

Does privatisation drive innovation? Business model innovation through stakeholder viewpoints: the case of Sydney Airport 10 years post-privatisation

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Abstract

Broad economic and social reform, rapid technological change and increasing global competition have meant that organisations must consider all aspects of their business model in order to successfully create and capture ongoing customer value. In this study it is proposed that business model innovation must always consider and incorporate the symbiotic and interdependent relationship that stakeholders have with an organisation. One particular aspect of economic reform, privatisation, has become an important driver of economic growth in many economies, particularly when linked with the rapid growth of air travel. Privatisation of an airport can generate a radical change in the overall business model for the airport owner and the various stakeholders involved in the operation of the airport. Sydney Airport has restructured its overarching business model to meet the demands of stakeholders. Using feedback from key stakeholders, this research examines the generally accepted view that airport privatisation leads to an improvement in airport performance. Chesbrough's Business Model Framework provides a lens to assist the analysis of Sydney Airport operations before and after privatisation, and provides valuable insights into the impact of privatisation on business model innovation.

Keywords: airport performance, airport privatisation, stakeholders, business model innovation, value capture, value creation

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INTRODUCTION

The study of business models is a relatively recent development in management research and has limited underpinning theory. Some authors have described business models as the organisational and financial 'architecture' of a business (Chesbrough & Rosenbloom, 2002). Others have argued that

Business models are not recipes or scientific models or scale and role models, but can play any – or all – of these different roles for different firms and for different purposes: and will often play multiple roles at the same time. (Baden-Fuller & Morgan, 2010)

Most usefully, Teece (2010) puts customer value at the centre of his definition in stating that 'A business model articulates the logic and provides data and other evidence that demonstrates how a business creates and delivers value to customers'. Business model innovation, then, can by itself create competitive advantages and make organisations stand out in the market. The present business environment has amplified the need to not only address changing customer needs when focusing on

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creating customer value, but to always consider possible business model innovation in order to successfully profit from improved customer value, and to address other key stakeholder needs. This recognises the existing symbiotic and interdependent relationship that stakeholders have with the organisation.

Over the past decade the stakeholder concept has become broadly defined by the recognition of the existence of multiple parties having a legitimate interest or stake in the business (Brenner, 1995; Donaldson & Preston, 1995; Nasi, 1995; Donaldson, 2002; Friedman & Miles, 2002; Atrill, Mclaney, Harvey, & Jenner, 2006). As recognised in the literature, organisations play an increasingly important role in society, in not only supporting a nation's economic growth but as clusters of individuals who work together in the transformation process of goods and services (Ansoff, 1965; Andrews, 1971; Porter, 1990; Watson, 1993; Bantel & Osborn, 1995). Stakeholders are affected by the achievements of an organisation, have a stake in the organisation and according to Wicks, Gilbert, and Freeman (1994) define the existence of the organisation. It is the stakeholders who can impact upon or who are impacted by changes in an organisation's direction (Brenner, 1995: 76). Hence, as it is stakeholders that are in a relationship with the organisation; businesses depend on, consist of and rely on this symbiotic relationship with key stakeholders. In addition, social, political and technological developments in the global economy reinforce the constant need for businesses to review and extend their value proposition to increasingly sophisticated global customers (Teece, 2010; Gordon, 2011; Koen, Bertels, & Elsum, 2011).

The question that drives this study concerns business models and the impact of privatisation on airport innovation and performance from stakeholder views. Airports were initially established with the objective of serving the interests of the community and society. Privatisation of an airport generates a radical change in the overall business model for the airport owner and the various stakeholders involved in the operation of the airport. Hence, it is proposed that a privatised airport has re-orientated its dominant business model to meet the demands of stakeholders. Sydney Airport, in particular, was chosen for this study as it was the largest and most controversial privatisation of an Australian airport with ongoing contention over its commercial orientation. The performance measurement and business model changes at Sydney Airport 10 years following privatisation are explored in this study.

Australia, like many developed nations, is experiencing ongoing privatisation reforms driven by both State and Federal governments. These policies have been generally accepted by the public, although there is a growing body of concern around 'selling the farm' issues. Thus, it is important to assess the impact of such reforms on organisational operation and performance, especially in these days of increasing acknowledgement of the importance of stakeholders. Parker (2003), Schipke (2001) and others (Snyder & Poole, 1993; Emmons, 2000; Wright, 2000; Funnell, 2001; Tsamenyi, Onumah, & Tetteh-Kumah, 2010) suggest that privatisation leads to greater efficiency in the production of public sector goods and services. There is, however, little evidence of (a) what the impact of the implemented privatisation reforms is on stakeholder operations and (b) whether the underpinning reasoning and philosophical claims of privatisation such as increased efficiency, profitability and commercialisation are correct.

Airports all over the world are expanding and improving their operations in order to maintain a strong and competitive position. In post-privatisation mode airport operations rely very much upon the symbiotic and interdependent relationship of multiple stakeholders (Zakrzewski, 2008). The alignment of stakeholders with the new contemporary role of the airport is proposed to have led to changes and innovation of an airport's business model and improved airport performance. Thus, how innovative are airports in meeting stakeholder demands? A major airport is a complex mix of many different organisations and structures that need to operate as an efficient unit to satisfy the requirements of the many stakeholders involved in the airports' overall delivery of services. Airport privatisation has had an impact on the operations of airport stakeholders due to the changed airport

positioning from purely focusing on passenger facilitation towards a more commercial bottom-line approach.

This paper explores the changes in airport innovation driven by privatisation at Sydney Airport, Australia's largest airport, through the application of Chesbrough's definition of a business model. Chesbrough (2007) claimed that a business model has two functions (i) value creation: through the definition of a series of activities that yield new products and services in such a way that net value is created and (ii) value capture: through the capturing of value from a portion of those activities for the organisation developing and operating it.

The value created is reflected by the investment in infrastructure and airport land development, the overall facilitation of a better passenger experience, the airport operator's engagement and perceived partnership role in the local community, the acknowledged interdependency of stakeholder operations and the investor's role in marketing the airport.

The research findings are also in line with Zott and Amit (2010) who built on existing business model literature (Magretta, 2002; Chesbrough & Rosenbloom, 2002; Willemstein, van der Valk, & Meeus, 2007; Johnson, Christensen, & Kagermann, 2008; Zott & Amit, 2008) and conceptualised a firm's business model as a system of interdependent activities that aims to deliver value to its stakeholders. Privatised airports have re-orientated themselves to meet the demands of stakeholders, including consumers, investors, suppliers and regulators. This research accepts the findings of previous research that private firms are accountable to their stakeholders and need to meet stakeholder information needs (Currie, 1987; Lee, 1999; Walker, Clarke, & Dean, 2000). Our research also accepts the argument that a firm is not solely responsible to its shareholders but to all of its stakeholders who are affected by the business (Freeman, 1984; Freeman & Evan, 1990; Clarkson, 1995; Mitchell, Agle, & Wood, 1997; Donaldson, 2002).

The paper is organised as follows: the background to organisational theory in the context of business model and stakeholder importance is provided. This is followed by discussing the rationale of privatisation and, in particular, the Australian airport privatisation, with a focus on Sydney Airport. Later, the research design and framework is described and discussed. In conclusion, the findings of stakeholder views on airport privatisation and the changes in the airport's business model are discussed.

