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"BETTING ON THE HOUSE":
VALUE CREATION BY INSOURCING AT CROWN LIMITED

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Abstract

While the outsourcing of information technology has featured heavily in IS research and practice, the alternative strategy of insourcing has received comparatively little attention. Insourcing is often regarded as the "default" or "do-nothing" scenario. In contrast, this paper explores insourcing as a conscious strategy requiring ongoing management to deliver successful business outcomes. This paper presents a single exploratory case study of insourcing at Crown Limited, an Australian-based international gaming company. It contributes to the literature on insourcing by identifying how Crown has oriented its IT function and processes to drive value from insourcing. This research suggests that insourcing is not about just replicating the practices of external suppliers at less cost. Rather, organisations that choose the insourcing path have alternate sources of value creation, by building on their close proximity to the business to drive innovation and new product growth, and the ability to match IT and business risk to control costs.

1   INTRODUCTION

The choice of whether to outsource or insource is an important decision for organizations. An extensive literature examines the benefits and success factors of IT outsourcing, which is coupled with analysis of the associated risks and hidden costs. The basic premise is that IT outsourcing creates value, although this must be balanced by the costs and potential risks must be mitigated.

However, there is little literature about alternative sources of value creation for organizations that choose not to outsource. Do these organizations simply forgo the benefits of IT outsourcing (say, for some greater organizational or ideological reasons?). Or, are there other, mutually exclusive, sources of value creation that are available that can compensate or even exceed those of IT outsourcing?

This study examines evidence from a single case study of a global international gaming and entertainment company to examine the distinctive value creation that is derived from its decision to insource IT. The case study examines the development of internal IT professional, change and technical skills and capabilities between 1998 and 2008 and the associated sources of value creation.

The study highlights that depending on the extent of insourcing versus outsourcing chosen, the organization will develop different sets of IT capabilities, follow different practices and manage different risks. This suggests that that insourcing is not about just replicating the practices of external suppliers at less cost. Rather, they suggest that organisations that choose the insourcing path have alternative sources of value creation that IT oursourcing. In particular, they can build on their close proximity to the business to drive innovation and new product growth, and leverage their ability to match IT and business risk to control costs.

2   A BRIEF LITERATURE REVIEW

In the past 20 years, IS researchers have studied extensively the potential benefits and risks of outsourcing. It is clear from this research that by leveraging economies of scale, labour specialization, and market discipline outsourcing can, in some circumstances, produce benefits such reduced cost, improved access to technology and skills, and strategic focus (Grover et al. 1996; Dibbern et al. 2004; Cullen et al. 2008). It is also clear that outsourcing introduces transaction costs (Williamson 1986), agency risk (Jensen and Meckling 1976), and coordination costs (Domberger 1998; Klein 2004) that are not present in an insourced IT function.

There is a wealth of research on success factors for organisations pursuing an outsourcing strategy. For example, Gottchalk and Solli-Saether (2005) identify the top three success factors as:

- carefully defining IT needs and managing IT services provided by the vendor;

- creating effective communication with and between stakeholders to secure continued support while balancing their interests and making the IT outsourcing arrangement so that all stakeholders achieve their goals; and,

- integrating and exploiting IT services from the vendor in a cost-effective way to produce competitive goods and services.

However, there little research on success factors for organisations that have chosen to pursue an insourcing strategy. IT insourcing is often seen as the "default" or "do-nothing" option. However, to be successful, insourcing must often achieve similar outcomes of reduced costs, improved access to technology and skills, and strategic focus (Lacity and Willcocks 1998; Ang and Straub 1998; Straub et al. 2008).

This paper contributes to the insourcing literature by identifying sources of value creation and success factors that appear to have contributed to insourcing success at Crown Limited during the ten-year period 1998 and 2008.

3   METHODOLOGY

Crown Limited was selected as a successful fully insourced IT function that has delivered strong internal IT and project capabilities, innovative new business products, and globally competitive IT systems in support of its growth aspirations for the past decade. It is especially interesting because the decision to insource was made by a CIO who, prior to joining Crown in 1998, was a senior manager within an IT outsourcing company. As such, he made the decision to insource whilst being fully conversant with both alternate sourcing practices.

This case study below is based on six interviews of around one hour each with five senior managers from Crown between February 2008 and May 2008. The research was supplemented with access to public information such as annual reports, news releases, presentations to annual general meetings and stock-market analysts, newspaper reports, and some internal reports. Two of these interviews were with the CIO, Ric Lamb. Another four were with the CIO's direct reports, including one who also reports to the gaming business. A discussion was also held with the head of the gaming business. Interviews were audio recorded, transcribed, and compared to the other sources to assemble and organize the information presented below. The authors are grateful to the six managers who shared their insights and experiences with us.

