CASE STUDIES ON BPO AND ITO AT LARGE CAPTIVE OPERATIONS IN INDIA

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Abstract

The past decade has seen explosive growth in offshore Business Process Outsourcing (BPO) to India by US and European companies. However, Australian companies have been slower to take advantage of this trend towards Globally Distributed Work (GDW). This appears surprising given sixteen years of unbroken expansion of the Australian economy that have created near full employment and skills shortages that can be addressed by offshore outsourcing. However, a large-scale survey of domestic IT outsourcing in Australia reported that failure rates are higher than has been recognized in the literature, while practitioner sources report widely varying success rates with offshore IT and business process outsourcing. With little in the way of theory or models to guide management decision-making, perhaps the under-participation by Australian companies is less surprising.

An Australian Bank (ANZ) and a UK airline (British Airways) provide two examples of companies that have created value for shareholders through successful implementation of Globally Distributed Work. Both have utilized a captive business processing operation in India for over a decade, but have pursued contrasting BPO strategies. British Airways expanded the scope of its operation by taking on BPO work for other companies in the travel sector, introduced private equity and then conducted a successful initial public offering. ANZ has expanded the size of its captive operations, integrated it more tightly into the parent company and is now capitalizing on the operational benefits offered by its Bangalore unit.

While captive IT Enhanced Services (ITES) operations appear to offer advantages in terms of managing knowledge, they also require significant senior management commitment over 2-3 years to deliver business benefits and mentor the emergence of a cadre of "culturally agile" managers. And yet the captive model appears least researched. The authors are using these and other case studies to develop a decision-

making framework that will assist companies to make effective investments in GDW, including making effective choices about engagement options and risk management.

Key words: Globally Distributed Work (GDW), Business Process Outsourcing (BPO), Captive BPO, Offshoring, Offshore BPO to India, Risk Management in BPO

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INTRODUCTION

Offshore outsourcing is part of "Globally Distributed Work" (GDW), defined as configuring people, technology and IT applications to achieve reduced cycle times and lowest cost to deliver services and projects. Collaboration technology and broadband telecommunications continue to improve, providing strong stimulus to the growth of GDW in both IT outsourcing and Business Process Outsourcing (BPO). India continues to be preeminent as the country that is the destination for most offshore IT Enhanced Services (ITES), a term used to cover both IT and BPO (Carmel and Agarwal, 2002, Davies 2004, Willcocks and Lacity 2006, Rottman and Lacity 2007)).

For western companies located in Europe, Australia or North America, seeking to utilize Indian based GDW models a variety of ownership and relationship structures are possible with Indian service providers. An early and fundamental decision for these companies is whether to establish a captive operation (i.e. wholly owned subsidiary) or some form of contracting relationship with an established service provider (Ramachandran and Voleti 2004, Robinson and Kalakota 2004).

The captive model offers the potential advantage to western companies for maximizing the creation and leverage of their knowledge and intellectual capital. This is particularly the case where the captive model involves activities that could be classified as "Knowledge Services". The captive model, however, appears to be the least researched (Rottman and Lacity 2007, Sharma, 2007).

Knowledge Services refers to BPO performed by people with specialized skills and knowledge. This category of BPO involves non-scripted and higher skilled processes that require application of business judgement and significant domain (or vertical market) knowledge (Nilekani, 2007).

The authors have conducted case study research involving Indian service providers and their clients from North America, Europe and Australia in order to develop a decision-making framework for evaluating investments in offshore BPO, particularly in higher end Knowledge Services (Penter, Pervan & Wreford, 2007). This decision-making framework is summarized in Section 6 below.

Previous research by the authors has considered offshore BPO and Information Technology Outsourcing (ITO) by Small and Medium Enterprises and has also considered both captive and arms length contracting engagement models. This paper reports on research conducted via three case studies into large Australian and UK multinational companies and their captive BPO operations. British Airways, WNS Global Services and ANZ Bank provide examples that illustrate effective management of captive BPO and demonstrate that the Indian ITES industry is successfully moving up the value chain. British Airways and ANZ Bank have each had an engagement with the ITES industry in India founded upon a captive model for more than 10 years, and each has derived significant business benefits.

BUSINESS PROCESS OUTSOURCING: LITERATURE REVIEW

BPO can be defined as "delegation of an IT-intensive business process to an external provider who owns, administers and manages it, according to a defined set of metrics" (Gartner 2004, quoted in Rouse and Corbitt, 2004).

BPO can be defined in terms of various "back office" functions, which can include human resources, finance and accounting, processing of insurance and credit transactions, procurement, and IT services (Grant 2005, Davies 2004, Feeny, Lacity and Willcocks, 2003; Willcocks, Lacity and Feeny 2003). Some writers view ITO as a subset of BPO (Robinson and Kalakota, 2004). For the purposes of this paper, BPO is defined as the outsourcing of any knowledge-intensive business process, including ITO. The degree of overlap between ITO and BPO is particularly evident when the research subject is offshore ITO and BPO (Rouse and Corbitt, 2004).

Outsourcing as a phenomenon is neither new nor should it be seen as restricted to IT (Dibbern et al., 2004). In the past fifteen years, academic research on Information Technology Outsourcing (ITO) has evolved rapidly (Dibbern et al., 2004, Willcocks Lacity and Cullen, 2006). However, published research into both offshore IT Outsourcing and Business Process Outsourcing is limited, particularly on Australian and European companies (Rottman and Lacity, 2007).

Classification of Business Process Outsourcing Activities

There are various classifications for the types of BPO activities. For example, by the extent to which task is unscripted and/or requires domain knowledge (Raman 2007, Bhargava, 2005):

- Expert Knowledge Services (equities research, competitive analysis, ASIC design)
- Direct Customer Interaction (credit collections)
- Customer Problem Solving (approving insurance claims, altering credit card limits)
- Rule Set Processing (frequent flier schemes, outbound telemarketing)
- Data entry and conversion (medical transcriptions, email Help Desk responses)

Another form of BPO classification considers the extent to which business processes are core (i.e. key to firm success and strategic in nature), critical and non-critical (see for example Ramachandran and Voleti, 2004).

It is common in academic and particularly trade publications to find reference to the assertion that offshore BPO is most suitable for low level, routine, non-core processes (see for example Ramachandran and Voletti, 2004, Bhargava and Bhatia, 2006). But research data and academic literature is contradictory on this point.

Well-defined, measurable and self-contained processes which can be considered as "non-core competencies" might appear to be most suited to offshore BPO (Tas and Sunder, 2004). It is, therefore, reasonable to conclude that companies should take a core competency approach to selecting processes to move offshore.

Contrary to this approach of outsourcing processes not to be considered core competencies, there appears to be considerable evidence that the most significant business benefits are obtained by utilizing highly skilled resources in processes which might be considered core or critical competencies (Robinson and Kalakota, 2004, Wipro 2007, Tas and Sunder 2004, Penter, Pervan, Wreford 2007, Carmel and Agarwal 2002). Activities such as custom ASIC design, credit collection, Operations, Technology and Shared Services fit the definition of unstructured, highly discretionary, non-scripted tasks with a requirement for high levels of domain knowledge and high levels of asset specificity. These activities can be considered as Knowledge Services.

