Many overseas technology specialists are also present in Australia—for example, the security specialists, Computer Associates and Symantec, and 'practice groups' of global companies, such as IBM's Network Consulting and Integration division. Others sell into our market through their

Asia-Pacific offices, such as the electronic design automation specialists, Cadence and Synopsys.

There are also at least eight listed Australian companies with Product Services offerings. Of these eight companies, four recorded profits in their last reporting period. And some of these also have overseas product sales—for example, Solution 6.

Over the next 5 years, the Australian Product Services spend is predicted to grow at 3% CAGR. In 2001, the Australian Support and Installation spend was estimated to be A\$1.5 billion. And the Australian IT Education and Training spend was estimated at A\$200 million.

A number of Australian leading software vendors provide product services—for example, Solution 6 and MYOB. But the majority of service vendors provide support and installation of products from multiple vendors—for example, Volante.

Integrated vendors and vendor-independent providers are present in Australia. Notably, integrated vendors includes most Software and Hardware multinationals.

Three Levels of Customer Engagement— Volante Solutions: an Australian story

Volante Solutions offers three layers of customer engagement—ad hoc consultancy agreements, managed support service agreements and service level agreements.

An ad hoc consultancy agreement enables the customer to have access to a large base of technical experts. Once the customer defines a task, the relevant level of technical support is provided.

A managed support services agreement provides the client with priority access to a 1800 number or email address 24 hours a day, 7 days a week. It also includes warranty and maintenance agreements with vendors; hardware and software upgrades and recovery; regular on-site and/or dial-in preventative maintenance and administrative support; and reactive on-site and/or dial-in emergency support with prioritised response times.

A service level agreement (SLA) involves installing performance management software on systems that require regular monitoring and reporting. The resulting data is posted to the Net.Net web site in real time. The reports and alerts match system performance against the service levels. The SLA account manager works with customers to address the issues that result from alerts and reports.

Trends—Product Services

Within this sub-sector, there are three trends.

Trend 1: The industry is consolidating. Further industry consolidation is likely in Product Services. Examples of this trend include the deals between HP and Compaq, between Siemens Business Services and Entex, and between Novell and Cambridge Technology. The globalisation of product vendors, and their active involvement in Product Services, is likely to challenge local vendors.

Trend 2: Product vendors and service subcontractors are entering 'preferred supplier' partnerships. The increasing global reach of major companies is also increasing the establishment and use of 'preferred supplier' partnerships.

Within IT Education and Training, for example, large firms use smaller firms to translate and customise content for local markets. Preferences run from many partners to single relationships—for example, DigitalThink uses multiple delivery partners but Cisco partners only with Lionbridge.

Trend 3: Increasing buyer sophistication is leading to low cost offerings. As noted in the discussion of Professional IT Services, IT buying is now becoming more professional and centralised with the rise of the CIO role. The implication of this is that Product Services will need to manage costs to compete effectively, possibly by moving activities to low cost locations or by automation.

Uncertainty—Product Services

There are two sources of uncertainty in Product Services. These surround the level of product complexity and the extent and sophistication of offshore supply.

Product complexity is influenced by convergence, the shortening lifecycles of software and hardware products as well as their proliferation. High product complexity implies a sustained demand for Product Services as clients require assistance to keep up with technical advancements.

In terms of offshore supply, labour costs are supporting the establishment of remote product services in low-cost regional centres such as India. There is also a move towards remote training and support methods such as CD-Rom and e-learning. The viability of offshore supply is uncertain, however, as a knowledge of local business practices remains important in complex product environments.

The uncertainty from these factors gives rise to three possible scenarios.

Scenario 1: High complexity of products and low level of offshore supply. This scenario could see any or all of the following:

- High product complexity, both in software and hardware, and low interoperability.
- Low levels of offshore supply as local knowledge and commercial and country risks make local service providers more attractive than offshore vendors.
- The key success factors are scale, client relationships and an ability to aggregate independent specialists effectively.
- Smaller firms specialise globally or act as local partners of global firms by providing local delivery or local customisation.
- Attractive margins due to complexity and high value-add of services in this environment.