LITERATURE REVIEW

The organisation and business models

In terms of accepted types of innovation, the privatisation of an airport definitely falls within the category of discontinuous innovation (Tidd, Bessant, & Pavitt, 2005; Gertsen, Sloan, Chapman, & Kyvsgaard, 2007) and utilising Tidd, Bessant, and Pavitt (2005) classification of the innovation space, involves a mixture of 'position' and 'paradigm' innovation. Here, 'position' innovation refers to changes in the context in which the product or service are delivered or introduced and 'paradigm' innovation refers to changes in the underlying mental models framing what the organisation does (Tidd, Bessant, & Pavitt, 2005). Other authors (Magretta, 2002; Moller, Rajala, & Westerlund, 2008; Teece, 2010; Zott & Amit, 2010) have referred to the latter as business model innovation, although there is clearly some overlap of this term with both position and paradigm innovation from Tidd et al.'s classification. Chesbrough (2010) asserts that business model innovation represents significant opportunities and challenges for firms seizing market opportunities, in particular, for established firms (Koen, Bertels, & Elsum, 2011).

A major airport is a complex mix of many different organisations and structures that need to operate as an efficient unit to satisfy the requirements of the many stakeholders involved in the airport's overall delivery of services. Moving from a government-controlled and operated entity focusing on passenger facilitation to a privately owned and operated facility (albeit with a relatively high degree of

government regulation and reporting) forces considerable changes in the focus and approach of the many organisations involved in the airport operation. Once the primary function of an airport changes from facilitating passenger throughput towards maximising shareholder returns, commercial development and increasing passenger numbers, then the business models of the many organisations involved must change dramatically. A focus on co-development between individual organisations (Chesbrough & Schwartz, 2007) and openness to ideas from partner organisations for innovation and efficiency improvement becomes crucial. In other words, the airport must move towards an open innovation model. Further, a move towards collaborative service innovation models becomes necessary, rather than solely client- or provider-driven innovation (Moller, Rajala, & Westerlund, 2008).

So, applying Chesbrough's definition of a business model to an airport consisting of a complex mix of organisations and systems, which organisations, or components of organisations, create the value, and which capture the value? Further, how does privatisation impact on this business model? This paper will try to address these questions through examining the impacts of privatisation on the key stakeholders in the airport operation.

Airport privatisation in Australia

State-owned assets are generally transferred into private ownership for one or more of the following reasons: to reduce government involvement in industry (Beesley, 1992; Haskel & Szymanski, 1993); to improve efficiency through commercially focused management (Vickers & Yarrow, 1995; Wu & Parker, 1998); to reduce the financial burden on government (Newberry & Pallot, 2003; Parker, 2003); and to provide access to private investment (Meggison, Nash, & Van Randenborgh, 1994; Emmons, 2000; Fairbrother, Paddon, & Teicher, 2002). These reasons are equally applicable to the privatisation of nation's key strategic assets such as airports, and more than 80 countries have introduced some form of privatisation or commercialisation of airports since 1980 (Schneiderbauer & Feldman, 1998; Enright & Ng, 2001; Humphreys & Francis, 2002).

Before 1980, national governments funded most airport operations worldwide, so airport management was controlled and was held accountable to state authorities, the major stakeholder. Airport management and operation were dependent upon the amount of capital investment available from the public sector to foster airport growth. However, public sector funds became scarce for airport expansion due to governments focusing on more political targets such as spending on education and health (Doganis, 1992; Poole, 1994; Sharp, 1996). The globalisation and deregulation of the air transport industry prompted changes in the aviation sector. The increasing demand for air transport resulted in the need of (a) new infrastructure and (b) the adoption of a more business-like philosophy of airport operations (Graham, 2003; Airports Council International, 2005); making airports an attractive and lucrative investment opportunity offering high returns with moderate risk (Enright & Ng, 2001; Francis, Fry, & Humphreys, 2001; Ferguson, 2005; Myer, 2005; Booth, 2008). It is therefore suggested that privatisation is not to be regarded as rescue reform but as a transformation process of public attitudes towards economic responsibility, customer orientation and corporate as well as individual accountability to the economy as a whole (Parker, 1994; Vickers & Yarrow, 1995; Schipke, 2001; Cohen, 2005).

Triggered by the country's discovered potential as a tourist destination and by pressure from global liberalisation reforms on the aviation industry, Federal and State government in Australia decided to privatise all 22 airports of the Federal Airport Corporation (FAC). Melbourne, Perth and Brisbane airports were privatised in 1996, 15 other regional airports in 1997, followed by Sydney Airport in 2002 (Cousins, 1996; Dinnison, 1996; Knibb, 1999). It was argued that the sum of investment needed for these core publicly owned assets to achieve international standards to maintain their competitiveness, imposed financial barriers for the Federal government to run the airport business

efficiently (McGhee, 1996; Sharp, 1996). The Australian federal airports have been leased via a trade sale for 50 years with an extension of 29 more years. Foreign ownership was limited to 49% as airports are strategic assets in nature; and airline ownership was limited to 5% to protect the independence of the hubs (Ashford, Stanton, & Moore, 1997; Knibb, 1999; Graham, 2003).

Industry sources have stated that airport privatisation has led to increased innovative management skills, increased stakeholder involvement and allowed for private capital sources to fund infrastructure and commercial development (Zakrzewski, 2009). To date airport operators claim that the Australian privatisation reforms of the air transport industry have added value to international airport operations. Air travellers obtain a higher level of service, airport operators profit from commercial revenue streams and new industry players have emerged and established their niche in the market (Doganis, 1992; Humphreys & Francis, 2002; Graham, 2003).

However, opponents of neo-capitalism policies have voiced reservations about the 'new role' of airports in society. Accountability and public welfare were, according to Vasigh and Haririan (1996) and DeNeufville (1999), the pre-privatisation prime concerns. Initially, Sydney Airport privatisation was criticised due to being an airport confined by environmental problems, politics and congestion dilemmas (Ballantyne, 1997; Feldman, 2001). Other pre-privatisation concerns are expressed in the literature related to private operators not improving infrastructure or services and charging excessive airport charges (DeNeufville, 1999). Further, doubts have been expressed regarding corporate strategy being driven by the bottom line, and the lack of incentives for the private sector to make long-term investments. According to Emmons (2000) and others (Schipke, 2001; Parker, 2003; Sheshinski & Lopez-Calva, 2003), the driving motive of a private company is profit, not service to communities; which leads to the view that privatisation leads to the sacrifice of public welfare while companies witness an increase in profitability. Cohen (2005) states that many failures and scandals were reported on privatisation processes. He alleges that it is the more frequent users of public services, namely the end-consumers, who may experience the adverse consequences arising from privatisation through not receiving the promised services. Cohen (2005), Parker and Kirkpatrick (2005), Parker (1994) argue that employees may also be adversely affected through job losses and increased part-time work as privatised firms seek to increase productivity and efficiency through entity re-orientation strategies and other cost-saving measures driven by privatisation (Parker, 2003; Cohen, 2005).