Where offshore BPO involves Knowledge Services, potential difficulties involved in capturing, leveraging and protecting dispersed knowledge and intellectual capital can become a significant risk factor (Oshri, Kotlarski and Willcocks 2007).

Engagement options available to companies utilizing service providers located in India

For western companies seeking to engage in BPO with service providers located in India, a variety of ownership and relationship structures are possible (Ramachand and Voleti 2004)

- Establish a captive operation (i.e. wholly owned subsidiary) at a carefully chosen location in India

- Engage with an Indian company that is a global BPO service provider and which has a western presence (e.g. Infosys)

- Engage with a multinational company that has a significant BPO workforce located in India (e.g. IBM Global Services, Accenture, etc.)

- Engage directly with Indian BPO service providers by conducting search and contracting activity in India

A related model is that developed by Carmel and Agarwal (2002). Although concerned only with offshore outsourcing of IT work, the maturation stages proposed appear to be highly relevant to engagement options for offshore BPO. A limitation is that Carmel and Agarwal's research is highly US-centric, being based on interviews with executives in 13 large US-headquartered companies.

Maturation stages identified through the research are described in the following table

Stage No.	Description	Summary of key management practices
1	Offshore bystander	Domestic outsourcing only
2	Offshore experimenter	Experimentation and pilot projects offshore
3	Proactive cost focus	Focus on cost reduction from offshore BPO of non-core activities. Organizational structures to manage offshore ITO emerging
4	Proactive strategic	Focus on multiple sources of business advantage such as access to talent and skills, reduced cycle time on major projects. Mature organizational arrangements and executive leadership

Describing a successful offshore IT outsourcing relationship between a US-headquartered financial services company and a leading India-based IT services provider, Kaiser and Hawk (2004) describe how the relationship has evolved over eight years through a similar series of maturation stages to what is now described as a "cosourcing" model.

Strategic offshore BPO performed through arms length contracts involves inherent tensions and requires a difficult management balancing act. Through research on 21 large US companies that have utilized offshore outsourcing, Rottman and Lacity (2006) have identified 15 management practices necessary for effectively offshoring IT work. The authors report that while business benefits have been obtained from these arrangements, success requires an immense amount of hands-on management,

which increases transaction costs and can erode overall savings (Rottman and Lacity 2006). For example, among the companies in the research study, transaction costs for offshore projects were approximately 50% of contract value compared to 5% to 10% for domestically outsourced projects (Rottman and Lacity 2006).

Utilizing a captive model may eliminate some of the inherent tensions and management overheads associated with arms length contracting. In an operation based upon a captive model, internal contracting is simpler and less risky, capturing and leveraging knowledge gained in the offshore operation is easier and security and confidentiality concerns can be mitigated (Carmel and Agarwal 2002).

Risks Associated with Business Process Outsourcing

A large-scale survey of domestic IT outsourcing in Australia has indicated that failure rates are substantially higher than has been recognized in the IT outsourcing literature, and that it is uncommon for companies to obtain substantial cost savings from domestic ITO or BPO (defined as being in the range 8%-15%) (Rouse 2002, Rouse and Corbitt 2003). In the context of research into management of risks associated with IT outsourcing, managers making decisions with respect to IT and outsourcing are often overly optimistic (Aubert, Rivard and Patry 2002).

Practitioner sources (e.g. Gartner) report widely varying success rates with offshore ITO and BPO (Rottman and Lacity 2007, Aron and Singh 2005). For example, Rottman and Lacity (2007) report a Gartner survey that found a 50% failure rate for offshore outsourcing initiatives. Rottman and Lacity (2007) also report on a case study involving 21 offshore outsourcing projects conducted over a two-year period by a US-headquartered Biotechnology firm. A number of these projects were not successful in meeting cost, quality and productivity objectives.

The specific risks associated with offshore BPO to India have been addressed by Aron, Clemons and Reddi (2005) who have developed a taxonomy of risks for this activity. Application of the taxonomy suggests that risks associated with BPO to service providers located in India appear to be predominantly the same as those

identified for IT outsourcing in general (Aubert et al 2001, Rouse and Corbitt 2003, Perrin 2007).

Reviewing risks identified in these earlier papers suggests that offshore BPO risks can be summarized as follows:

• Financial (the BPO arrangements will result in additional costs and/or reduced savings)

• Transition and co-ordination costs (linked to financial)

• Managerial attention required (which would be diverted from the firm's core activities to the management of the BPO arrangements, or to resolution of problems with BPO to service providers located in India)

• Loss of critical organizational knowledge (particularly tacit knowledge)

• Security of information

• Service debasement (Perrin 2007)

• Reduced business flexibility

• Vendor or supplier failure to perform BPO services

• Damage to firm's reputation (e.g. loss of Australian jobs, customer disaffection with accents, corruption)

• Exchange rate risk (e.g. adverse movement of Indian Rupee against Australian dollar (note that the cross rate between these two currencies has been stable for 18 months)

- Environmental risk (e.g. violent escalation of violent conflict between India and Pakistan, riots and civil disturbances)

The risk analysis conducted by researchers identified above (e.g. Aubert et al 2001, Aron, Clemons and Reddi 2005, Rouse and Corbitt 2007) appears to assume that the engagement model adopted is arms length contracting. Hence, significant focus is placed on the risks associated with principal-agent issues and incomplete contracts (Aubert et al 2001, Aron, Clemons and Reddi 2005). It is possible that risks associated with these two categories are reduced significantly if a captive model is selected as the BPO engagement model. But it is also likely that the captive model will introduce alternative sources of risk (Ramachand and Voleti 2004, Bhagarva and Bhatia 2005).

RESEARCH METHODOLOGY AND DATA COLLECTION

The practical significance of the research arises from the size of the market for offshore outsourcing of IT and Business Processes, rates of growth and the scale of investment being directed into the sector (Rottman and Lacity 2007, Oshri, Kotlarski and Willcocks 2007). For practitioner executives in many companies, offshore outsourcing is an option that must be evaluated and implemented successfully in order to meet shareholder expectations.

The academic significance of the research arises from the apparent contradiction that the captive model for Business Process Outsourcing appears to be the least researched, but also the most common model (Bhargava and Bhatia, 2005).

The fundamental research question being addressed by the authors is the development of a framework to guide management decision-making by Australian companies conducting offshore BPO to service providers located in India. To provide a broader context and basis for comparison, the authors have also conducted case study research on parent companies based in jurisdictions other than Australia, and on service providers located in host countries other than India.

The authors have been involved in the ITES-BPO sector in India in various ways for several years and have conducted numerous meetings and interviews with Indian service providers and with Australian and global companies that are participating in the sector. Meetings and interviews with Indian service provider companies have been held in Bangalore, Mumbai, Gurgaon and Hyderabad, and also in Melbourne Australia. The authors' research includes both captive operations and also business models based on various forms of "arms length" contracts.