Scenario 2: Low complexity of products and a low level, and sophistication, of offshore supply. This scenario could see any or all of the following:

- Low levels of offshore supply as product simplicity drives low-cost solutions and clients prefer automated support.
- The bulk of profits accrue to large firms with key client relationships and who can roll out automated solutions at low-cost.
- Smaller firms specialise globally or act as local partners of global firms by providing local delivery or local customisation.

Scenario 3: A high level, and sophistication, of offshore supply that can handle both high and low product complexity. This scenario could see any or all of the following:

- Formation of product services hubs in low-cost countries with a critical mass of talented, English-speaking IT employees—for example, India and increasingly China.
- Aggressive price competition between major service providers.

- Entry by local firms from low-cost countries.
- Increasing low-cost supply innovation—such as e-learning—by firms that remain onshore.

Potential Business Models—Product Services

Against this background, there are three business models that could prevail.

Vertically integrated vendors offer Support and Installation Services around their own products as well as IT Education and Training. These vendors are likely to perform best in the event of low product complexity, especially if there is also a low level, and sophistication, of offshore supply.

In this model, successful vendors would require:

- Access to global distribution and a strong reputation.
- Low-cost supply through process innovation.
- Strong relationships with content localisers.
- A substantial client base that allows them to cross-sell.

Vendor-independent offshore providers would offer those Product Services lines that can be delivered remotely. This includes most software maintenance. These firms are likely to be sustainable in both a high and low product complexity environment provided they are sophisticated enough to handle the product complexity.

In this model, successful vendors would require:

- Access to global distribution and a strong reputation.
- Low-cost structure as a result of their geographic location.
- Strong relationships with many product vendors and firms who can 'localise' content.
- A flexible workforce of IT problem-solvers with an excellent command of English.

Technology specialists would offer expertise in dealing with a range of specialty and emerging needs. These firms are most likely to perform best if there is high product complexity, especially if the level, and sophistication, of offshore supply is low.

In this model, successful vendors would require:

- Specialised services that support specific products.
- Distinctive technical knowledge allowing them to deal with complexity and convergence.
- Strong talent and a clear competitive advantage through the capture and codification of useful proprietary knowledge.
- Strong relationships with complementary technology specialists and firms that can 'localise' content. These partnerships are in place for both local and global delivery.
- Commercial skills to rapidly convert local operations into global specialist businesses.



Opportunities for Australia—Product Services

The opportunities for Australia in Product Services are broadly consistent with those in Professional Services. That is, there are likely to be opportunities for existing Australian integrated specialists to expand in services, regionally and/or globally, if they can expand product sales and then cross-sell services. Opportunities for Australian vendor-independent providers are likely to be local.

Specifically, there are three areas of opportunity for Australia in the IT Product Services sub-sector.

Develop vertically integrated providers. Vertically integrated providers are likely to be sustainable in all outcomes, but would benefit most from high product complexity. A few leading product vendors are likely to have local delivery, but will increasingly use low-cost automated and offshore solutions for IT Support and Maintenance as well as IT Education and Training. Smaller firms are still likely to have specialty functional roles or act as preferred supply or distribution partners for the globally integrated providers.

A few Australian product vendors, such as Solution 6, have significant overseas product sales and this could drive overseas product services revenues. However, most Australian product vendors have limited global product distribution. For them to drive product sales, they would need to partner with MNCs with compatible products. Such product sales might, or might not, generate overseas service revenues given that an MNC partner could be a more compelling service provider.

Australian firms tend to be too small to be attractive as exclusive partners outside Australia for global product companies. Given the competitive nature of the global product services market, therefore, Australian services companies are likely to be limited to the local market.

