
Getting it right the Australian way

The results of a recent in-depth survey of Australian companies' attitudes to intellectual property management have lessons that go far beyond the country. Nowhere is this more so than in the work being done by organisations that have identified IP rights as key drivers for growth. By Timothy Devinney and Adam Liberman

As a fully developed nation both in economic and societal terms, there is little argument that is necessary to convince most observers that Australia is a country whose future is based less on the sort of physical structure reform of the late 20th century – labour market reform and competitive practices – but on the ability to mobilise its intellectual assets most effectively. Although Australia's physical assets are immense, one only has to look at companies such as mining firm BHP-Billiton to see how clear it is that the value from these assets is driven not by their ownership but by more effective exploitation. In other words, owning what is in the ground is significantly less valuable than the knowledge of how to extract and sell it. In addition, the latter part of the 20th century was a period in which services began to dominate the Australian domestic sector and increased its export importance. Today, one of Australia's main export industries is education, that most intellectual of intellectual assets, and the country exports over Aus\$1.2 billion in copyright materials, a figure that is increasing at nearly 9% per annum.

However, many people, from academics to politicians, feel that Australia's position on the world stage is at risk not because intellectual assets do not exist within the country and society but because they are not given sufficient pride of place in managerial thinking. For example, when Lou Gerstener became CEO of IBM "(h)is first management decree was devoted to the importance of innovation and intellectual property", reported Mark Vorhees in the May 2003 issue of *American Lawyer* magazine. That decree has borne impressive fruit including over US\$1 billion per annum income derived by IBM from

licensing its patent and copyright rights. In 2002, that licensing income comprised about one-fifth of IBM's earnings. Gerstener has other high-profile counterparts in organisations such as Microsoft and Xerox Corporation, who all view IP as a strategic asset, and not merely as a matter of compliance. There is no such equivalent iconic individual or obvious corporate champion in Australia. However, it is also clear that this issue is not one that is unique to Australia but common in many mid-sized post-industrial societies lacking in population and income to develop the clusters of knowledge capital normally associated with intellectual property development.

In what follows we discuss the role of intellectual property in an organisation and briefly analyse Australia's position in the world IP landscape. We then examine the findings of a survey on the role of IP in Australian organisations, carried out by the Centre for Corporate Change at the Australian Graduate School of Management and law firm Freehills, as well as three detailed case studies - Foster's, BlueScope Steel and ANSTO - of Australian organisations, use of intellectual property rights as a tool in creating and maintaining sustainable competitive advantages for their businesses. Foster's is Australia's leading alcoholic beverage producer and owner of the Australian icon Foster's Beer. BlueScope Steel is Australia's leading steel operator, which was spun off from BHP-Billiton in 2002. ANSTO is the Australia Nuclear Science & Technology Organization, the operator of the Lucas Heights nuclear reactor and a government company aimed at utilisation of nuclear energy for scientific, medical and commercial application.

Australia's position in global IP landscape

When one examines the aggregate level of intellectual property development, Australia's position can be thought of as either remaining stable or declining relative to other developed nations depending on which statistics and authorities one wishes to believe. For example, figures from the Australian Bureau of Statistics show R&D expenditure as a proportion of GDP in Australia rose during the early part of the 1990s, and peaked in 1996-97 at 1.65%. However, by 1998-99 it had fallen back to 1.5%. The proportion of Australian GDP devoted to R&D is relatively low by international standards with Australia ranked twelfth among OECD countries in 1998-99.

Although Australian patent applications have increased rapidly - from little more than 20,000 in the late 1980s to slightly more than 80,000 in 2000 - they have not really kept pace with worldwide trends. Australia's proportion of worldwide patent applications decreased from 1.6% in 1990 to 0.8% in 2000. During this same period, Australia's proportion of worldwide GDP also decreased, from 2.3% to 0.12%. The mixture of these patents also has a unique pattern when we look at their source. For example, of the approximately 63,000 patent applications in Australia in 1999, only about 10,000 originated outside the country (15%). In the case of Germany this proportion was 34% and for the United States it was over 50%. Other countries with a pattern similar to Australia include the UK (16%), China (18%) and France (15%). Countries such as Sweden, New Zealand and the Netherlands are even lower with 5%, 3% and 5%, respectively. We also see that approximately half of the Australian patents applied for were lodged overseas and the general trend has been that Australian applications for patents in overseas countries has been increasing dramatically: between 1993 and 1994 the number of overseas patents applied for by Australian entities increased by 55%. Of all other OECD nations, only Canada had a higher figure (63%). Throughout the 1990s Australian organisations and individuals were consistently increasing their overseas patenting activity.

The managerial side of intellectual property

Our prior discussion implies that the evidence of Australian intellectual property activity based on general statistics is mixed. To get a better picture of the priorities managers place on intellectual property, the Centre for Corporate Change at the Australian Graduate School of Management and law firm Freehills surveyed nearly 1,000 organisations and received responses from almost 100. These firms were asked a series of questions that

tapped the following:

- What is the perceived importance of intellectual property to corporate value?
- To what extent is intellectual property managed and at what level?