At Sydney Airport, post-privatisation claims of excessive airport charges in non-aeronautical areas have been made by the air service providers in submissions to the Productivity Commission (hereafter the 'PC'). In its price airport monitoring report, the ACCC (2009) named Sydney Airport as charging the highest average price per passenger and accused the airport of price gouging in the area of car parking. Over the past 10 years, stakeholder claims were also made of unrealistic asset valuations and that airports, as monopolies, have no intention of engaging in a commercially constructive way with airport users (Qantas, 2006; ACCC, 2009).

While there have been many claims made concerning both positive and negative outcomes of airport privatisation, this paper examines the issue through a business model innovation lens using the voices of Sydney Airport's key stakeholder groups.

Sydney Airport at a glance 2002–2011

Sydney Airport is Australia's major airport and the most critical single piece of infrastructure for Sydney (NSW). This was emphasised by one respondent in this study as follows:

Sydney Airport – It is Australia's national linkage to the world. If that infrastructure is not growing and is not being invested in and not developing, then Australia and not only Sydney suffers – but the overall Australia's national income suffers. (Government Representative)

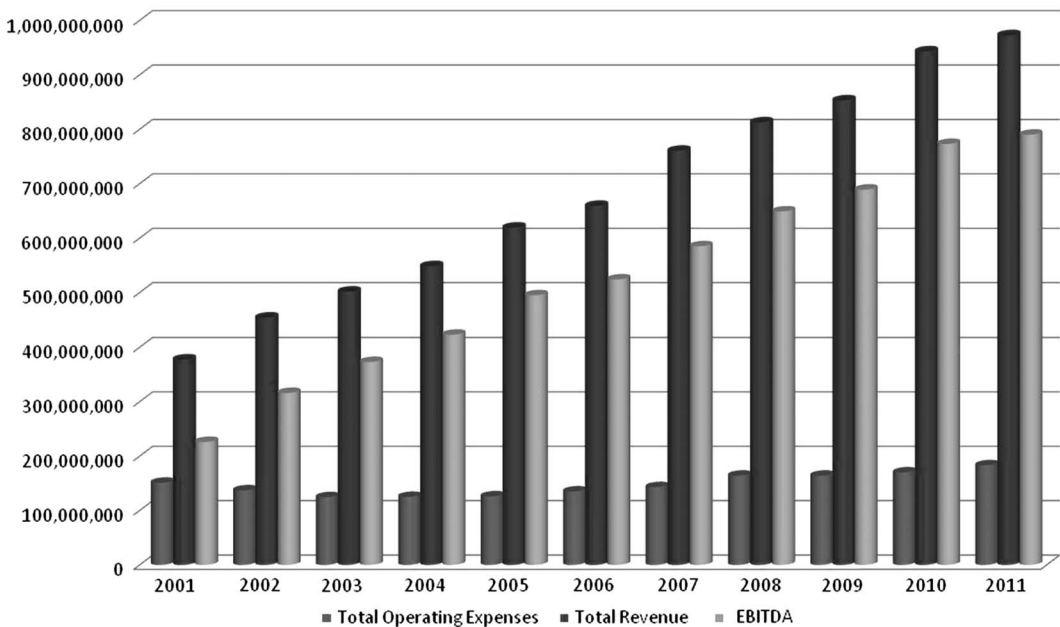


FIGURE 1. SYDNEY AIRPORT OPERATING PERFORMANCE (2002–2011)

The Federal government sold the management authority of Sydney Airport in 2002 to the Southern Cross Airports Corporation Holdings Limited (SCACH), which is the ultimate parent company of Sydney Airport Corporate Limited. Macquarie Bank infrastructure investment funds have majority ownership of SCACH and paid 5.6 billion dollars for Sydney Airport. The other airports managed by the FAC were privatised for collectively close to \$5 billion dollars. It was pointed out by both the government and the airlines that while the aeronautical infrastructure was in good shape at the time of the privatisation, the terminals were not, a serious problem for a critical national asset. This was supported by Baird's 1996 statement that if Sydney Airport failed to be privatised it would become the greatest white elephant that NSW tax payers have ever had to fund (Baird, 1996). In 2009, Sydney Airport provided employment to 6% of the Sydney workforce. The airport contributes directly and indirectly to 2% of the Australian and 6% of the NSW economy, and adds ~16.5 million dollars/annum to the NSW Gross State product (Sydney Airport Fact Sheet, 2009).

Post-privatisation, the catering for the end-user airport consumers (passengers) has contributed significantly to the growth and steady operating performance at Sydney Airport. Figure 1 illustrates the trend of the total revenues, Earnings Before Interest, Tax, Depreciation and Amortisation and operating expenditures since 2002 (data sourced from Sydney Airport Annual Reports, 2002–2011). Since its privatisation in 2002 the airport's total revenue has more than doubled (increased by 114%).

A more detailed analysis of the revenues indicates the growth of the commercial side of privatised business operations has outperformed the traditional aeronautical revenue streams. Figure 2 compares the retail, commercial and property revenue figures from 2002 to the year 2011 and illustrates an increase of 93, 87 and 118%, respectively. The aeronautical revenue increased by 123% whereas the aeronautical security recovery charges have gone up by 195% over the last 10 years as a result of increased expenditure on government-mandated security requirements that is passed on to the airport users.

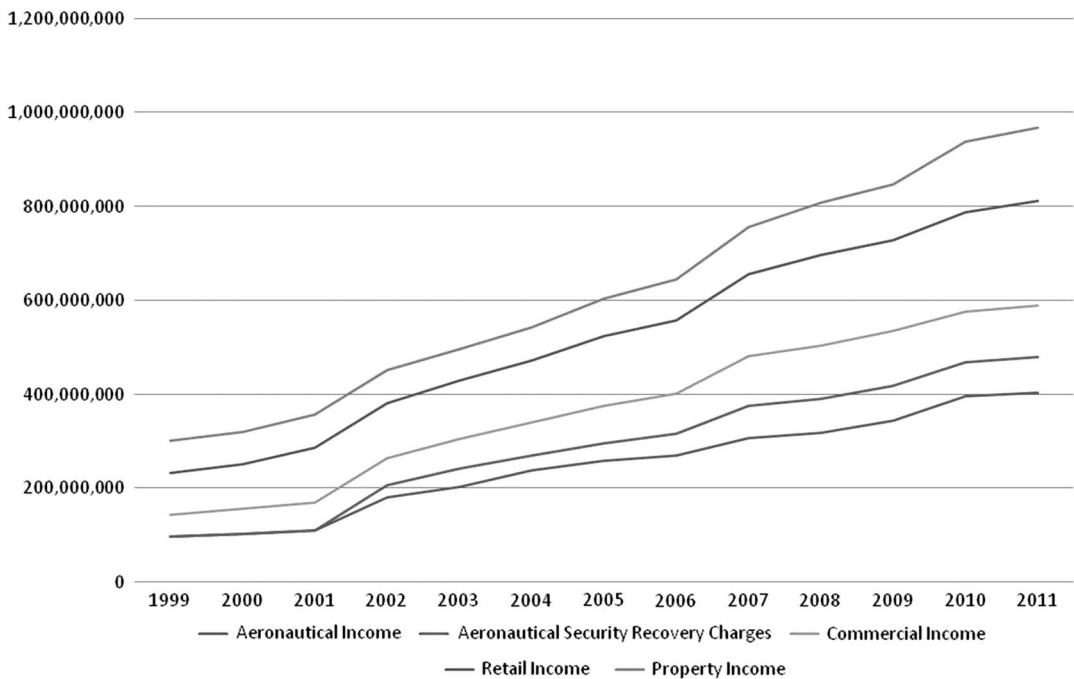


FIGURE 2. SYDNEY AIRPORT REVENUE STREAMS (1999–2011)

Figure 3 shows the increase in passenger movement of 49% from 2002 to 2011. This exemplifies the critical role and demand for this infrastructure.