4   INSOURCING AT CROWN LIMITED

4.1   Business Context

Crown Limited is a gaming company with its origins as a part of Publishing and Broadcasting Limited (PBL), an Australian icon and defining force in Australian television and media. After its acquisition by PBL for $1.8Bn in 1999, Crown quickly became one of the largest arms of the PBL empire, making up more than 40 percent of PBL's total revenues. Crown Limited started with a temporary casino in 1994, developing the Crown casino and recently expanded entertainment complex in Melbourne in 1996 (Figure 1). It then acquired the Burswood Casino in 2004. From there, the company has invested in multiple additional projects, including the $260 million Crown Macau (Figure 2) and the $1.4bn City of Dreams also in Macau. The latter was the biggest investment by an Australian company in China at that time (DFAT 2007).

On 8th May 2007, PBL announced its split into two publicly listed companies, a gaming company ('Crown') and a media company ('Consolidated Media Holdings' to provide the capital and flexibility necessary for the company to achieve its ambition to expand its international gaming interest. Since the de-merger, Crown is oriented towards building a position as a global provider of gaming services. Its head office is in the Crown Casino premises in Melbourne.

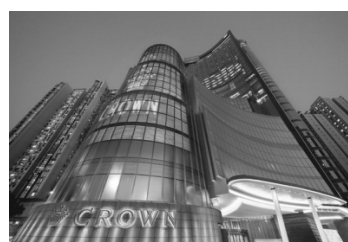|	
Figure 1: Crown Melbourne: Third Hotel	Figure 2: Crown Macau

Source: Crown (2008)

In its most recent half-yearly results in 2010, Crown Limited reported revenues for the first half year of approximately $1.2 billion, with a net profit of $115m (Crown 2010). Crown has one of the strongest balance sheets of any gaming company in the world, it sees long-term potential for growth in Macau given its exposure to China, which is reflected in strong growth since 2009.

4.2   Information Technology Context

Crown's IT scope includes 'front of house' – table and slot machine management control and bank systems; and 'back-of-house' – food, beverage, hotel management, security, and car parking systems. These are integrated into the loyalty tracking, patron management, and VIP management system. When a patron sticks their card in to a machine, it recognises them and gathers earning information, which then provides rewards such as car parking, dining and event tickets.

Lamb describes Crown as a 'taker' of off-the-shelf packages for most solutions, except in gaming where IT in Crown also does its own development for its casino management system, CMS.

When Crown was setup in 1994, it included the rights to the source-code for a solution written by the consultants assisting them. The system was for a US casino, but Crown tailored it for the local market and regulations. In addition, as Lamb points out, 'While every casino has similar functional requirements, Crown is unique in that we are very much a high-roller casino'. Crown has approximately 12% of the high rollers world market.

The IT department has further developed CMS over the past 14 years. While the gaming industry packaged solutions are dominated by a small number of suppliers who focused on the needs of larger casinos in Los Vegas, Crown has continued to develop its own solution, capturing ideas from people coming from other casinos, in Australian and internationally.

This created very strong demand and very rich functionality. Despite the associated complexity, the CMS is regarded as one of the most state of the art casino management systems in the world. Crown has continued to benchmark themselves against leading packages each year, meeting with key suppliers and evaluating their offerings.

When they recently opened Crown Macau and considered whether to implement CMS or buy a package, the key functionality around high-rollers was still superior. However, commercially available packages are now catching-up with some functions within CMS. To position Crown to be able to selectively use these packages as they become available, the Head of applications development is in the process of de-coupling the systems using services oriented architecture (SOA):

> So when we first started it was very integrated. Now we're de-coupling the systems so that our table automation system is now separated from our casino management system. This means that we can now go out and purchase an off-the-shelf system, which may not have our great table automation component, but we can still link it up.

Crown has a reputation in the gaming industry as an innovator and good user of IT. A successful example of an innovation at Crown was the development of a semi-automated table-game, 'Rapid-Roulette'. The idea was born between the IT function and the gaming business, and was developed in a joint venture with gaming supplier, StarGames. Rapid-Roulette, and all its derivatives, is now a worldwide product, installed in over ten countries and providing ongoing royalties to Crown.

Describing the business problem, Lamb explains:

> From a revenue generation perspective, if we were able to get more efficient – very simply if we could move spins per hour from 30 to 60 – in theory, you could double the revenue on roulette.