This was a relatively modest goal but one based on the fact that anecdotal evidence indicated that Australian companies were, if anything, inadequate in their ability to: (1) maximise their conversion of knowledge to intellectual property rights; (2) properly manage their intellectual property rights; and (3) maximise the commercialisation of intellectual property rights. It was our feeling that Australia's IP issues were unlikely to be totally related to geography and scale and instead would have as much or more to do with the priorities found within Australian corporations.

As shown in the box opposite the findings supported this anecdotal evidence*.

Lessons in IP management

The results of the IP survey indicate that the general state of IP management in Australian firms is inadequate and *ad hoc*. However, within any population of firms there exist examples to which one can point that exemplify best practice. In the case of three organisations - Foster's, BlueScope Steel and ANSTO - we have examples of local firms utilising solid models for the discovery, management, exploitation and protection of IP. We conclude by utilising these firms as exemplars for six lessons in the proper management of IP. In choosing these three firms, we do not mean to imply that there are no other Australian firms with top-quality IP management practices but that these three are representative of that best practice group of companies. Our selection of these organisations is meant to represent firms of differing size (from small to large), market (from consumer to industrial) and orientation (from product to scientific).

In looking at these organisations in detail we see that IP pervades these companies although each puts emphasis on slightly different areas in managing and fostering it. ANSTO is much more of a typical research-based organisation leading to the need to manage IP very much as a process of R&D and activities like patenting; while BlueScope Steel, competing in a ferociously price-competitive commodity market, places more weight on the management of operational processes and techniques. Foster's is also concerned with process IP but invests heavily in protection of its brand names and dealing with counterfeiting.

Findings of the report

Our research on Australian IP practices revealed:

- Intellectual property is, on average, the least important activity in the value chain.
- Firms that placed intellectual property higher on the agenda were more likely to be involved in product and services development to a greater degree.
- Those placing the most emphasis on intellectual property were, by and large, the smaller organisations. Those placing the least value on intellectual property were moderate in size (about half the size of the largest firms in the sample).
- The major differences among firms were between those emphasising intellectual property to a "moderate" or "great" degree. When compared to those placing low importance on intellectual property they were more likely to have senior management and board members involved.
- Most organisations rarely conduct intellectual property audits and few, if any, conduct intellectual property valuations.
- The most diligent firms were those with a multinational link - either a local multinational or the subsidiary of an overseas multinational.

Lesson 1: proper IP management requires a holistic approach encompassing the corporate and legal context

The singular lesson that comes from our best practice firms is that IP cannot stand in isolation from the general strategic posture of the organisation. This requires a melding of the legal aspects of IP protection with the managerial aspects of employee motivation, corporate culture, operational control and monitoring, and managerial responsibility.

The merging of the legal and corporate contexts shows up in two ways. First, our best practice organisations view much of their competitive advantage as arising from their intellectual property. For example, the value of BlueScope Steel is related less to the ownership of physical assets, such as factories or sources of raw materials, which can be easily bought and sold in the open market, and more to the skills and assets associated with discovering and extracting value from these activities. BlueScope Steel provides an example of how this is achieved through proactive education of employees - a key method for increasing the pervasiveness of IP thinking - and an integration of functional activities. Udo Buecher, Manager of Intellectual Property, states it this way: "IP strategy needs to be a part of all the core activities through the company. For us, IP needs to sit above all the individual business units. It interacts across the board with all of the businesses and the functions, particularly marketing and product development. ... The main process of integrating IP into marketing and R&D is one of education. So we hold formal and informal education seminars in our company to raise the awareness of IP."

Second, there is a belief that a lack of focus in the past allowed for valuable IP to leak from the organisation. Much of this was due to a failure to understand the complex inter-relationship between the managerial and legal components of IP management. In the past, IP was something managed from the legal office and soon forgotten by other parts of the organisation. Today, these firms strive to manage IP in line with the other major functions.

Lesson 2: proper IP management requires dedicated management and legal staff

It is a managerial cliché that what is not managed is not done. Cliché or not, it is true. However, as our survey results show, a lot of IP is not managed and hence one would expect that those organisations managing their IP most directly would be receiving the best results. This is revealed most easily by the fact that each of these companies have managers dedicated to the management of IP and that

they are part of a process that requires sign-off from an IP perspective before new activities move forward. As Robert Muir, Business Development Director for ANSTO, notes: "Third parties help us implement [aspects of our IP implementation plan], but the strategy is developed and managed internally."

This was common in all the companies - a mixture of dedicated and outside expertise was combined for maximum effectiveness. What is also telling about these companies is that the IP function is headed by a dedicated senior manager and not by the legal department - a fact signalling that IP's importance is not just a matter of legal protection but an issue of management.