The data utilized in the case studies of British Airways, WNS and ANZ was gathered through interviews conducted over a period of two years with staff and senior management of each firm, in Bangalore, Mumbai and Gurgaon, India and in Perth, Melbourne and Sydney, Australia, together with a review of company documentation and formal presentation material. A number of telephone interviews were also conducted with British Airways staff in the United Kingdom. Data collection has involved approximately 120 hours of interviews. For all interviews, a semi-structured format has been utilized[1].

There were 26 individuals interviewed as part of the case studies on British Airways, WNS and ANZ. Interview subjects included CEO, CIO senior functional executives and managers and staff occupying a range of positions within the two captive operations. Major interviews were recorded, transcribed and written up as a structured narrative which included analysis of what appeared to be key insights from that interview. Participating subjects were provided with a copy of the interview notes in the form of this structured narrative, and were asked to verify accuracy. Some interview subjects returned marked up corrections via email, or added additional information and commentary. In other instances, interview subjects confirmed the accuracy of the notes by email or telephone conversations.

Some individuals were interviewed on multiple occasions in the course of the case study research, in order to seek additional insights, clarify issues arising from earlier interviews, or to track progress with major issues (for example, the IPO of WNS).

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[1] An interview script is available upon request but is not included here due to space limitations.

OFFSHORE BPO UTILISING A "CAPTIVE" BUSINESS MODEL

Because of its potential advantages in terms of creating and leveraging knowledge and intellectual capital, the captive model seems an obvious fit where BPO involves activities that could be classified as knowledge services. The captive model, however, appears to be the least researched.

ANZ's BPO Strategy: Daring to differ from its competitors

Overview

ANZ was founded in 1835 and is now one of the 5 largest companies in Australia and has a market capitalization of approximately $53 billion Australian Dollars (AUD). With assets of $335 billion AUD, ANZ has 1,327 world wide points of representation, over 6 million banking and finance customers and employs more than 34,000 staff. Total shareholder return for the 12 months to 30 September 2006 was 17.1%, FY07 profit was $4.18 billion (www.anz.com.au, November 2007).

ANZ has the highest customer satisfaction of any of the four major Australian banks, the highest level of staff engagement and is expanding rapidly in to Asia. Unlike its Australian banking rivals, which are only now looking to reduce back-office costs through contracts with Indian BPO service providers, ANZ has had a long-standing commitment to source IT and BPO skills in India through its operations based upon a captive model in Bangalore, India.

ANZ has owned a technology business now called ANZ Operations, Technology and Shared Services (OTSS) in Bangalore since 1989. It acquired ANZ OTSS as part of a major acquisition of Grindlays Bank. During the past 18 years, ANZ OTSS has established a specialist capability in developing and managing software and technology for many of ANZ's systems. More recently, ANZ OTSS has developed a significant business processing capability.

Addressing the Trans-Tasman Business Circle in Sydney in November 2007, ANZ Chief Executive Officer Michael Smith announced the further expansion of the ANZ Operations, Technology and Shared Services (OTSS) business unit based in Bangalore.

"My intention is that we'll continue to develop [the] Bangalore [unit] in the coming years, such that it becomes a strategic asset for ANZ in innovation, cost and service. At ANZ, we are committed to keeping our call centers and customer facing roles at home in Australia and New Zealand … but a significant part of our software development and technology support now goes on in Bangalore".

Smith's speech was significant for two reasons. As well as affirming the future of ANZ OTSS in Bangalore, Smith also referred to India as a global leader in innovation, technology and cost competitiveness, noting that

"In a number of technology and operational areas, Indians are some of the most skilled professionals in the world. These are skills which are in chronic short supply in Australia and New Zealand".

Compared to their counterparts in Europe and North America, Australian companies significantly under-participate in offshore outsourcing. Smith was one of the first senior Australian business leaders to acknowledge in a public forum that outsourcing to service providers based in India may be a viable solution to some aspects of Australia's current skills shortages (Smith 2007).

People Management and Organisational Development at ANZ OTSS

Currently, ANZ employs 1,800 people in its Bangalore captive operation. About 1,100 are engaged in IT service, 500 work on business processes such as payroll, accounts payable and mortgage processes and 200 people provide management and administrative support. Approximately 20 staff in the Bangalore operation have relocated from Australia.

ANZ Banking Group plans to continue expanding the scope of its Bangalore operation, increasing staff numbers from the current 1,800 to 2,400 by early 2008, and consolidating its activities into a new facility in 2009.

ANZ regards OTSS not just as a captive ITES operation, but as an "integrated captive" meaning that the bank has set out to create "ANZ in Bangalore" that has fully assimilated the parent company culture. Staff members in Bangalore are given the same corporate and organizational development training as staff in the parent company, and HR policies in Bangalore are the same as in the other parts of the Bank.

Asked to summarize the workplace culture of ANZ OTSS, Managing Director Fred Bertram notes:

> *"There are cultural differences in India, hierarchy is revered and staff members are less prepared to come forward and are unlikely to say no. We are very clear that ANZ OTSS is an Australian organization. We revere the culture here but we remember who we are. We are not here as apologists. We make sure that all staff know about our standards and our values. We spend a lot of time explaining the ANZ brand, and telling staff 'if you see stuff you know will hurt the ANZ brand, you must tell us'".*

While OTSS has been operating for the past 18 years, and it has only been in the last 2 years that the focus has been on adopting the model of a fully integrated captive where ANZ corporate culture is fully integrated. It is this shift in focus over the past 2 years that has enhanced the prospects of OTSS delivering a "demographic dividend" to the parent company by producing a cadre of "cultural agile" staff and managers who are adept in operations and technology and capable of relatively seamless relocation to other parts of the global ANZ Bank.

Business Benefits delivered by ANZ OTSS

ANZ obtains significant reductions in its cost-to-income ratio from the successful performance of the Bangalore operation. As well as IT development and support,

functions performed in Bangalore include back-office processing for credit cards, mortgages, wealth management products and human resources. ANZ executives consider that OTSS delivers a 50% reduction in operational costs associated with the business processes performed in Bangalore. ANZ pays $8000 AUD per annum in Bangalore for an IT graduate; a similar graduate in Melbourne if available would be seeking at least $40,000 - $45,000 AUD (based on data collected in August 2007). Bertram estimates that it will take at least a decade for rising wages in India to erode the benefits obtained from labour cost arbitrage.

ANZ is also seeking strategic benefits from OTSS through a transformational agenda. By co-locating Information Technology, Operations and Shared Services in an environment where there is a critical mass of skilled people focused on continuous improvement it is able to "lift and shift" processes from anywhere within its global operations, deliver immediate cost reductions and then achieve further benefits, including reduced cycle time, through re-engineering of the processes. Strategic agility is enhanced because resources can be freed up to support key aspects of ANZ's growth strategy, such as expansion in Asia.