While Crown had the internal development skills, they didn't have the capability to build the hardware. They approached a small Australian slot manufacturer, StarGames and created a joint venture, securing local and international patents. Crown developed a prototype, which:

> We then went on to version 2 and now we are at version 5 or 6. We have now built Rapid Big Wheel, and we are looking at Rapid Blackjack. They also brought in the fully automated machine for jurisdictions that we didn't have. That's been even more successful.

Richard Longhurst COO Gaming states:

> Rapid Roulette an example of an operating department successfully partnering with IT and a manufacturer to produce a world class product.

4.3 Crown Information Technology

Crown Information Technology has been led by Lamb since May 1998. When Lamb joined Crown, there was a strategy in place to commercialise the IT function to provide IT services to many gaming companies.

> The IT organization was half way out the door. They had set up a separate company and moved all the IT people into it. They were looking to sell services back to Crown and to other casinos around the world. In fact, they were already doing some work for a casino in Connecticut.

Lamb had come to Crown Limited from the IT subsidiary of a large Australian mining company, which did about 30% of its work outside its parent organization.

> One day they would beat on you because you weren't doing enough external work, and then the next they would say you aren't focused on the core business…Or you would hook something really big and be reeling it in and they say: Oh, that's too big – cut it off

His view in Crown was that the parent organization was tolerating IT more than supporting it, and the team was achieving only through sweated labour and working weekends. The first thing Lamb did was to transfer them back to Crown.

Lamb describes the culture when he started as a 'hero' culture. The IT department had started in 1994 with only six people. At that time its job was to set up the temporary casino as fast as possible, as well work on the $2 billion permanent casino:

> There were people who worked enormously hard with an unbelievable work ethic to get this place open. But they didn't have any process.

Lamb immediately set about developing the necessary professional IT management skills, project-management capabilities and ensuring he had the necessary technical capabilities. The team is now approximately 65 people. Key functions are shown in Figure 3.
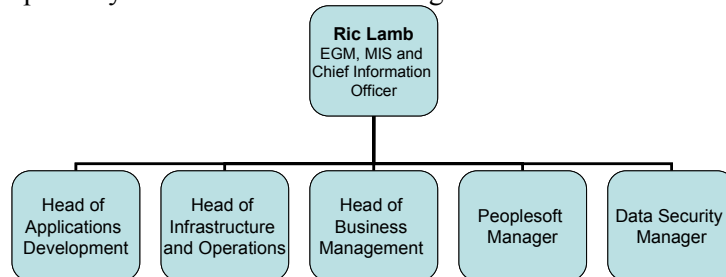

Figure 3: Crown Limited IT Management Team – 2008

4.4 Building Internal IT Capabilities

4.4.1 Professional skills

The professional IT skills included delivery of IT infrastructure and applications, as well as interfacing with the business. Lamb started by appointing a Head of Infrastructure and Operations, who now manages approximately 30 people, as well as being responsible for the small number of suppliers on contract around the network and monitoring to set the processes:

> People needed to understand there are other ways of doing this than just charging at it like a bull

Lamb also hired a new Head of Applications Development, who was previously with a local software development company. This introduced formal requirements and cost estimation with the business:

> He was rigorous in defining this is the way we are going to do it, the design, and what the business is going to pay it. Although they would say, even if it was a small change, 'Why should it cost that much?' But, the reality is, it costs that much, where the guy before wouldn't even charge them.

On the business-systems side, Lamb inherited one of the early IT employees, Peter Herring, who he appointed as Head of Business Relationship Management. This manager has since taken a position in the gaming part of the business as general manager for product strategy for gaming machines. He

formed good relationship with the business and is viewed as a leader in the organisation on gaming issues. Says Lamb:

> He is an idea generator for us, embedded in the business, seeing problems that need to be solved.

Herring describes his transition from his early IT roles, from a starting point where there was little prioritization, to eventually helping shape focus and shape strategic business growth. In the first phase in 1998, he relocated with the business:

> It was more to be the account representative, or traffic cop, to understand which things are a priority to the business and try to get them developed quicker.

The second phase was:

> … to help users better understand the applications that already existed. The role morphed into starting to question the business on why they actually wanted that bit of information. No one had asked the question: Did you know you can get this information in another way?

The final stage of maturity for the role was extending from an IT account management perspective to a strategic business perspective of how to grow the business:

> How are we going to grow revenue? What are the big-ticket items? What are the major issues that are facing the (Gaming) department?