There was also a notable growth of 21% in aircraft movements since 2002, as can be seen in Figure 4.

This paper argues that the increased value captured from privatised airport operations for the Sydney Airport operator is reflected in the increased profits per arriving passenger, numbers of departing passengers and airline movements. The airport's post-privatisation business model is compared with its pre-privatisation model and the changes driven by privatisation are discussed later in this paper.

Research framework and methodology

A social science field research approach was followed utilising Yin's (2003) case research framework. The research design focused on the 'how' and 'what' research questions and a thorough understanding of the case object (Sydney Airport) before the actual field research. Open-ended questions were used in interviews with senior managers from all key stakeholder groups to investigate (a) the airport business model innovation as an aftermath of airport privatisation and (b) the impact of privatisation on airport performance from stakeholder views.

The airport stakeholders were identified using Mitchell, Agle, and Wood (1997) stakeholder categorisation and were put into five groups. The participant sample was selected based on the various individual's role, corporate and stakeholder interest, and involvement in the Sydney Airport privatisation, as well as being a key stakeholder of the airport. The tabular representation in Table 1 indicates the stakeholder sampling for this study. Owing to the political and competitive nature of the air transport industry a combination of convenience and snow-ball sampling was used to access the sample; however, only senior/executive management positions were interviewed to

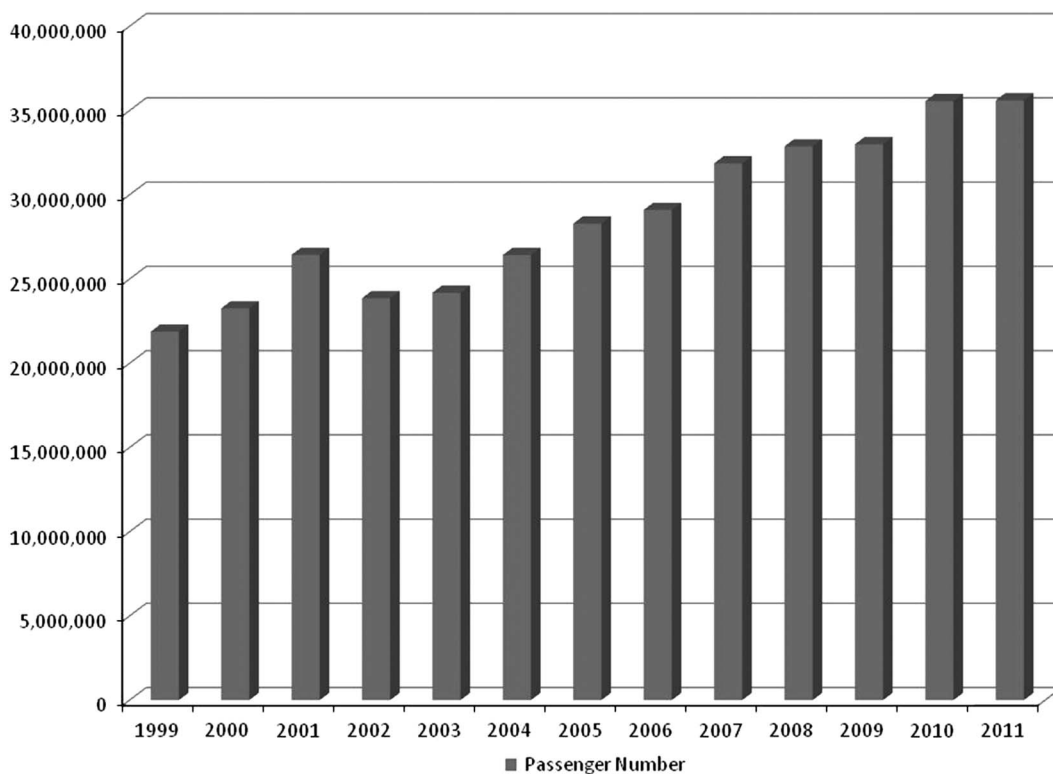


FIGURE 3. SYDNEY AIRPORT PASSENGER NUMBERS (1999–2011)

ensure effective representation of the particular stakeholder/company. Thus, the one-on-one interviews involved CEOs, CFOs, etc. from airlines, airport operators, infrastructure providers and investors, plus senior government and public sector representatives and action group coordinators for the Government/Environmental Group stakeholders. The interviews ranged from 45 to 90 minutes duration and were recorded and transcribed before analysis. Notes taken by the interviewer regarding body language and other visual clues were also included in considering the overall case study.

A qualitative research data mining software package (Leximancer, 2007) assisted with the content and relational analysis in this study. This software was used to display (a) the words comprising the vocabulary of the most frequent concepts used for subsequent analyses; (b) the connectivity of concepts in similar contexts; and (c) the relation between individual concepts in the form of a visual display of a diagram referred to as concept map. This was measured by examining how often two concepts are discussed within the same passage of text, which in this analysis was identified as two sentences within the same paragraph that was proportionate to the length of the responses. All analyses conducted using the Leximancer application involved interviewee responses only.

Summing up the analysis process, data triangulation was carried out when analysing the field data and combining it with the researchers case knowledge, reflections and interpretation. The analysis was done in two parts.

First, a conceptual analysis was undertaken with the aim to discover the presence, frequency, strength and definition of key concepts from all the interviews.