Compared to most contractual models for offshore outsourcing, ANZ executives believe that the captive model offers important advantages in capturing and leveraging knowledge when the business drivers are transformation and strategic agility.

ANZ also notes the major commitment that its global competitors, such as Citibank, Barclays and Standard Charted Bank have made to the offshore BPO model. ANZ OTSS is expected to be a major contributor to ANZ's goal to be at world's best practice in banking operations by 2008.

Current Risks and Management Challenges for OTSS

As processes are "lifted and shifted" from other parts of ANZ Bank and transferred to the Bangalore operation, the capture, transfer and leverage of tacit knowledge remains a challenge. While the rate of staff turnover at OTSS is much lower than industry

average in Bangalore (which approaches 25%-30% per annum), high rates of attrition can increase risks associated with knowledge management.

Maintaining the engagement of Bangalore staff with the ANZ brand and culture has been a major focus of Bertram and his senior team, and continuing effort in this regard helps keep staff attrition at low levels.

Getting "buy in" and support from business process owners in other parts of ANZ is considered a critical success factor (referred to by Bertram as "selling the Bangalore story"). Clarity of definition of business requirements has been a risk, and senior management mentoring is required to avoid an "us versus them" mentality, which can be reflected in attitudes such as "we'll throw that problem over the wall to the people in Bangalore and see what they make of it".

While OTSS currently delivers a 50% reduction in operational costs associated with the business processes being performed in Bangalore, cost advantages may be reduced in the future due to BPO industry expectations for continued and high increases in salaries. Shortcomings in the Bangalore transport infrastructure can also impact productivity. The strong rise of the Rupee against the USD has so far had little impact due to the strength of the AUD; however, continuing appreciation of the Rupee has the potential to erode cost advantages.

ANZ's Strategic Options with OTSS

ANZ plans to retain ANZ OTSS as an integrated captive so that it will continue to deliver improvement in the parent company's cost to income ratio. It is also an ideal platform to support ANZ's Asian expansion. Having IT, operations and shared services functions sitting side by side generates opportunities for process improvement. Increasingly, OTSS is likely to deliver a demographic dividend by producing "culturally agile" staff and managers who can move from Bangalore into other parts of global ANZ.

As the limits of organic growth are reached in the ITO and BPO industry in India, a mature and well performing operation like OTSS may become an attractive target for acquisition or investment by world-class transnational ITES companies.

ANZ is the only major Australian bank operating a captive BPO operation in India. ANZ OTSS has had opportunities to take on work for other financial services companies, and thus pursue a strategy similar to that adopted by British Airways and GE to build up their formerly wholly-owned Indian BPO centers prior to the introduction of private equity. But ANZ has decided against this strategy.

With ANZ and other competitor banks set to take on major IT challenges over the next 5 years as they replace legacy banking platforms, ANZ considers that the risks are too great that taking on additional work on a commercial basis would become a distraction to staff and management.

According to Bertram, the success of ANZ OTSS has been due to

"history and good timing, a degree of good fortune and a degree of good management; certainly we are further down the offshoring track than any of our Australian competitors".

British Airways successful BPO and ITO to India

Overview:

In 1999, British Airways was in crisis. It had just reported a 50% slump in profits, its worst result since privatization. Faced with intense competitive pressures and low employee morale leading to a sour industrial relations climate, BA was in trouble. In May 2000, Australian Rod Eddington, a former Rhodes Scholar with broad airline industry experience particularly in Asia, was appointed as CEO of British Airways. His strategy was to focus on high yield business travelers, and initially it seemed to work with a strong profit turnaround in his first year. But Eddington couldn't possibly have known what was about to hit the airline industry.

First came the September 11, 2001 attacks on New York and Washington DC and a suspension for a period of Transatlantic flights (a profit engine for BA), together with a number of follow on security incidents. The period immediately following 9/11 proved disastrous for many airlines. This period was followed by the Iraq War, weak demand for air travel especially from higher yield business travelers, steeply rising fuel costs, and an appalling airline industry structure. The global airline industry suffers from very difficult structural fundamentals. It has huge fixed costs, strong labour unions and commodity pricing for its core services. It has a horrendous exposure to rising oil prices – British Airways had a fuel bill in FY 2006 amounting to1.6 billion Great Britain Pounds (GBP). In the USA, Chapter 11 bankruptcy protection and elsewhere hidden State subsidies enable weak competitors to survive and continue flying, depressing returns for all participants.

And yet by 2005, British Airways was the world's most profitable airline. How was this stunning turnaround achieved?

Following a loss of £200m GBP in 2002 on the back of 9/11, CEO Rod Eddington launched the "Future Size and Shape" program aimed at reducing staff numbers by 13,000, closing flights on unprofitable routes, driving complexity out of the business and seeking process improvement and cost efficiency from all parts of the British Airways business. The success of "Future Size and Shape" allowed BA to report a profit of £135m in 2003, despite a decrease in turnover.

Commenting on the 2003 result, Eddington noted that:

"These are good results in one of the toughest [airline industry] years in living memory"

Role of Information Technology in the "Future Size and Shape" Program

Information Technology (IT) played a major role in the "Future Size and Shape" program. One of the first management changes introduced by Eddington was to elevate Chief Information Officer Paul Colby to a "seat at the top table" by having the CIO report to the CEO. This reflected a commitment to use IT to simplify and

automate business processes, particularly in sales and distribution. Eddington's IT credo was

> *"there are no IT projects, there are just business improvement projects in which IT is a critical enabler"*.

Prior to "Future Size and Shape", sales and distribution costs were running at 15%-20% of revenue. A few years later, following the success of the transformation projects enabled by use of IT and offshore outsourcing, sales costs had fallen to single figures as a percentage of revenue.

The selective outsourcing of some aspects of IT services and Business Processes to service providers based in India was an important success factor in the "Future Size and Shape" program. Starting in a small way in 1996, and adopting different strategies for IT services and for Business Process Outsourcing, BA was able to obtain cost savings in the order of 40%-60% from offshore outsourcing (eventually amounting to 100 million GBP per annum), and build its captive BPO operation into a global BPO industry leader.

Starting Small: Business Process Outsourcing (BPO) by British Airways to WNS Global Services

A predecessor of British Airways flew the first scheduled international passenger service between London and Paris in 1919. And another BA predecessor first flew into India in 1928. So when BA commenced offshore Business Process Outsourcing to India in a small way in 1996, it could draw upon almost 70 years of experience of operating in India.

British Airways (BA) started World Network Services (WNS) Private Limited as a fully owned subsidiary in Mumbai, India, in November 1996 with an initial investment of 1 million GBP. BA reported at the time that it could hire more highly qualified staff in India for approximately 20% of the total remuneration cost of similar staff positions in the United Kingdom (Robinson and Kalakota, 2004).

The first business process that was performed in India was passenger-revenue accounting. Marshall (2005) reported that, prior to the impact of the Internet and e-tickets, this operation in 1996 was labour-intensive and involved processing of over 36 million flight coupons.