To compete regionally and/or globally as integrated providers, Australian firms would need to possess a certain mix of attributes and capabilities:

- **Global distribution and product sales.** Australian vendors would need to access overseas distribution through owned or shared networks and would need to be able to demonstrate their reliability as a service provider.
- **Low-cost supply through automated solutions.** A number of Australian vendors have automated offerings—offerings such as self-paced e-learning, self-help support portals and remote, telephone-based support. These will probably increase in importance with the growth of networking.
- **Relationships with service providers who have knowledge of local business practices.** Currently, Australian leaders vary in the extent they localise service offerings. One firm with a Southeast Asian presence has customised its products and educational services accordingly. Another has a regional offering, but conducts all its education services in English. Others limit Product Services to technical support that requires no country-specific customisation. To be successful outside of Australia, Australian vendors would need to provide services in partnership with local service vendors who can tailor and localise their offerings or do this themselves.

Develop independent service providers that can service a wide range of products from multiple vendors. If product

standardisation and 'user friendliness' increases, service providers that can service a wide range of products from multiple vendors could become sustainable. Such a model can be delivered by offshore providers and Asian providers may be well placed to challenge the position of Australian vendors.

Looking forward, it is likely that Australian vendors will remain specialised by industry or function, while more generic product services may be delivered from Asian offshore hubs.

To succeed in this model, Australian firms would need to possess the following attributes and capabilities:

- **Relationships with most, if not all, key product vendors.** Most local vendor-independent companies have built strong relationships with major product firms. However, scale will become increasingly important, as competition intensifies, the scale of service vendors increasingly influences the terms of such relationships with global product vendors (especially in areas such as warranty and recovery supply).
- **Regional distribution 'footprint' and knowledge of local business practices.** Few vendor-neutral Australian services firms have regional distribution. Expanding regionally will be a challenge given the competition from global services firms such as Accenture and local firms already in each of the Asian markets. The limited presence of Australian firms overseas would also inhibit their ability to tailor services to country-specific business requirements. Australian firms, therefore, would need to build at least a limited presence in regional markets to expand.
- **Low-cost supply, preferably through an offshore hub.** A number of Australian firms provide services to European or US customers at costs lower than those in their home markets. With the growing sophistication of offshore supply, Australian vendors might need to outsource components of product delivery offshore to maintain a competitive cost base.

Develop technology specialists. If convergence is rapid, firms competing in specialised global businesses are more likely to be successful. A number of overseas Security and Systems and Network Management specialists operate in Australia. Australian technology firms are typically smaller—all of these firms, except one, earn revenues of less than A\$50 million. These firms could

continue to compete in profitable product services technology niches if they possess certain attributes and capabilities:

- **Distinctive technical knowledge.** Australian firms usually become specialised as a result of developing products in their particular area of expertise. To be successful in this model, Australia would need to focus R&D on areas of sustainable advantage and find ways to commercialise the resulting businesses.
- **Relationships with other technology specialists.** Most Australian specialists have established strong networks with complementary technology specialists. Maintaining and building these networks will be critical.
- **Global operations, or local operations that can quickly increase in scale, and a knowledge of local business practices in regional markets.** Due to their small size, very few Australian specialists have global operations. One firm has two offices in Europe and a presence in the Asia-Pacific region, but this is unusual.

The overwhelming majority have only a local offering. To be successful, additional overseas presence will be required. Technology specialists need to expand regionally and globally. Australian vendors would need access to knowledge of local business practices either through partnerships with local service providers or from their own presence.

4.3

Outsourcing Services

The IT Outsourcing Services sub-sector consists of two main areas—IT Process Management and IT Management.

IT Process Management consists of two services lines—Business Process Outsourcing, which is the largest, and Processing Services. Business Process Outsourcing covers low-volume but complex activities such as human resource management, administration and finance. Processing Services covers outsourcing of high-volume transaction processing such as claims processing and payroll service.

IT Management consists of three service lines—IT Outsourcing, which is the largest, Network Infrastructure Management and Applications Outsourcing. IT Outsourcing covers a client's IT operations such as 'help desks' and disaster recovery. Network Infrastructure Management covers such operations as the management of desktop infrastructure and network performance. Applications Outsourcing covers activities such as deployment and management of software applications.