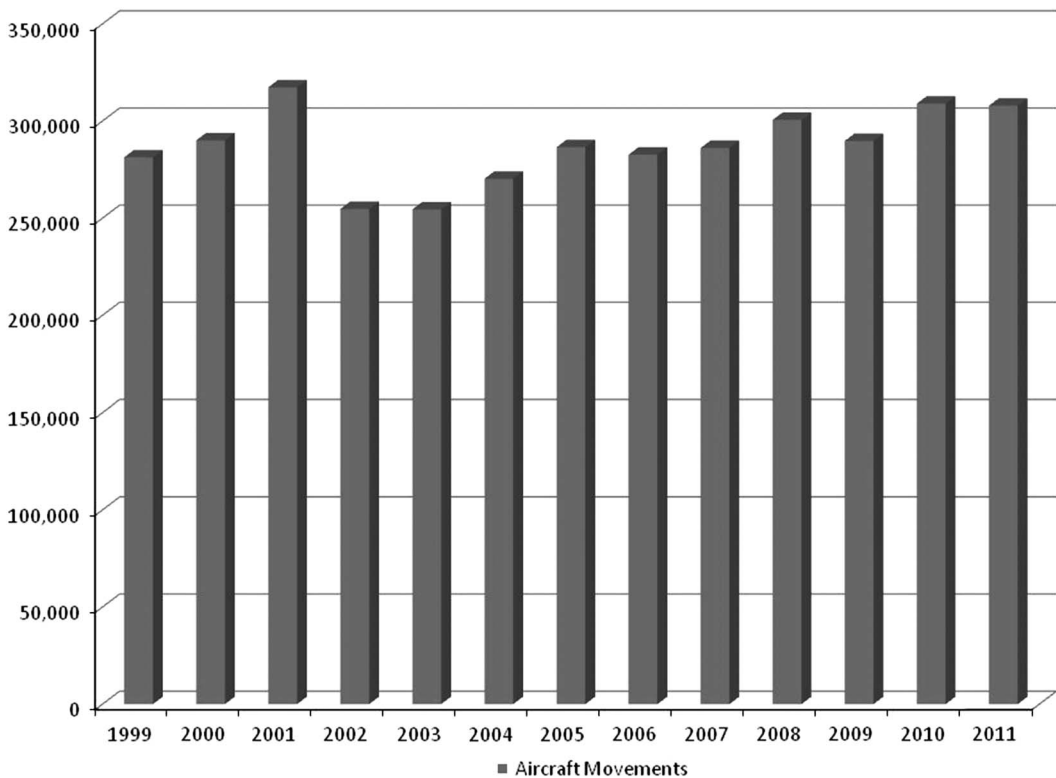


FIGURE 4. SYDNEY AIRPORT AIRCRAFT MOVEMENT (1999–2011)

TABLE 1. SAMPLING METHOD FOR EACH STAKEHOLDER

<i>Airport stakeholder group</i>	<i>Sampling method</i>	<i>Number of interviews</i>
Government/environmental groups	Convenience/snowball	6
Investors/shareholder	Convenience	1
Other airport users: infrastructure asset providers	Convenience	2
Airlines (domestic and international)	Convenience	8
Airport operator	Convenience/snowball	3
Five stakeholder groups		20 interviews

Second, relational analysis assessed the research question on the impact of privatisation reforms on the stakeholders by drilling down into the data to find the meaning in not only the relatedness of the concepts but also in the context of airport privatisation.

The limitations of this study are in line with general limitations applied to case research such as potential researcher influence and limited generalisability. The next section reports the research findings. Where quotes from interviewees have been included, only the relevant stakeholder group (see Table 1) has been shown following each quote. This ensures anonymity (an important condition of securing senior management involvement from the various stakeholder groups) but allows an appreciation of the frame of reference of the relevant interviewee.

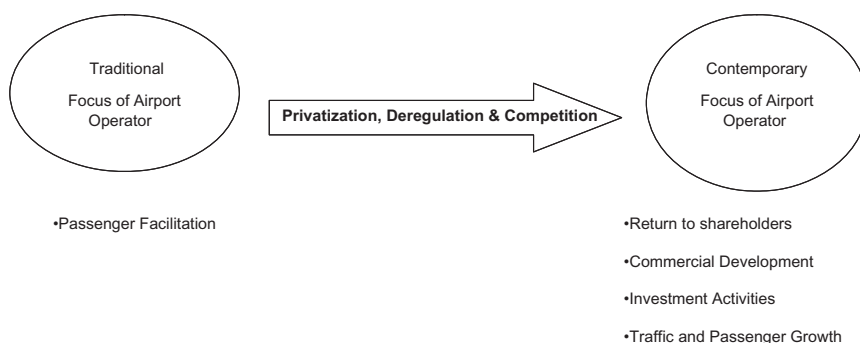


FIGURE 5. TRADITIONAL VERSUS CONTEMPORARY FOCUS OF SYDNEY AIRPORT OPERATIONS

FINDINGS AND DISCUSSION

The results are discussed in two parts. First, the overall privatisation outcomes as perceived by the stakeholders are discussed. Second, the changed airport business model is presented and discussed.

Before considering the business model(s) applicable to Sydney Airport pre- and post-privatisation, the impact of privatisation reforms on key Sydney Airport stakeholders needs to be explored. It is after all the mix of stakeholders and their interactions that create the complexity of the airport business. This study is supportive of Poole (1994) who stated that airport privatisation reflected a changing paradigm of what an airport is supposed to be (p. 3). The traditional paradigm views an airport as essentially a public service whose objectives ought to be simply to enable aircraft and their users to arrive and depart while just covering the costs. Privatisation creates the airport-as-an-enterprise paradigm, where the airport is viewed as an entrepreneurial business whose objectives are to meet the needs of the diverse clientele being the airlines, passengers, meters-and-greeters, staff, neighbourhood communities, airport tenants and others (see Figure 5).

Furthermore, it needs to be acknowledged that the key airport stakeholders perceived Sydney Airport privatisation as a money-making exercise for (a) the government and (b) the investor (airport lessee) in the form of returns to be gained from investments and commercial developments on airport land (see Table 2 for a number of key comments on this issue from interviewees representing various stakeholder groups).

Airport privatisation outcomes

Commercialisation of airport operations

In examining the research proposition as to the impact of privatisation on stakeholder operations, the concepts and themes most often referred to in the interview transcripts and as identified by Leximancer (Figure 6) were as follows: development, money, price, commercial and privatisation. Notably, most concepts relate to the commercial-oriented outcomes of the reforms. The respondents exemplified this by mention of the ongoing commercial development on airport land as a result of private ownership.

The findings have shown that airport developments are essential to meet the dynamics of the global air transport industry. Particularly, as traffic is expected to double between 2002 and 2020 according to the Airports Council International (2003). This supports claims by Francis, Lawrence, Humhreys, and Ison (2006) that the pressures for change in the air transport sector are driven by the large cost of infrastructure provision to accommodate the forecasted long-term growth of traffic. Sydney Airport's

TABLE 2. PRIVATISATION: FINANCIAL AND ECONOMIC VIEWS

Stakeholder	Illustration of financial and economic-driven outcomes
Airlines	The whole point of privatisation was to avoid having to use public money for upgrading infrastructure and all that. It's not about airports, it's about money! (Airlines)
Airport Operator	Regarding the privatisation, there are many reasons for privatisations. There is one fundamental reason why governments privatise and that is cash/returns! (Airport Operator)
Government	The government was also very interested in ensuring that there was adequate infrastructure investment for aviation around Australia. The best way of doing that was to put the airports in private hands, so that they would have access to far greater sources of capital, for expansion for going forward, than government might ever have. (Government)
Community	Fundamentally it's a money making exercise for all the people around the airports. (Community)
Investors	The qualitative aspect of privatisation is to create an environment which promotes A) future investment in the airport to support expected capacity growth and B) also service levels. (Investor)
Other (infrastructure asset providers)	There is a potential danger that original intention of an airport has been overlooked, because of the need to drive up revenue through non-aviation related retail and commercial activities. (Others)