A key consideration for British Airways was whether to go with an established vendor or to set up British Airways own BPO venture. Marshall (2005) reported that it was decided to set up "Speedwing World Network Services (WNS)" as a wholly-owned operation based upon the captive model, because this would allow BA to exercise greater control, to ensure quality and would promote internal acceptance by BA managers. Marshall (2005) reports that it was felt that since BA would own WNS, internal managers within the airline would have the confidence to accept output from the Indian venture.

While the airline had been using outsourcing companies in the UK, WNS was the first experience of outsourcing business processes overseas. Mumbai and Pune were chosen as the locations because British Airways already flew to Mumbai, and so management and staff were familiar with this part of India (Shaw, 2003). According to Shaw (2003), British Airways chose India for their first foray into offshore BPO because of the quality and depth of Indian staff. Marshall (2005) described the staff hired by WNS as:

   "very well educated, enthusiastic and [with] a great willingness to learn".

From inception, WNS gained a reputation for high quality staff and management, an open, team-oriented work culture and an excellent work environment based on adhering to BA's staff charter. Eddington (2006) believes that creating an excellent work environment pays off in terms of quality of staff output, and this philosophy was adopted at WNS. The BPO strategy also involved rotating long-serving BA managers through WNS in order to leverage knowledge in both directions, and to build up camaraderie and team spirit.

All business processes that were transferred to WNS had a service-level agreement (SLA). This document gave both parties to the transaction targets to work towards,

and also to use as measures of quality and consistency. The SLA also provided clarity on roles and responsibility, and on process "hand offs". The senior management of BA and WNS measured the success of the BPO by the extent to which it lowered the cost of the functions being handled, and by the level of acceptance by internal BA management. Both were considered equally important.

Twelve months after inception, WNS had 350 staff and was delivering 40%-60% cost reductions to the parent company (Shaw, 2003). Additional business processes in financial operations and the BA Executive Club were identified and transferred to WNS, so that by 2002, there were over 1600 staff working in India and WNS had moved to a 24x7 operation, thus providing a platform to perform BPO faster, better, cheaper (Shaw, 2003).

As a result of these initial achievements, BA was able to use the capabilities of WNS to drive further process improvements. For example, the cost and quality of revenue audits performed by WNS were of such high quality and low cost that BA was able to increase revenues by performing more regular audits (Shaw 2003).

However, Eddington (2005, 2006) has emphasized that the benefits of offshore BPO to India go beyond cost saving. The quality of staff and management in the WNS Global Services in India has led to continuing process improvements and productivity gains that go well beyond the benefits of cost reduction through labour arbitrage, noting that:

"The fact that India is four hours ahead of the UK means that our team can this afternoon can work on some of the operational challenges for tomorrow during the course of this afternoon, this evening, and then literally hand off the problem overnight to our people in India. When our people in the UK come back next morning to address the challenge, they'll find that key elements of it have been solved by our people in India."

The success of WNS attracted interest from other airlines that outsourced similar functions, such as revenue accounting and management of Frequent Flyer Programs, to WNS. This diversification of the revenue and customer base in turn

presented BA with opportunities to "monetise" the value that it had created through its captive BPO operation.

With US and global private equity capital pouring into India in the early years of the 21st Century, British Airways took the opportunity to sell down a majority share in WNS to Pincus Warburg in April 2002. British Airways retained a 30% stake in WNS Global Services and continued as a major customer.

On the 26 July 2006, WNS began public trading on the New York Stock Exchange (NYSE), raising $224 million USD and becoming the first "pure-play" BPO company to list on the NYSE. In September 2006, WNS advised investors that its travel services client base included 30 leading airlines and travel agencies, and it also announced a new multi-year contract to provide revenue accounting and audit services for a leading North American airline. The announcement represented a major milestone on the journey from British Airways "captive operation" to one of the world's leading independent BPO companies.

British Airways' Business Process Outsourcing Strategy

In the decade since inception of Speedwing World Network Services as a captive operation, British Airways has played a significant role in the development of the BPO industry in India. British Airways BPO strategy appears to have succeeded at multiple levels in creating social capital; the airline has obtained significant benefits for its core business, it has helped to create a new Business Process Outsourcing industry in India and it harvested value for shareholders through a well-timed introduction of private equity and then an IPO of WNS.

According to former CEO Eddington, BA followed an "emergent" strategy in developing and monetising its BPO assets in India.

"We were learning as we went along. With hindsight, we got most of the big pieces of the offshore BPO strategy right. It helped a great deal that we had been flying to India for more than 70 years; BA understood the Indian environment and people's aspirations. In terms of the strategic choice between

operating through a captive BPO operation or arms length contracts, we reflected at regular intervals about the most appropriate organisation structure to source the right intellectual capital at the most appropriate cost to BA."

British Airways Offshore Information Technology Outsourcing Strategy:

In contrast to its approach to offshore BPO, British Airways pursued offshore IT outsourcing through framework contracts with Indian companies NIIT Technologies and TCS. According to Colby (2005), the framework agreements set in place a pricing structure for offshore application development work and giving BA "on demand" access to the resources in India depending on the internal IT work load. According to Colby (2005), the use by British Airways of offshore resources is primarily about freeing up the internal IT department to focus on core strategy and design work by sending lower-level application development work and programming offshore as and when the need arises.

Citing the design, development and release of a web based booking application as an example of British Airways use of Indian IT services companies, Colby (2005) said:

"It was designed out of London by us, project managed in Newcastle by us and built by TCS in Chennai. But I'd be losing control of how it all fits together if I outsourced the design to Chennai."

Offshore IT outsourcing has been done through arms length contracts, rather than through a captive operation, because BA had long experience in outsourcing aspects of its Information Technology and Telecommunications activities. Using IT service providers located in India was seen as a logical extension of existing IT outsourcing practices rather than a radical departure.

The first experience of IT outsourcing by an Indian service provider was in 1996, when three consultants from NIIT worked on a time and materials basis. Unable to find personnel with skills in the legacy airline software protocol Transaction Processing Facility (TPF) to work on the British Airways Booking System, BA

worked with NIIT Technologies to set up a dedicated skills development centre in Mumbai.

NIIT Group had long been involved in IT education and training in India, and the synergy between the training and software development business units in NIIT have been key drivers in the successful offshore IT outsourcing relationship. In 1999, NIIT set up a dedicated development centre for British Airways. NIIT is given the independence to decide whether to conduct the projects in India or at its UK site in High Wycombe near Heathrow Airport. The stringent service levels that are part of this framework contract have been consistently met or exceeded by NIIT (NIIT Technologies, 2006).

CONCLUSIONS FROM THE ANZ AND BRITISH AIRWAYS CASE STUDIES

According to Bhargava and Bhatia (2006), the decision between adopting a BPO solution based upon the captive model or an arms length contracting engagement model is the most difficult decision in the entire offshoring process.

British Airways and ANZ Bank are global leaders in their respective industry segments and both commenced their outsourcing operations in India with captive operations, decisions that were based on a strong preference to maintain control over their transactions and security of their key data and intellectual property. Over time, the strategic outsourcing paths of the two companies diverged because of different business and industry contexts.