Key Statistics

2001 Global revenue

IT Process Management: US\$181 billion

IT Management: US\$100 billion

2001 Australian revenue

A\$4.6 billion—or less than 1% of global revenue

Expected global growth rate to 2005

IT Process Management—16%

IT Management—13%

Global market structure

IT Process Management: fragmented

Top 3 hold 22% of the market

Network Infrastructure Management: fragmented

Top 3 hold 24% of the market

Competitive landscape consists of both incumbents (such as Siemens, IBM and IGS) and emerging players (such as Digex, Digital Island and PSINet)

Applications Outsourcing and IT Outsourcing:

Top 3—IBM, CSC and EDS/Accenture—hold over 30%

Multinationals (MNCs) in Australian market

Branch offices of all major generalist outsourcers such as IBM, EDS and CSC

Branch offices of many specialist outsourcers such as ADP and First Data

A number of Australian companies provide Outsourcing services—for example, Volante and KAZ Group

Snapshot

The two main areas of this sub-sector—IT Process Management and IT Management—each display different characteristics.

IT Process Management has historically enjoyed growing demand and fragmented supply. Fixed costs are high, however, so scale is important. And profitability is linked to achieving high volumes of throughput.

The main features of the IT Management market include asset intensity and long-term contractual relations. All three service lines require large investments in infrastructure. This leads

today's firms to seek scale so that they can achieve adequate returns on their capital. Consequently, market opportunities for new and second tier players are limited.

Within this sub-sector, there are six important trends – speed and reliability of outsourcing; the increasing use of offshore supply; industry consolidation; buyer sophistication; security and reputation; and migration into adjacent markets.

The main uncertainty in this sub-sector is around the degree of technical convergence. Against this background, there are three possible business models—Processing Services vendors, Business Process specialists, and technical specialists in IT Management.

The opportunities for Australia in IT Outsourcing Services are likely to emerge in the areas where the 'value for money' offered by Australian companies is compelling and sustainable—for example, in the high end of Business Process Outsourcing and IT Management.

Current State—Outsourcing Services

The two main areas of this sub-sector—IT Process Management and IT Management—each display different characteristics.

IT Process Management has historically enjoyed growing demand. The 1980s and 1990s saw widespread outsourcing as companies opted to clear their balance sheets of non-core processing assets. IT Process Management includes Processing Services (US\$80 billion of the total revenue and forecast to grow at 6% over the next 5 years) and Business Process Outsourcing (US\$130 billion, 20% growth).

Overall supply is fragmented—the Top 3 providers hold 22% of the market. However, fixed costs are high, so scale is important within individual service lines. And profitability is linked to achieving high throughput.

There are powerful suppliers in certain segments—for example, ADP has less than 10% of the overall Processing Services market, but leads in payroll processing; and First Data has 8% overall, but leads in payment processing.

IT Management demand has experienced strong growth recently. IT Management includes IT Outsourcing (US\$70 billion

of the total revenue and forecast to grow at 6%), Network Infrastructure Management (US\$30 billion, 13% growth) and Applications Outsourcing (US\$15 billion, 26% growth).

Industry analysts predict that, over the next 5 years, Australian IT Outsourcing revenues will grow at 12%. Today, Australia hosts branch offices of all major generalist outsourcers such as IBM, EDS and CSC. It also hosts branch offices of many major specialist outsourcers such as ADP and First Data. Australian home-grown firms compete almost exclusively in specialty areas such as superannuation services, security and billing outsourcing. There are at least 11 listed Australian companies with an IT Outsourcing offering. Of these, five recorded profits in their last reporting period.

The nature of IT Management supply differs somewhat by service line. Network Infrastructure Management is fragmented, and the competitive landscape consists of both incumbents and emerging companies. Applications Outsourcing and IT Outsourcing are more concentrated, with the Top 3 holding 30% of the market. In each case, the incumbents—IBM, CSC and EDS—hold strong supply positions.