4.4.2 Project and change skills

Delivery has been a constant focus. Describing his arrival at Crown, Lamb was also 'bound and determined' that he would be a master of his own destiny:

> One of the competencies I didn't see a lot of was good project management. I have championed developing people to manage projects better. That meant I wasn't going to outsource projects. I own the projects and I carry the risk of delivering that project.

This doesn't mean that he does not use external resources:

> I have been quite happy picking up individual people to work on projects and skill sets that I need to work on projects. I've built relationships with certain suppliers who can support this because they understand that they are never going to own the projects. I'm not asking them to take the risk of the project.

Crown operates its development processes to CMM Level 2. As described by the Head of Applications Development: 'This is sufficient for Crown and what's best for the organisation. We have repeatable process: requirements, project management, testing, contract management...' He sees this as optimal for Crown. If Crown were to go up a level:

> We'd have to put more rigorous controls around process. We'd probably have to start separating some areas: configuration management team, internal testing… So, this would take considerably more time. At Crown, we're accepting a certain level of risk to meet certain times frames or to be more competitive.

4.4.3 Technical skills

Lamb has a strong internal recruitment program, selection people from the gaming floor or food and beverage areas. Often these people are finishing their degrees and already have relationships in the business and are very loyal. Examples of this were prominent in the interviews conducted as part of this research, for example:

> I just picked up a person off the gaming floor. She has got a PhD in IT. Another senior person had 15 years at a bank in a very senior job, had a baby and thought she would like to work part time as a dealer and loved it. One day she knocked on our door and said: I think I'm ready for IT.

At Crown, Lamb requires his team to be connected with the business:

> There is more customer focus, awareness of the customer – both the internal and the eventual customer. They need to be able to relate to people: to manage expectations, to be accountable, to deliver on commitments, to keep in touch with people – no surprises, and be able to work in teams.

As a small IT shop, Lamb's Head of Applications is quick to highlight the combination of technical and soft skills that is required to work at Crown:

> Our high performing developers are probably multi-skilled. Although they might have programming skills, they also have the analyst capability because they need to interact with the business to deliver solutions.

4.5   Looking To the Future

As Lamb considers the sourcing decisions for the future, innovative capability to drive revenue growth is in the forefront of his mind:

> It's an ongoing process to identify the need within the business, identify the big drivers from a margin perspective or top line revenue, and then use the IT department within Crown or external IT companies to help drive shareholder value.

Interestingly, Lamb is increasingly servicing multiple casinos; each one owned differently (Burswood 100%; Macao, 37%; Canada, 50%). This draws his IT department closer to becoming an IT service provider for these other casinos. Lamb may soon be faced with the same choices as he walked in the door in 1998. For example, whether to operate the Crown IT function as a service provider to the multiple entities, or whether he replicates his in-house model within each Casino.

5   DISCUSSION

A strong feature of this case is the level of business focus and understanding portrayed by the key players. Their focus is on positioning of Crown's business at the forefront of its competitors using technology. In doing so they have co-developed innovative new products, maintained and further developed a world-class casino management system, and integrated many other packaged solutions.

While Crown has chosen an insourcing strategy, it is still constantly aware of the need to perform better than the outsourcing alternative. There is little evidence in the case that suggests that Crown feels it is either disadvantaged or constrained because of its insourcing strategy. Rather, at any point in time, they expect the IT function to be able to deliver and integrate the best solution available from around the world, or, solve the problem themselves. Lamb has structured the IT function combination of IT skills and capabilities to drive value from insourcing. Crown's insourcing practices tailor processes and skills to ensure cost-effective yet successful delivery of IT services.

IT Professional Skills. Lamb provides the leadership that positions working in IT in Crown as "being part of the business", rather than "working in IT as part of Crown". Structurally, IT is set up as another business function rather than a service provider. People sit within the revenue generating part of the business and work to understand issues and develop ideas. IT only charges discretionary work back to the business, where it is subject to normal business decision processes.

IT at Crown seeks to free the business from the constraints of established products and existing practices to deliver new innovative solutions that are not otherwise available form the market. In a broader IT industry environment that often espouses fitting the business to existing packages, the Crown IT function advocates "strategy for the business first, then look at it from a technology perspective" – what can be achieved and how? Crown seeks, where appropriate competitive advantage from ongoing development of its own systems. Further, it monitors this advantage relative to market developments to be able to respond or revisit these capabilities over time.

Change and project skills. Lamb's team takes accountability for project delivery and only uses external resources where appropriate. For the delivery of IT services, Crown establish the internal IT processes that match the business' desired risk-reward, cost and time tradeoffs. For example, Crown sees CMM level 2 as optimal for its business needs and risk appetite.