British Airways expanded the scope of its captive operation by taking on BPO work from other companies in the travel sector, introduced private equity and then conducted a successful initial public offering. The resultant independent business, WNS Global Services, is now a world-class provider of BPO services, and BA remains a large client.

GECIS, the offshore BPO arm of global multinational GE Corporation has also followed a similar path to WNS through its journey to Genpact, an independent provider of BPO services that nevertheless retains GE as an important source of business (Sengupta, Gupta and Singh, 2004).

ANZ has considered the same strategic options but adopted a different approach. ANZ has expanded the size of its captive operation in Bangalore to encompass operations, technology and shared services. It has integrated its captive operation more tightly into the parent company, is now taking management talent from the Bangalore unit into other parts of its global business and using it to support its Asian expansion. ANZ is capitalizing on the demographic dividend offered by its Bangalore captive operation.

Both ANZ and BA report that the "bottom line" metric is that offshore BPO improves productivity by at least 40% - 50% if executed successfully. These case studies, and others conducted by the authors, also demonstrate that the business benefits of offshore BPO go well beyond labour cost arbitrage (Penter, Pervan and Wreford, 2007). Perhaps the most valuable benefit has been the infusion of new skills, energy and knowledge of best practice. Other benefits include relieving staff and skill shortages, cycle time reduction and process improvement (Davies 2004, Khan, Curry and Guah 2003).

A tentative conclusion is that ownership of a captive operation has been a key determinant of success with knowledge transfer, which has been recognized as risk factor in offshore BPO (Oshri, Kotlarski and Willcocks, 2007). The captive model appears to have strengths in facilitating development of communication, trust, sharing of intellectual property including tacit knowledge and company trade secrets, and promoting effective conflict resolution, factors which have been identified as contributing to the success of outsourcing arrangements (Perrin and Pervan 2006).

Management of a successful captive operation does present significant challenges. Key risks that need to be managed include high rates of staff attrition and development of a sustainable local management model (Penter, Pervan and Wreford, 2007). Difficulties with local management models arise because of the need to

develop a cadre of managers who exhibit "cultural agility". This refers to the management capability to understand and work effectively within the parent (or client) company culture while also being able to function with similar dexterity in the host country business culture (Hofstede 2001, Wood 2007, Sharma 2007).

While captive ITES operations appear to offer significant advantages in terms of capturing and leveraging knowledge, they also require significant senior management commitment and perseverance over 2-3 years in order to deliver business benefits and mentor the emergence of a cadre of "culturally agile" managers.

Our research has demonstrated that "cultural agility" is a process which works in both directions. Parent company managers acquire necessary insights into the capabilities of staff in the captive operation and the BPO industry in the host country (in these case studies, India). Staff working in the captive operation acquire insights into the formal business processes and tacit knowledge of the parent company. As noted by other researchers (Wood 2007, Sharma 2007), our tentative conclusion is that the process of developing a cadre of "culturally agile" managers appears to change the culture of both the parent and host operation over time; the change may happen more rapidly and more thoroughly in the case of a captive model because the process of developing trust is easier.

Analyzing Differences in BPO Strategy Between British Airways and ANZ

It is possible to identify and analyze the differences in the BPO strategies pursued by BA and ANZ over a decade by identifying key decision points at which the two companies took diverging paths. Our analysis suggests that overall industry structure and the strategic posture adopted by each firm in its industry sector offers significant explanatory power in understanding the choices that were made.

Industry Structure

As described earlier in the paper, British Airways faced extremely difficult structural fundamentals in the global airline industry which for much of the period under study was in crisis. By contrast, ANZ enjoyed a favorable industry structure and strong

economic growth in its core markets in Australia and New Zealand. Using the framework developed by Miles and Snow (1978) for characterizing strategic choices available to individual companies, BA was inevitably a "defender" firm while ANZ can be characterized as an "analyzer/prospector".

As a "defender" firm, BA could be expected to drive its BPO strategy to deliver cost efficiency, and it is consistent with this strategic posture that BA moved progressively away from a wholly-owned captive model to arms length contracting for BPO services in the search for cost reduction. By contrast, as an "analyzer/prospector" firm with a focus on developing new growth markets in Asia, ANZ looked to its captive BPO for a "demographic dividend" at a time when it was facing acute skill shortages in the parent country.

Taking on BPO work for other companies in the same industry

BA elected to take on work from other airlines at its captive BPO center, and thus began to create options for spinning off and monetizing the value it had created. This decision is consistent with the "defender" strategic posture, because a higher volume of work at the captive BPO resulted in lower unit costs for BA at a time when it was relentlessly focused on cost efficiency. ANZ also had opportunities to take on work for other companies in the banking industry, but after evaluating this possibility, elected to maintain the focus of its captive BPO solely on internal work; again this appears consistent with its "analyzer/prospector" strategic posture.

Regulatory and Risk Environment

The airline and banking industries are both highly regulated by national Governments, but the perceived impact of risks associated with offshore BPO is higher in the banking industry. The perceived regulatory and risk issues associated with offshore BPO have been a major influence in decisions by ANZ management to maintain a captive BPO operation.

Skills shortages

For much of the past decade in its headquarters city of Melbourne, Australia ANZ has faced acute shortages of IT and other skilled business professionals. ANZ's captive operation in Bangalore offers the parent company the prospect of a "demographic dividend" in the form of culturally agile managers who have acquired deep knowledge of the bank's business culture and processes. The impact of skills shortages has been a significant factor in influencing ANZ management to develop the Bangalore operation as an integrated captive.

Executive Leadership

The BPO strategy at BA was led and driven by CEO Sir Rod Eddington, who epitomizes the model of a "culturally agile" CEO with a deep understanding of the possibilities of global sourcing. By contrast, until the recent appointment of Michael Smith as a "culturally agile" CEO at ANZ, previous executive leadership teams appeared more strongly focused on management of the regulatory and risk environment.

British Airways, WNS Global Services and ANZ Bank demonstrate that it is possible to sustain business advantage from GDW over a significant period of time and also contribute to the formation of social capital. These case studies have also enabled the development of a theoretical framework for choosing an appropriate ownership and relationship structure and also for guiding management decision-making. The framework is further discussed in Section 6 below.

Factors that lead to Business Process Outsourcing Success

The factors outlined below have been developed from the British Airways and ANZ case studies (and others conducted by the authors) to assist Australian companies that are not yet participating in BPO to service providers located in India to learn rapidly from the experiences of "early adopter" companies. The framework also aims to reduce risks and avoid operational difficulties associated with offshore BPO and to maximize productivity gains.

1. Align offshore BPO strategy with overall firm strategy (in other words, define offshore BPO strategy within overall strategic context for firm)

2. Start with a clear business rationale and definition of "success" for the offshore BPO strategies (e.g. cost saving, alleviate skills and resource shortages, free up internal resources for growth opportunities, transformational outsourcing, etc.)