Iterations = 1000

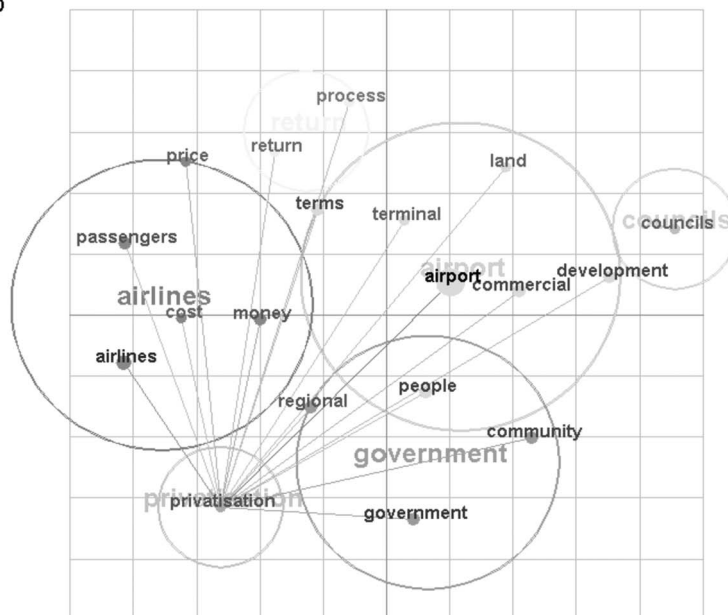


FIGURE 6. THEMES AND CONCEPTS RELATED TO PRIVATISATION OUTCOMES

adaptation to the changes in the air transport environment was highlighted by the airport operator as follows:

You want to enhance your infrastructure to meet the current and the immediate future demands of the aeronautical side. Now there's no good investing in new terminal [facilities], extra gates,

spending hundreds of millions of dollars if there [aren't] sufficient passengers in the planes to fill all those gates. (Airport Operator)

However, the results also demonstrated conflicting views regarding the non-aeronautical developments at the airport. A discord was identified in terms of the conflicting interests of the airport operator focusing on obtaining the highest return on the acquired assets to meet the wealth maximisation objectives for the private investors versus the fulfilment of the airport's traditional role of passenger facilitation. This appeared to be particularly important due to Sydney Airport's unique size and location in comparison with the other airports in Australia. Sydney Airport's limited capacity issue with its impact on stakeholder operations was commented on by a government representative as follows:

... it goes to the question of how best can you run an airport where there is rising capacity demand, increasing demand from airlines for more fuel-efficient flight paths and also the interest of the community. Now that is a very fine balancing act that occurs every day and it's getting harder and harder. (Government)

The capacity issue at Sydney Airport is not directly related to the aftermath of the implemented privatisation reforms, as the capacity problem is primarily a function of airport location (too close to the city) and size of operations (the largest Australian airport by passenger numbers). One of the privatisation objectives included the private investor's responsibility to invest in non-aeronautical airport land development so that the airport is aligned to global standards. Conversely, the limited amount of space available at Sydney Airport to fulfil this objective seemed to have cramped and reduced the efficiency of the airport. This was argued by interviewees, in particular, the airlines and infrastructure asset providers, who indicated that the commercial needs of the airport have started to interfere with stakeholder operations in a way that has not happened in the past. This supports arguments identified in the literature from opponents of privatisation implying that privatised entities behave as monopoly profit maximisers in a free market situation of unequal stakeholder power distribution (Baumol, 1993). The findings emphasised that the identified lack of space at the airport has created post-privatisation predicaments and impacts stakeholder operations as to (a) stakeholder location on airport premises and (b) dilemmas regarding the aeronautical versus non-aeronautical expansion of airport land.

Stakeholder accountability

Further findings related to the airport operator having become much more accountable to the public and its stakeholders. It was highlighted that at Sydney Airport, due to private sector involvement in airport operation and the investor having its own money invested, the accountability and transparency of airport operations assists in stakeholder relationship building. The reporting that is done at Sydney Airport to its external stakeholders was illustrated by the airport operator as follows:

Now you have a situation where Sydney Airport produces: a) annual accounts, and b) makes a quarterly release about its financial performance [and] makes monthly releases about traffic statistics. [It] provides a lot of performance data, which we certainly think is pretty easy to understand. Whether it's more or less transparent than under government ownership is hard for me to say, because I wasn't around at the time, but I'd be surprised if it was less transparent than it was. (Airport Operator)

As indicated above, the sale of the airport asset was perceived to be positive by the majority of respondents as it has freed up parts of Commonwealths capital for other public sector activities.

The findings have shown that the privatisation of Sydney Airport led to the attainment of (a) a high sales price; (b) the commercial developments bringing Sydney Airport to global standards; and (c) increased passenger flows. Also, the light-handed regulation and the commercial negotiations between the airport operators and airport users were perceived to be of benefit to the stakeholders involved as agreements can be reached without any government interference.

Unexpected aftermath of the Sydney Airport privatisation

Nevertheless, the data analysis has shown certain unexpected outcomes as a result of private ownership and efficiency changes regarding the privatisation of Sydney Airport that not even the government anticipated. One example of this relates to the airport owner extensively maximising their revenues as a result of privatisation and dramatically expanding their income earning potential (see also Figure 1). This excessive profit drive from the private airport operator was evidenced as follows:

A negative example that we did not anticipate included the fact that in the case of Sydney Airport, its owner and controlling shareholder, may have control over so many aspects of life of the airport. ... the biggest surprise is [just who is now the airport owner] and the integration of everything related to the operation of the airport under their ownership and control through various bodies. (Government)

A further example is that the government is viewed by some stakeholders (and some sections of the government itself) to have given the airport operator too much free reign. This was exemplified by a government representative as follows:

We probably should have structured more supervision of the airports than we did. We should not have allowed the airports to operate as freely as they are now able to do. So, although they will tell you they are not able to operate freely, as they still have all sorts of restrictions on them - but in reality, they operate pretty freely! (Government)

Other less-positive outcomes were related to the investors and controlling shareholder having control over so many aspects of the life of the airport. The detailed analysis of stakeholder responses identified the following unexpected consequences in terms of exploiting Sydney Airport as a toll gate for increased economic returns by the investor and operator post-privatisation:

- imposing challenges for small players on the airport site in terms of access and available facilities;
- increasing aeronautical charges, instead of using the revenues from the retail end-shops, commercial, rental activity to reduce the cost of aeronautical charges;
- exaggerating the cost of parking;
- buying up car parking facilities outside the airport perimeter to establish and/or maintain its monopoly on car parking for the airport to prevent airlines setting up a cheap car park.

The first three points were also highlighted in the submissions made by the airlines (Qantas, 2006; RAAA, 2006; REX, 2006) and other airport users (BP, 2006) to the PC investigation in 2006 and submissions made by airlines (RAAA, 2011; REX Airlines, 2011) to the PC inquiry on Economic Regulation of Airport Services in 2011. The 'gouging' practices of the airport operator regarding car parking charges were emphasised by the ACCC (2009) in its airport monitoring report.

As indicated above there are certain negative outcomes from privatising the airport. Nevertheless, this study asserts that, on balance, the outcome has been positive, and Sydney Airport has re-orientated itself to meet the demands of the key stakeholders of airport operation, including

consumers, investors, suppliers and regulators. Thus, the privatisation has provided greater opportunities for innovation, primarily because it has driven the implementation of a different business model for the airport as a whole (see below). Further, the privatisation has created a clear connection between the returns for various commercial operators within the airport framework and their levels of service quality from the viewpoint of the travelling customer. This strengthened connection between service providers and end-user customers has created an improved organisational climate for innovation which has been shown previously to be positively correlated with improved work group service innovativeness (Nsenduluka & Shee, 2009) and improved overall organisational innovation performance (Sung, Choi, & Cho, 2011).