In the case of BlueScope Steel, we see an excellent example when examining one of their recent initiatives, a strip casting project. In this case, responsibility was passed onto the team managing this so that they dedicated part of their activity to IP directly, with the support of the rest of the organisation. What was most interesting about this project was the fact that it had as its first purpose creating IP: "We will naturally become like an IBM in the steel industry, because that project is earmarked specifically for licensing."

Lesson 3: proper IP management requires concerted attention at the very top of the organisation

In line with dedicated staff managing the IP function, best practice firms ensure that the IP component of the corporate ledger receives notice and attention from the very senior management, sometimes to the level of the board of directors. This lesson is best exemplified by BlueScope Steel. Says Udo Buecher: "There is a very strong awareness of IP through the legal function and the legal function has a very strong direct link to the executive management team including the CEO."

In ANSTO, IP reporting is directly to the executive director and the board of directors while at Foster's the board, through its audit and compliance committees, heavily involves itself in the assessment of IP.

Lesson 4: proper IP management requires an understanding of world's best practice and worldwide monitoring

One very clear lesson from our investigation is that IP is, almost by definition, a global phenomenon. This implies two marginally related issues. First, because the violation of IP rights knows no borders, the monitoring of IP rights cannot be restricted to local markets only. Foster's is possibly one of the best Australian examples of this issue. According to Owen Malone, VP, Intellectual Property: "I

think we have learned a lot through being a multinational corporation - you get your hands dirty, you get burned, you learn. ... We have integrated IP detection, capture and protection to maximum extent within existing processes."

Second, because the nature of monitoring and enforcement spans borders, best practice invariably involves structures and systems that are themselves global and one needs to look to the most effective models for such activity. Again, Foster's provides some lessons as to this goal. Says Malone: "Our aim is to develop best practice and world's best practice at this activity, so we have a very, very keen eye for how it is done elsewhere."

Robert Muir of ANSTO points out one critical aspect of benchmarking IP practice: "It is fundamental that we are looking at who is playing in the space...is there anything that is likely to dominate us?"

Lesson 5: proper IP management requires a culture of IP to pervade the organisation

This may sound simple but it is probably the most difficult and time-consuming process to institute. IP is not created by senior management but by employees generally operating at or below the level of middle management. What this means is that effective discovery of new knowledge, the efficient conversion of that knowledge to IP, and the successful capitalisation of IP to products and services occur away from those managing the process from above. Hence, the most direct and operational way of managing the firm's IP is to make it self-managing by inculcating the relevant employees with an IP-centric view of their responsibilities. The best example we have of this is the activity of ANSTO where concerted effort is being made to push IP appreciation and knowledge to the level of the laboratory scientists.

At Foster's, this focus is concentrated around an open culture of innovation. Owen Malone explains: "This requires building a culture that rewards people to innovate and rewards people who bring forward innovations... The ongoing task in an organisation like Foster's is to develop that cultural dimension firstly and enhance relationships with areas where people are willing to come forward. ... To a quite surprising extent, people are very proactive in bringing forward ideas: innovations and intellectual capital are promulgated as key corporate objectives from CEO down. At the end of the day my belief is that, unless we have a cooperative culture among the people working there, you are always going to be pushing uphill to capture everything that should be captured."

Lesson 6: proper IP management requires recognition and use of a mix of IP rights

The final lesson is that IP goes beyond just patents and licensing or monitoring and enforcement. The hallmark of our best practice companies was their ability to recognise the complex mixture that makes up IP. Udo Buecher states this idea succinctly: "An increasingly larger proportion of our know-how is protected, not by patent procedure, but by making active decisions to keep the information confidential in-house."

For all these companies the feeling is that IP management is not only about the effective management of innovation but also the innovative use of management. BlueScope Steel seeks to use its growing knowledge base as a means of building knowledge networks with complementary producers through "the use of patents as trading opportunities to get access to other companies' developments".

Such thinking is expressed in a slightly different manner by Robert Muir: "Things like patents are just a ticket to the game at this particular point. Business models and, God forbid, revenue models - how you make money out of IP, that's what needs to be scrutinised."

Need for proper management

New ideas, information and knowledge allow a firm to grow and evolve as the environment in which it operates changes. Sustainable performance is related strongly to the ability to create and maintain a sustainable competitive advantage that is less subject to natural erosion and competitive reaction. In today's economy this requires the continual creation of new knowledge by the firm, its employees and partners. However, it is not just the creation of knowledge that matters. That knowledge must be captured and converted into marketable intellectual property that can then be protected through legal - copyrights, designs, patents, trademarks, trade secrets, etc - means.

But even this is not enough. Unless there is a proper system of management in place that ensures that all the components, including discovery, capture, protection and monitoring and enforcement, are reinforced, much of the effort at the front end will have been wasted. ■

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