3. Commit significant leadership and management resources to understanding the Indian context, understanding the BPO market and acquiring knowledge of cultural factors that must be managed to achieve success

4. Focus detailed management attention on the classification of the Business Processes to be outsourced (for example Expert Knowledge Services compared to Rule-Set Processing). Classification of the processes should strongly influence selection of engagement options and also development of a knowledge management strategy for offshore BPO

5. Systematically define and evaluate engagement options that match BPO market capability against the nature of the processes and activities being outsourced, the business objectives for offshore BPO, and the transformational goals (i.e. improvements over time in the cost, quality and functionality of the business processes).

6. Develop a formal Knowledge Management strategy for the offshore BPO project, noting that Indian service providers (or captive operations) can often contribute significant domain expertise and knowledge of global best practice. A key issue is to ensure that tacit knowledge gained over time by the service provider located in India is captured and leveraged (see also factor 15 identified below in respect to a core capabilities model for both company and supplier capabilities)

7. Develop a transition plan for initiating handover of the Business Processes that are being transferred offshore. For example, is it "lift and shift then optimize"

or "optimize business process first" and then transfer? It is valuable to recognize that some service providers in India have a significant track record in process optimization and in the application of rigorous methodologies for ensuring service quality (for example CMM Level 5 for software, six sigma for business processes, etc.)

8. Establish clear objectives and metrics for offshore BPO and implement a Performance Management System for offshore BPO execution that reflects the definition of "success"

9. Conduct a formal risk assessment and risk management process (suggest that this be done according to Australian Standard AS 4360 or equivalent).

10. Validate choice of location in India as part of the initial formal risk assessment, noting that Bangalore is likely to be the preferred location in India for Australian companies

11. Establish governance arrangements for the offshore BPO project; in particular alignment of BPO project objectives with business objectives, optimization of resources committed to BPO project, risk identification and management, alignment and communications mechanisms. Establish clarity regarding decision-making rights that are being transferred to Indian service BPO service provider

    Note: Research evidence suggests that successful BPO projects usually involve transfer of significant decision-making rights to the service provider. A key point is that there should be absolute clarity around decision-making rights.

12. It should be the responsibility of senior management to establish communication and alignment mechanisms between the Australian company and the service provider located in India (which may be a wholly owned subsidiary or captive operation). It is a critical factor to establish relationship quality and trust in the case of an arms length contract with a service provider

located in India, and a sense of "one organization" in the case of a captive operation.

13. Establish realistic expectations about the high level of leadership and management commitment required to achieve success, and the time required to derive significant business benefits from offshore BPO to Indian service providers (e.g. 18 months to 36 months)

14. Develop BPO project over time through a defined series of phases, possibly around the following sequence:

Stage One:	Initial pilot projects in offshore BPO
Stage Two:	Strong focus on "quick wins" such as cost reduction or reducing skills shortages
Stage Three:	Strategic offshore focus (choice of engagement model confirmed and multiple sources of business benefits)

15. Revisit the formal risk management process at regular intervals (say 6-12 months) and address the specific risk of loss of organizational knowledge by adopting a core capabilities model such as that proposed by Feeny, Lacity and Willcocks (2005)

Limitations of the Research

A limitation in this research is that it is focused primarily on two global companies that operate from Australia and United Kingdom, and both companies have pursued one particular BPO model (i.e. captive operation). In addition, it is confined to two industry sectors and is based primarily on qualitative data. Furthermore, the data has been gathered over a relatively limited time span of just over 2 years. However, published case studies on the captive model in offshore BPO are scarce, and the case studies are intended to add to the literature on this currently under-researched area.

Future research will continue to track the evolution of the BPO models at ANZ, British Airways and WNS through longitudinal case studies. Other case studies that are currently underway are gathering data across a broader range of Australian and multinational companies that participate in offshore BPO to service providers located in India. Data is being collected on a wider range of industry sectors, company sizes and on several different BPO models (including both captive operations and also arms length contracting), which will enable cross-case comparisons and results obtained from a range of case studies.

The research is likely to have a bias towards success, as it has been easier to obtain access to senior executives and to corporate information in cases where there is general acknowledgement that the offshore BPO model has delivered business benefits. As noted by Rouse and Corbitt (2003), companies are less willing to provide information and access to projects that are considered to be unsuccessful or experiencing difficulties.

REFERENCES

Aron, R.. and Singh, J. (2005) Getting Offshoring Right, *Harvard Business Review*, 83:12, December 2005, pp 135-143

Aron, R., Clemons, E. and Reddi, S. (2005) Just Right Outsourcing: Understanding and Managing Risk, *Journal of Management Information Systems*, Fall 2005, Vol. 22, No. 2, 37-55.

Aubert, B., Patry, M. and Rivard, S. (2002) Managing IT Outsourcing Risk: Lessons Learned in *Information Systems Outsourcing: Enduring Themes, Emergent Patterns and Future Directions,* R. Hirscheim, A. Heinzl and J. Dibbern (Editors), Springer, Berlin, 155-176.

Bhargava, N. and Bhatia A. (2005) Knowledge Services: Painless Offshoring, URL www.wnsgs.com, Accessed 17 May 2006

Bhargava, N. (2006) Redefining BPO, URL www.wnsgs.com , Accessed 17 May 2006.

Borman, M. (2006) Applying multiple perspectives to the BPO decision: a case study of call centres in Australia, *Journal of Information Technology*, 21 99-115.

Business   Week   (2006)   Offshoring: Spread   the   Gospel,   URL www.businessweek.com., Accessed 27 February 2006.

Carmel, E. and Agarwal, R. (2002) The Maturation of Offshore Sourcing of Information Technology Work, *MIS Quarterly Executive*, 1, 65-79.

Colby, P, 2005, "British Airways Eyes up Indian Suppliers", Downloaded from www.silicon .com/research/specialreports/offshoring/, 19 May 2006.

Davies, P. (2004) *What's This India Business? Offshoring, Outsourcing and the Global Services Revolution*, Nicholas Brearley Publishing, London.

Dibbern, J., Goles, T., Hirschheim, R. and Jayatilaka, B. (2004) Information Systems Outsourcing: A Survey and Analysis of the Literature, *DATA BASE*, 35, 6-102.

Eddington, Sir Rod (2005) Trade and technology: the business response to the new global economy, *Advancing Enterprise 2005 Conference*, London.

Eddington, Sir Rod (2006) Telephone interview conducted from Perth on 18 May 2006.

Feeny, D., Lacity, M. and Willcocks, L. (2003) Business process outsourcing: The promise of the "enterprise partnership" model, URL http://www.templeton.ox.ac.uk/oxiim/bpo.htm , Accessed 28 July 2006.

Feeny, D., Lacity, M. and Willcocks, L.P. (2005) Taking the Measure of Outsourcing Providers, *Sloan Management Review*, 46, 41-48.

Friedman, T.L. (2006) The World is Flat: The Globalised World in the Twenty-First Century, Penguin, London.