The application of Chesbrough's business model framework to Sydney Airport suggested that the privatisation of Australian airports could be value adding to all stakeholders involved because (a) there was much an airport can do in working together with the states, other authorities and the airlines in stimulating traffic growth through promoting the advantages of new routes or additional frequencies and providing service to meet the needs of the airlines; (b) there was a realisation that much value can be unlocked in developing optimal solutions to new investment programmes as and when they become necessary; and (c) value was to be delivered not only to shareholders and customers of the business but also to other stakeholders such as the local community, the region and the travelling public.

Therefore, the next section discusses the changed airport business model driven by privatisation.

The airport business model: Pre- and post-privatisation

As airports are complex entities, the results of this study of airport stakeholders confirmed that the Sydney Airport operator had to adapt to an environment subject to rapid and far-reaching changes, which reinforces the importance and recognition of airport stakeholders in the day-to-day airport operations. This is in line with stakeholder theory (Freeman, 1984; Hill & Jones, 1992; Clarkson, 1995; Mitchell, Agle, & Wood, 1997; Donaldson, 2002; Atrill et al., 2006; Neville & Menguc, 2006) as private sector corporations have recognised the existence of multiple parties having a legitimate interest or stake in their business as well as the potential for exploiting value-adding opportunities. Thus, the privatisation of Sydney Airport, initially designed to deliver value for passengers and airlines, has resulted in a change of the overall business model for the airport owner and the various stakeholders involved in the operation of the airport. Especially, as it was confirmed by the airport operator that each stakeholder has a role to play in the airport business:

Now at the end of the day, it's about working together. Airports need airlines, airlines need airports. It's about working together, right, and finding that balance. (Airport Operator)

It was previously identified that the change in ownership has had a significant impact on stakeholder relationships and interactions. The stakeholders have become more engaged in decision-making processes and consultative approaches to terminal redesigns, or other airport site projects involving neighbouring communities. The commercial negotiation tactics, the business growth and the airport land development, although criticised to an extent, were perceived to be the most notable outcomes of the Sydney Airport privatisation; each having an impact on stakeholder operations. This is further evidenced in the most recent submissions made by representatives of the airport operators and air service providers (AAA, 2011; BARA, 2011; RAAA, 2011; Sydney Airport, 2011) to the PC inquiry.

It was further emphasised that catering for the end-consumer and satisfying stakeholders through improved company performance has led to acclaimed shareholder wealth maximisation for institutional investors at Sydney Airport. Interestingly, the revenue streams from the commercial-oriented

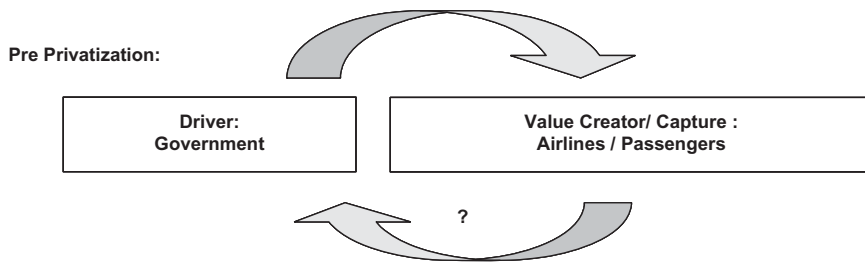


FIGURE 7. PRE-PRIVATISATION AIRPORT BUSINESS MODEL

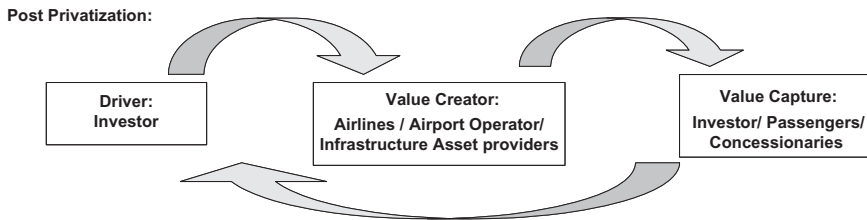


FIGURE 8. POST-PRIVATISATION AIRPORT BUSINESS MODEL

approach of privatised business operations have outperformed the traditional aeronautical revenue streams (see Figure 1).

As described above, Chesbrough and Schwartz (2007) business model definition incorporates two key functions (i) value creation – a series of activities that yield new products and services in such a way that net value is created and (ii) value capture – profiting from a portion of those activities for the organisation developing and operating it.

Applying this definition to Sydney Airport, Figures 7 and 8 illustrate a comparison between the pre- and post-privatisation airport business models; with the latter figure taking into account innovation of stakeholder operations that were driven by privatisation. Owing to the airport actually being a collaboration of several firms/stakeholders, in addition to Chesbrough's two key business model aspects, we have introduced the concept of a 'value driver' that represents the motivational source or drive for innovation and improvement.

Before 1996, it was the government that ran the airports in Australia. The FAC as indicated by the First Assistant Secretary, Aviation Policy Division, Department of Transport and Regional Development (Harris, 1996) had two roles: (a) to develop airports in a manner which would serve the interests of public parties (airlines and passengers), while (b) ensuring that matters of public interests were covered. Kain and Webb (2003: 29) mentioned that the Australian government's stated rationale for privatisation was to improve the efficiency of airport investment and operations in the interests of users and the general community, and to facilitate innovative management. Thus, one can conclude that the pre-privatisation driver of airport operations was the Government that ran airports under budget constraints. The value creator and capturer were the airlines as well as the passengers who profited from the traditionally focused airport business. The lack of profit motive on behalf of the government questions this stakeholder's position as a value-capturing agent, and thus creates a confounding element in Chesbrough's business model application.

In the post-privatisation business model (Figure 8) it is the investor that has an active role of driving the airport business as it has a clear value capture role. The airlines as well as the airport operator and other infrastructure asset providers have taken on the role of implementers and value

creators while the value is captured again by and for the passengers (as in pre-privatised structures), but now also for the investors and the concessionaries.

Value driver

The findings have demonstrated that the investor not only supplies the capital for expansion, but that this organisation also believes it has a key role in marketing the airport to countries and airlines in order to increase passenger and traffic flow. It was identified that the private investor brought in the expertise in airline marketing and network planning; aspects that were argued the government would have never considered under public ownership. Thus, a more innovative approach was used to boost the traffic post-privatisation, leading to increased traffic (and therefore increased profits) with an impact on the success of the airport and on the surrounding region.