The main features of the IT Management market include asset intensity and long-term contractual relations. All three service lines require large investments in infrastructure. This leads today's firms to seek scale so that they can achieve adequate returns on their capital. Consequently, market opportunities for new and second tier players are limited. Emerging ASPs such as USInternetworking and Corio, for example, have struggled to gain a foothold.

Using Business Partnerships to Meet Customer Needs: KAZ Group Limited, an Australian Example

With a market capitalisation of A\$184 million and nearly 2,500 employees, KAZ Group Limited (KAZ) specialises in the provision of IT outsourcing and business process outsourcing. KAZ is also a major provider of software products, application development and maintenance, systems integration solutions, risk management services and education services.

The KAZ Group of companies includes the following businesses:

- KAZ Computer Services—supplies IT infrastructure outsourcing, data centre outsourcing and systems integration. It supports six continents from its seven data centres.
- Aspect Computing—provides application development and outsourcing, systems integration, education services and risk management services. In many cases, it delivers these services through long-term relationships with its customers.
- Australian Administration Services—provides business process outsourcing of specialist administration and customer services for the superannuation funds of nearly 3.5 million Australians.
- Ausdata—specialises in business process outsourcing services in the document processing market from its six document processing centres in Australia, and supplies document management solutions.
- Fundi Software—develops enterprise systems management software through long-term contracts and joint ventures with IBM and other major software companies in the US.

The Group has a number of longstanding partnerships with international organisations, including Cisco, Hewlett Packard, IBM, Microsoft and Sun Microsystems. It also has relationships with a number of major customers, including ANZ Bank, Elders, Alcoa World Alumina Australia, Australia Post, Coles Myer, Westpac Bank, Australian Department of Defence, AMP and REST Super.

Trends—Outsourcing Services

Within Outsourcing Services sub-sector, there are seven trends.

Trend 1: Leading IT Services providers increasingly view Outsourcing Services as their growth engine. Accenture, EDS, IBM GS and other IT Services providers are all building their capabilities to help companies to refocus on core processes and outsource/offshore the administrative elements of support and back office processes including finance, accounting, HR management as well as purchasing, logistics, credit management, claims management and even product design and engineering.

Trend 2: Improvements in communications infrastructure are increasing the speed and reliability of outsourcing. Improvements in communications technology are expanding the options for the remote exchange of data. These improvements also result in much reduced telecommunications costs, which, in turn, lead to lowered costs for data transmission to offshore firms. The demand for outsourcing services is stimulated by the growth of systems and network complexity—for example, the rapid increase in the number of public connections and nodes due to infrastructure build-outs and Internet connectivity.

Trend 3: Companies are increasingly using offshore supply to reduce cost. Today, the trend to using offshore supply is taking two forms. First, most large software and hardware firms and large corporations are moving lower value, less mission-critical IT functions offshore to lower cost locations. Second, there has been a proliferation of offshore outsourcing companies such as Daskh, Tata and Wipro.

Certainly, labour cost advantages are a large part of outsourcing's success. India, with a cost structure around 30% of commercial hubs like London or New York, has witnessed a rapid growth of outsourcing activity. The Indian example also demonstrates other advantages of offshore supply. India, for example, has knowledge of, and experience in, the delivery of complex IT services and it has proven relationships with some of the largest companies in the US and Europe. As a result, India is ideally positioned to cross-sell Business Process Outsourcing to existing accounts. For these reasons, supply is likely to continue to move offshore to India, or to countries that can replicate this model.

Trend 4: The industry is consolidating. Further industry consolidation is likely in IT Outsourcing Services, just as it is in other IT Services sub-sectors. This consolidation will take place

in two ways. First, established players will consolidate to achieve both scale and scope. An example of this is EDS who has purchased Sabre, Structural Dynamics Research and Systematics in the last 18 months. Second, new offshore outsourcers will consolidate. Recent examples of this are Wipro's deal with Spectramind, and Tata's deal with CMC. And, as we have noted above, the globalisation of client demand is creating further impetus for industry consolidation.