Gartner Group, "*Vendors seek clear role in SMB Market*", Gartner Dataquest Report ITSM-NA-MT-0108, 2004. Accessed May 2006

Grant, R. (2005) Offshoring Jobs: US and Australian debates, *Parliamentary Library Research Brief*, Parliament of Australia, Canberra, 14 March 2005

Hofstede, G (2001), *Culture's Consequences: Comparing Values, Behaviours, Institutions and Organisations Across Nations*, Sage Publications, New Delhi

Kaiser, K. and Hawk, S. (2004) Evolution of Offshore Software Development: From Outsourcing to Cosourcing, *MIS Quarterly Executive*, Vol 3, No. 2, June 2004.

Khan, N., Curry, W.L. and Guah, M. (2003) Developing a Model for Offshore Outsourcing, *Ninth Americas Conference on Information Systems*, 996-1003.

Lacity, M., Feeny, D. and Willcocks, L. (2003) Transforming a Back-Office Function: Lessons from BAE Systems' Experience with an Enterprise Partnership", *MIS Quarterly Executive*, 2, 86-103.

Linder, J. (2004) Transformational Outsourcing, *Sloan Management Review*, 45, 52-58

Marshall, R (2005) British Airways Goes to India in 1996, URL www.ciol.com , Accessed 22 May 2006.

McKinsey & Co. (2004) Extending India's Leadership of the Global IT and BPO Industries, URL www.mckinsey.com , Accessed 22 May 2006.

Miles, R., Snow, C., Meyer, A. and Coleman, H. (1978), Organisational Strategy, Structure and Process, *The Academy of Management Review*, Vol 3, No. 3 (July 1978), pp 546-562.

NASSCOM (2007), Overview of the Indian IT Software and Services Sector

NIIT (2006), www.niit-tech.com, downloaded 22 May 2006.

Nilekani, N. (2007), Keynote Address to 2nd International Conference on the Management of Globally Distributed Work, IIM Bangalore, 25-27 July 2007.

Oshri, I, Kotlarsky, J. and Willcocks, L (2007) Managing Dispersed Expertise in IT Offshore Outsourcing: Lessons from Tata Consultancy Services, *MIS Quarterly Executive* Vol 6. No 2 June 2007, 53-65

Perrin, B. and Pervan G. (2006) IT Outsourcing Relationship Management and Performance Measurement System Effectiveness, *Australian Conference on Information Systems*, Adelaide, December 2006.

Penter, K., Pervan G. and Wreford, J. (2007), Case Studies on Repcol and IORAM: Australian Companies that are Creating Shareholder Value through Globally Distributed Work, *2nd International Conference on the Management of Globally Distributed Work*, IIM Bangalore, 25-27 July 2007.

Ramachandran, K. and Voleti S. (2004) Business Process Outsourcing (BPO): Emerging Scenario and Strategic Options for IT-enabled Services, *Vikalpa*, 29.

Raman, R. (2007) Knowledge Process Outsourcing – The Next Big Wave – Can India Have Competitive Advantage? *3rd International Conference on Outsourcing of Information Systems*, Heidelburg, 29-30 May, 2007

Robinson, M. and Kalakota, R. (2004) *Offshore Outsourcing Business Models ROI and Best Practice*, Mivar Press, Inc., Alpharetta.

Rottman, J., and Lacity, M. (2006), Proven Practices for Effectively Offshoring IT Work, *MIT Sloan Management Review*, 47, 3, 56-63.

Rottman, J. and Lacity, M. (2007), Project Attributes and Contextual Explanations of Offshore Outsourcing Outcomes: Evidence from a Client's Perspective, *3rd International Conference on Outsourcing of Information Systems*, Heidelburg, 29-30 May, 2007

Rouse, A. and Corbitt, B. (2002) The Australian Government's Abandoned Infrastructure Outsourcing Program: "fiasco" or relatively typical?, *Proceedings of the 13th Australiasian Conference on Information Systems*, pp 699-710, Victoria University, Melbourne, Australia.

Rouse, A. and Corbitt, B. (2003) Revisiting IT outsourcing risks: Analysis of a survey of Australia's Top 1000 organisations, *14th Australasian Conference on Information Systems* 26-28 November 2003, Perth, Western Australia.

Rouse, A. and Corbitt, B. (2004) IT-supported business process outsourcing (BPO): The good, the bad and the ugly, *Proceedings of 8th Pacific Asia Conference on Information Systems (PACIS)*, Shanghai, China, 8-11 July 2004.

Sengupta, S., Gupta, I. and Singh, S. (2004), The house Jack built … and Jeffrey is about to sell, *Business World India, 11 October 2004*, URL www.businessworldindia.com , Accessed 21 May 2006.

Sharma, R. (2007) Macro and Micro HR Challenges in Globally Distributed Work, Proceedings of *2nd International Conference on the Management of Globally Distributed Work*, IIM Bangalore, 25-27 July 2007.

Shaw, Shaunne, 2003, "Business Process Outsourcing: Is Off-shore right for your Business?", *Presentation to Outsourcing to India: the next step, FT & NASSCOM, 25 November 2003, London.*.

Shukla, A. (2006) Genpact's Gems, *India Today International*, 8 May 2006, 29-33.

Singh, H. (2006) TO GE OR NOT TO GE, *The Financial Express*, 1 April 2005, URL www.financialexpress.com , Accessed 22 May 2006.

Smith, M. (2007) Speech to Trans-Tasman Business Round Table, 26 November 2007, Sydney.

Tas, J. and Sunder S. (2004) Financial services business process outsourcing, *Communications of the ACM*, 47 50-52.

Thakar, A. (2005) Meshing IT and BPO, *Hindu Business Line, 21 March 2005*, URL www.niit.com , Accessed 19 May 2006.

The Economic Times India (2006) Genpact to set up shop in Poland, Philippines, China, *Times News Network*, 19 April 2006, URL www.economictimes.indiatimes.com , Accessed 22 May 2006.

Willcocks, L., Lacity, M., and Cullen, S. (2006) Information Technology Sourcing: Fifteen Years of Learning, *Working Paper Series*, Department of Information Systems, London School of Economics and Political Science, April.

Willcocks, L., Hindle, J., Feeny, D. and Lacity, M. (2004), IT and Business Process Outsourcing: The Knowledge Potential, *Information Systems Management*, Summer 2004, 21,3, 7-15.

Willcocks, L. and Lacity M. (2006) *Global Sourcing of Business and IT Services*, Palgrave, United Kingdom.

Wood, G. (2007) Similarity, Isomorphism or Duality? Recent Evidence on the HRM Policies of MNCs, Proceedings of *2nd International Conference on the Management of Globally Distributed Work*, IIM Bangalore, 25-27 July 2007.

Wreford, J. (2006) Interviews with author, Perth and Bangalore, 8 -12 May 2006, 17-22 August 2006.

ANZ (2007), www.anz.com.au, downloaded 27 November 2007.

Wipro (2007), www.wipro.com, downloaded 27 November 2007.