When the government owned the airport, as the national gateway to Australia, the assumption was 'We don't really have to market ourselves very heavily.' At the end of the day, if an airline wants to fly to Australia, they are probably going to come to Sydney. And so, there was really no active marketing of the airport. (Investor)

Other findings related to the innovative drive of the investor to focus on the various passenger profiles, as it sees its role in not only passenger facilitation but generating an experience to ensure the return of the passenger. One of the interviewees questioned whether under government ownership, a lot of thought would have been given to the space that the 70% of people who are not in the business lounges occupy while they are waiting for their flights. Examples of the improvements as suggested by the investor were that they are constantly thinking about ways to improve the passenger process, whether by having fast track security, which has been introduced recently at the airport, or having an arrival duty free so one can purchase duty free when getting back to Sydney rather than having to carry it all the way around the world. The investor focus on the passengers was further illustrated by:

As a private owner you want to make people happy, because if they are happy, then they are in a better frame of mind obviously to spend money. So that at the end of the day there is a motive to improve the return, but in order to improve that return, you have to improve the service and you have to make the airport a much better environment. (Investor)

Value creator

In terms of value creation, it is the airport operator, the airlines and other infrastructure asset providers who engage in value creation. The value created at Sydney Airport post-privatisation is reflected by the investment in infrastructure and airport land development, the overall facilitation of a better passenger experience, the airport operator's engagement and perceived partnership role in the local community, and the acknowledged interdependency of stakeholder operations and liaisons with the airlines. This was indicated by the airport operator's statement that the aim is to generate an improved passenger experience, which leads to increased commercial revenue streams. This is in line with the public versus private sector management approach as argued by Carney and Mew (2003). In addition, this finding supports the submission to the PC on behalf of the Sydney Business Chamber (2011) that Airport privatisation has been a success. Free from government constraints, private sector managers could focus on operational and service improvements that provide consumers with greater convenience and choice. This was shown by an air service provider respondent as follows:

One can argue that the improvement at Sydney Airport has taken place as a result of private ownership - an example of that would be, more retail shops, which gives the travelling public a greater range of services; there are more eating facilities which gives the travelling public a better

experience, even though it complicates the operations of airlines because everyone's queued up. (Airlines)

Overall, the airport operator's prime concern was to create a satisfactory passenger experience. Privatisation has enabled the operator to cater for the passengers in additional ways through the available funding and investment in non-aeronautical infrastructure. Driven by the bottom line with a desire to maximise the returns per passengers, the level of improvement for passengers has improved post-privatisation, and was claimed by the respondents to have been greater than it would have been under government ownership. This is illustrated below:

You want to increase the profit per arriving passenger, departing passenger and profit per airline movement. The way you increase the profit per passenger is you should get them to pay and to buy more things, more opportunities at higher prices, and get more airline customers at higher prices whilst at the same time reducing costs. (Airport Operator)

The operator also pointed out that when the investor spends money on capital investments into aeronautical-related infrastructure the investment is recovered later from the airlines through proper consultation and passed on as an increased passenger charge. Thus, the revised post-privatisation business model has ensured an improved alignment between technological innovation and operational efficiency through a more effective focus on service quality as perceived by the travelling customers. This is in keeping with previous research into the factors linking technological innovation and operational efficiency (Santa, Ferrer, Bretherton, & Hyland, 2009). The significance of cooperation and liaising between the airport operator, the investor and airlines in these kinds of decisions emphasises the interdependence of interests and operations among stakeholders.

Value capture

According to the model in Figure 8 the value is captured by the investors in the form of the required return on the investment. This model element supports the argument of Francis et al. (2006) that the air transport industry required private sector input due to existing pressures such as: (a) the traffic growth, as the Airports Council International estimated and an investment of \$500 billion in airport expansion between 1999 and 2019 to accommodate the traffic growth; (b) the fiscal burden imposed on government due to expansion of air transport infrastructure; (c) the lack of funds for infrastructure development; (d) free market forces; (e) globalisation; (f) improved efficiency; (g) congested infrastructure; and (h) new larger aircrafts. This was exemplified by the investor as follows:

Obviously on the economic side of things, privatisation is a revenue generating event, generally speaking. So if you have a government which has a deficit or has, you know, future funding commitments, then the ability to generate not just the lump sum of revenue that comes from the privatisation (from the sale of the asset), but also the potential to maintain an on-going income stream, potentially from license fees or rate, or things like that, is quite important. (Investor)

In the model shown in Figure 8, the investor occupies a dual role of driving the privatised business operations but also in capturing the value from it for institutional investors. It is the airport operator and the airlines that are in the role of value creators due to their interdependence of operations. Changes in effective and efficient airport operations were reflected by the airport operator working with the airlines to ensure that passengers have a good facilitation experience. To generate the returns, the investors adopted innovative approaches to satisfying airport customers and stakeholders involved

in the day-to-day operations of the airport business by providing a choice of goods and services and generating increased traffic through direct marketing of the airport as well as direct involvement like in the case with the airlines.

CONCLUSION

Australia and other nations are still subject to ongoing privatisation reforms and it is evident that such reforms are accepted by the public. Using feedback from key stakeholders, research reported in this paper aimed to examine the generally accepted view that airport privatisation has led to an improvement in airport performance. Stakeholders were identified using Mitchell, Agle, and Wood (1997) framework. The findings also supported Zott and Amit (2010) business model concept of key stakeholder interdependence in value-adding activities.

Sydney Airport has clearly undergone considerable expansion in their commercial activities since privatisation. The findings have shown that the change in ownership has had a significant impact on stakeholder relationships and interactions. This study provided confirmation of the principle of stakeholder interdependency at airports; that is, that stakeholders interact and give meaning to the corporation, place moral obligations on managers and that these obligations can influence decision making (Wicks, Gilbert, & Freeman, 1994; Jones & Wicks, 1999). In addition, the results support Hill and Jones (1992) who argue that stakeholders have an interest and influence in the actions of the organisation, thus making the operations of the airport successful.

The stakeholders have become more engaged in decision-making processes and consultative approaches to terminal redesigns, or other airport site projects. It was identified that the shareholders and the airport operator have benefited the most from the privatisation process. Chesbrough's definition of a business model was applied to Sydney Airport, in both pre- and post-privatisation operating models. The aim was to identify which components of the airport business, or in this case, which of the various airport stakeholders, create the value, and which capture the value. Following detailed examination of the operation of the multiple interdependent organisations involved in Sydney Airport, it was realised that a third element of Chesbrough's model, that of 'value driver' might be needed to fully explain such complex business models.

The investor was identified to have a dual role of driving the privatised business operations and also in capturing the value from it by generating returns for institutional investors. It is the airport operator and the airlines that fill the role of value creators due to their interdependence of operations. The change from the situation before privatisation is clearly due to private sector involvement driven by the bottom-line results, efficiency improvements and new ways to deliver customer value. The collaborative nature of airport operations requires an increased openness to ideas and knowledge from the many interdependent firms involved. Open innovation, collaboration and interdependence between the various stakeholders are clearly requirements of successful airport operation in the post-privatised world of major airports.

This research has considered business model innovation driven by privatisation where changing roles and responsibilities of key stakeholders are delivering value to customers on a much wider front than that traditionally accepted as an airport's role. The research has confirmed the generally positive outcomes of privatisation of state-owned strategic assets, using Sydney Airport as the examined case study and key stakeholders as the main data source. By considering the privatisation-driven business model innovation that occurred at Sydney Airport in the 10 years since the asset sale, the research has provided a model for identifying agents of value creation and capture in other complex system innovations. The research has also identified a third possible element of complex multi-organisational business models, that of the value driver, which may or may not be combined with the value creation or capture functions.

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