Trend 5: Buyers are becoming more sophisticated, which is leading to further cost reductions. As in other IT Services sub-sectors, IT buying is becoming more professional and centralised. There are two main implications of this trend. The first is that, to remain attractive, IT Outsourcing Services providers will need to ensure they are competitively priced in services. The second is that, due to the large value of outsourcing contracts, client firms will select those outsourcers they can trust in a business partnership.

Trend 6: With an increasing focus on, and need for, security, a premium is being placed on a strong reputation. Today, we are witnessing an increased demand for greater protection of data and secured operations from hackers and viruses. Consider the recent security breaches by the Code Red and Nimda viruses, which carried more powerful payloads and propagated more quickly than attacks of the past. There is also the threat, or perceived threat, of malicious individuals—both opportunistic vandals and terrorist attackers. Against this background, the emergence of the role of Chief Security Officer places security management near the top of corporate agendas. It also supports the trend that companies will only trust their IT to well-known, fully-resourced and secure outsourcing specialists.

Trend 7: Firms are moving into adjacent IT Services markets. The trend towards offshore supply is likely to weave into the trend of broader industry participation. Providers will seek to expand their IT Outsourcing Services offering as they seek to cross-sell services. Spectramind, TransWorks, eFunds, eServe, Conseco-ExlService, Daksh and First Ring are all examples of this trend. These companies began as call centre outsourcers and are now attempting to offer more value-added services.

Uncertainty—Outsourcing Services

The main uncertainty in Outsourcing Services is the degree of technical convergence. In this context, convergence refers to the extent to which services that were once distinct are delivered together—for example, broadcasting, voice telephony and online computer services. Several waves of convergence are expected over the next 5 years—for example, convergence between wireless and wireline voice services, voice and data products and iTV. The degree to which convergence will occur is largely unknown.

This uncertainty gives rise to two potential scenarios.

Scenario 1: There is low convergence. This scenario could see any or all of the following:

- Incremental and relatively slow changes in networks, services and products lead to low technical complexity.
- Clients move to standardise routine activities so most outsourcing focuses on lower value, higher volume processing services.
- Increased offshore supply of transactional services by low-cost service providers—for example, India and China.
- Lower margins and vigorous competition based on price.
- Continued demand for IT Management and Business Process Outsourcing.

Scenario 2: There is high convergence. This scenario could see any or all of the following:

- High technical complexity in some service lines.
- Continued demand for lower value, higher volume processing services.
- Strong demand for higher value, higher complexity IT Management and Business Process Outsourcing.
- Higher margins due to complexity and value-add of outsourcing in this environment.

- Continuing offshore supply of transactional services by low-cost service provider countries.
- Higher value, higher complexity outsourcing services and the high end of Business Process Outsourcing remain onshore or, at minimum, are performed in developed stable markets. This is particularly the case for those services where physical proximity is important—for example, network management.

Potential Business Models—Outsourcing Services

Depending on how the uncertainty unfolds, there are three business models that could prevail.

Large scale outsourcing vendors, providing high volume transaction processing (or 'Processing Services Vendors') will prevail in both scenarios but will achieve greatest share in the event of low convergence. In this model, successful vendors would benefit from:

- Global scale.
- Low-cost operations, which may require outsourcing many of their activities to low-cost countries.
- Strong sales and marketing through ownership or alliances.

Outsourcing firms, specialising in the management of more complex processes (or 'Business Process Specialists') will also prevail in both scenarios, but will be more significant in the event of higher convergence. This is because high convergence would, at least initially, lead to more complex inter-Enterprise processes. In this model, successful companies would operate similarly to Processing Services vendors, but these specialists would focus on their domestic market, at least initially, which they understand best. In addition, they would possess the following features:

- Specialised business process knowledge and skills, often industry specific, to deal with higher complexity.
- An outstanding marketing proposition to convince clients to outsource non-standard functions—for example, they will offer very high value services.