Technical Skills. Lamb has contained costs by having multi-skilled staff; selectively bringing in specialty resources only when needed; working with the business on the highest value-adding IT development functions, and recruiting, developing and retaining staff from the business. Crown recruits staff from the gaming floor and other parts of the business where there is a strong pool of people undertaking further study. It develops their IT skills while capturing their close business links and company loyalty.

Rather than trying just to emulate the practices that would be expected from external suppliers, Lamb has pursued practices that leverage the strengths of insourcing and his internal capabilities to drive the strategic use of IT within Crown.

Crown IT has three key strengths from insourcing that it leverages to drive business value. The first is its proximity to the business. Insourcing presents few barriers to building relationships with the business, whereas outsourcing requires significant processes and ongoing efforts to align stakeholder interests. Crown's insourcing strategy has made it easy to embed IT as part of the business and deliver innovation. Within Crown's growth environment, where requirements are often uncertain, this has facilitated strong alignment of technology and strategy. In a mature environment, perhaps focused on controlling cost, this advantage may be less pronounced.

The second strength of insourcing at Crown is their ability to match IT risk and business risk. Insourcing enables the IT function to match risk in accordance with business demands and appetite, whereas outsourcers must often adopt a lower risk profile to protect themselves against commercial risk and legal liability.

The third strength evident in this case study is that Crown IT is the strong loyalty of its IT staff, which is driven in part by recruiting graduates from the gaming floor and leveraging the brand to recruit and retain people. This is amplified by the strict licensing requirement in this case, although other organisations may have other cultural strengths that can be leveraged.

6 CONCLUSION

This exploratory case study has identified how Crown has developed its IT function to deliver insourced services that drive the strategic use of IT across the business. This paper demonstrates that an insourcing strategy is not simply a "default" or "do-nothing" strategy. Rather, successful insourcing requires ongoing proactive management to both deliver organisational goals and remain competitive to outsourcing. Organisations that choose to insource must shape their internal IT skills and exploit their strengths, which include close alignment with the business and the ability to match IT and business risk.

References

Ang, S. and Straub, D. (1998). "Production and Transaction Economies and IS Outsourcing: A Study of the U.S. Banking Industry," MIS Quarterly, Vol. 22(4), pp. 535-552.

Crown (2010) Half Rear Results presentation http://www.crownlimited.com/Assets/Files/ASX Half Year Results 2010 Announcement (Presentation Slides).pdf, accessed 24 Feb 2010.

Dibbern, T., Goles, R., Hirschheim, B., & Jayatilaka, B. (2004). Information Systems Outsourcing: A Survey and Analysis of the Literature. The Data Base for Advances in Information Systems, Vol. 35(4), 6-102.

DiRomualdo, A. and Gurbaxani, V. (1998). "Strategic Intent for IT Outsourcing," Sloan Management Review, Vol. 39(4), pp. 67-80

DFAT Macau Brief - January 2007. Australian Government - Department of Foreign Affairs and Trade. http://www.dfat.gov.au/geo/macau/macau_brief.html accessed 18/06/08

Domberger, S. (1998) The Contracting Organization: A Strategic Guide to Outsourcing, Oxford University Press, Oxford.

Grover, V., Cheon M. and Teng J. (1996) "The Effect of Service Quality and Partnership on the Outsourcing of Information Systems Functions", Journal of Management Information Systems, Vol. 12(4), Spring, 89-116.

Gottschalk, P. and Solli-Sæther, H. (2005). Critical success factors from IT outsourcing theories: An empirical study. Industrial Management & Data Systems, 105(6), 685-702.

Jensen, M., Meckling, W. (1976), "Theory of the firm: Managerial Behavior, Agency Costs, and Ownership Structure", Journal of Financial Economics, Vol. 3. pp. 305 - 360.

Klein, P. (2004) "The make-or-buy decision: Lessons from Empirical Studies", Working Paper No. 2004-07, Contracting and Organizations Research Institute, University of Missouri – Columbia.

Lacity, M., and Willcocks, L. (1998) "An Empirical Investigation Of Information Technology Sourcing Practices: Lessons From Experience," MIS Quarterly, September, Vol. 22(3), pp. 363-408.

Straub, D. Weill, P. and Schwaig, K. (2008) "Strategic dependence on the IT resource and outsourcing: A test of the Strategic Control Model", Information Systems Frontiers, Vol. 19, pp. 195-210.

Williamson O., Economic Organization, Brighton: Wheatsheaf Books, 1986.