Technical specialists in IT Management will prevail in both scenarios but will increase in significance with higher convergence. IT Management will usually involve significantly higher capex and lower labour costs relative to the other models. (This is most obvious in Network Infrastructure Management.) In this model, successful specialists would benefit from:

- An established brand and strong reputation for reliability and security because their clients entrust them with mission-critical functions.
- A base in countries that are perceived as low risk environments—that is, politically and economically stable.



Opportunities for Australia—Outsourcing Services

The opportunities for Australia in IT Outsourcing Services are likely to emerge in the high end of Business Process Outsourcing and IT Management where the 'value for money' proposition of the Australian companies is compelling and sustainable.

Develop business process specialists in niches. To compete against global firms, Australian outsourcers could focus on labour-intensive, but high value-added, outsourcing. This type of opportunity would exist in the case of both high and low convergence, but would be more viable if there is higher convergence and complexity.

Australian firms are already competing in niches such as superannuation services, security and billing outsourcing. These firms could continue to capture opportunities either on a standalone basis or as partners with, or contractors to, global outsourcers. In addition, Australian firms could compete in those countries that are under-penetrated by the major global companies.

To succeed in this model, Australian firms would need to possess a certain set of attributes and capabilities:

- **Differentiated offering.** Most Australian outsourcers already have at least one functional specialisation and/or industry specialisation. Leading Australian outsourcers such as KAZ Group and AMCON Solutions have won a number of contracts with European and US customers. The implication, therefore,

is that Australian firms should continue to specialise in those areas where they clearly understand the needs of end-users.

- **Large-scale, low cost operations.** Australian outsourcers are very small by global standards. Only seven Australian outsourcers reported revenues greater than A\$50 million in 2001, yet this is minimal compared with global outsourcers such as EDS, who reported A\$41 billion for the same period. Despite this, Australian firms are mid-range in cost as our labour is cheap compared with Europe and the US but expensive when compared with Asia and the subcontinent. Australian firms need to build scale and reduce costs through M&A activity, if appropriate; improved internal efficiency through process re-engineering; and, down the road, through offshore delivery.
- **Access to global distribution.** Even though Outsourcing Services will be delivered in Australia, there is a need to set up offshore sales and marketing to generate business. Three Australian firms have offices in Asia, although most do not. This implies that, for ongoing standalone success, Australian outsourcers must access regional distribution networks, either by sharing those networks or by leveraging the networks of larger global companies.
- **Product integration knowledge.** Insights in Business Process Outsourcing generally require an intimate knowledge of the products relating to the business. For example, to understand superannuation business processes requires a knowledge of superannuation software products. Given the complexity of these business processes compared with simple transactional processes, Australian outsourcers need to acquire knowledge about the relevant products.

Develop technical specialists in IT Management. To compete against global firms, Australian outsourcers could focus on IT Management services. Currently, Australian telecommunication carriers such as Telstra and Optus provide most of these services to the local market, especially in Network Infrastructure Management. Other examples of listed companies in Network Infrastructure Management include Commander Communications and Techniche. These firms can continue to compete in the case of both high and low convergence, and could even have opportunities to expand into adjacent

geographical markets. However these opportunities will be more likely in the event of high convergence and complexity.

Australian firms can succeed in this model if they possess a certain mix of attributes and capabilities:

- **Strong reputation for reliability and security.** In general, our stable political and business environment aids the reputation of our outsourcing firms. Specifically, several of our outsourcers either specialise in security outsourcing or have a dedicated security service line. Many of them also have relationships with high profile, prestigious clients.
- **Distinctive technical capabilities.** Given the higher levels of complexity involved in Network Infrastructure Management, Australian firms would need to demonstrate best-in-breed technical skills and equipment.

Develop large scale processing services vendors.

Australian firms would find it extremely difficult to prosper using this model. This model favours large-scale, ultra low-cost incumbents.

If there is low convergence, a few global majors with branch office sales and marketing around the world are likely to dominate. And all major global outsourcers already have branch offices throughout Australia, effectively barring local companies from playing any meaningful role in providing these services.