

## **Get (IP) Smart for Corporate Survival and Growth**

*Capturing value from intellectual property can be a challenge for even the most sophisticated businesses, but by making it part of a company's early strategy, corporate leaders can ensure a bigger return from their intangible assets.*

By David Teece and Stephen Johnson

Too often when businesses make strategic decisions, IP experts are not given a seat at the table. For example, much of the recent discussion around restructuring supply chains and outsourced arrangements following COVID-19 has focused on managing the risks of a future pandemic, including the use of multiple or more locally based suppliers and bringing manufacturing back in-house. The general assumption is that higher long-term costs will be offset by increased enterprise resilience.

Yet too few businesses are recognising this as an opportunity to re-evaluate their IP strategy and involve IP specialists—even though doing so could help them to take steps to reduce losses to collaborators, copycats, and followers, further strengthening the firm's long-term competitive position.

This is just one example of a fundamental point: consideration of IP issues should be an integral part of strategic decision making, rather than an afterthought. Protecting the value of a firm's intellectual property may even be key to its survival, particularly for companies with asset-lite business models. Equally, early recognition of the limits of IP protection may avoid the adoption of unsustainable business models. In short, adding IP value involves an informed discussion of what IP protection both can and cannot achieve.

### **Why intellectual property is important for business strategy: Appropriability**

Whether an innovating firm retains enough profit to continue developing its business depends in part on managerial choices that should be informed by IP considerations. Leaders need to analyse the so-called '[appropriability](#)' of their innovative efforts. This is a measure of how hard or easy it is to keep profits—or, put another way, how easy it is for others to copy (or improve) innovations given the business model adopted and the relevant legal environment. But the IP environment is only one factor affecting appropriability and therefore long-term profitability.

Innovating firms must also consider the complementarities of their proprietary technology with external knowledge and assets. How dependent are their innovations on technologies owned by others? Will licences be needed? Are any of their suppliers irreplaceable? Will distribution of their products or services depend on a network owned by or beholden to a potential rival?

Innovators, dealing with the herculean task of launching new products and services and building new businesses, often rely too much on shortcuts that weave a fragile web of contracts involving partners, suppliers and licensors without considering how best to leverage intellectual property. The innovator's residual intangible assets are often all too easy to reproduce (and possibly improve) at low cost. When intangibles are the major assets of a business, it may find itself at the mercy of a business partner with the manufacturing or other capabilities and assets that it lacks.

As this brief overview illustrates, capturing value is a challenging goal and many pioneering firms fall short. Fortunately, many of the pitfalls can be avoided if the add-in of IP value is considered as part of strategy formulation. A simple example of this approach would be an intervention at the earliest stage of developing a new product. Suppose the innovation team is considering a razor/razor-blade business model for a new product where the profits will come from future sales of replacements for a needed consumable (the blade). If that consumable can be easily copied by hundreds of manufacturers around the world, a service model may be the preferred business approach from the start.

Yet such a decision is unlikely to be made in many businesses. The team developing the new product would first obtain senior management buy-in on the razor/razor-blade business model, then at some stage turn to the patent group and ask: "Can our new product be patented?" The answer to that question would likely be "yes", but with a large amount of legal complexity and a number of caveats about significant legal risk around concepts such as patent exhaustion and international patent exhaustion, proposals for separate IP protection for the razor and the blade, and many other detailed nuances of IP law that together amount to a warning message about weak appropriability. How much easier and less disappointing things might have been had an IP expert been part of earlier discussions around the business model.

### **Why are IP experts not at the table?**

The strategic importance of intellectual property has been written about extensively since the 1980s. However, many businesses today are started naively, with business models still adopted and strategic decisions still taken without IP strategy being part of the process. At best, the IP function is called upon later to do what it can to protect choices already made.

This lack of progress may be contrasted with, during the same period, the rise of the chief HR officer (CHRO) from a role often regarded as administrative to a true strategic partner to the CEO. The HR function has also swelled to cover broader areas such as physical facilities and security.

It is thus striking that intellectual property has not taken a more prominent role at a time when innovation has become a central tenet of business.

Why has intellectual property so often been sidelined? We can identify a few key factors.

### ***IP and business leaders***

Part of the problem can be traced to business education and training, which generally leaves top managers unable to ask the right questions of their expert advisers. In contrast to the many courses addressing leadership and people issues, intellectual property is rarely part of business education or training. At most business schools, if education on intellectual property is offered as part of an MBA at all, it is one component of an elective course. Few business students are willing to trudge over to the law school and, if they do, they are likely to be greeted by an IP curriculum that is bereft of business strategy considerations. Few business leaders leave either undergraduate or graduate education with the impression that intellectual property is important or that it is part of their job to have any understanding of it. Had IBM executives had such training, would they have so willingly outsourced the PC operating system to Bill Gates?

Even as leaders gain experience, most will have encountered intellectual property as a risk or deal blocker but not as an asset or part of a strategy. Typical examples include:

- the trademark that was chosen by the marketing team and brand experts but was then later deemed by the legal department as too great a risk of infringement given another mark used by a competitor;
- the claim filed by a patent troll, which was a distraction but then easily settled; or
- the patent dispute with a competitor that was very expensive and a huge distraction, but again settled with little overall business impact.

Even when seen as a risk, any fallout is likely to be perceived as manageable and something that can be left to experts to mitigate. Few business leaders have experienced cases that went to trial and were the subject of calamitous losses or injunctions. Except in industries such as pharmaceuticals, biotechnology or telecommunications, intellectual property has generally not been a significant topic of CEO or board-level concern in recent years. This can be contrasted with the risks associated with privacy and data security compliance. Until intellectual property recently emerged as a question of national competitiveness in relation to China, much of the conversation was that patents were in the hands of patent trolls, leading to an unwarranted tax on industry that should be controlled and limited.

For large internet-based businesses, which implement technology developed by others and distribute the content of others, intellectual property remains more of a risk and a cost of doing business than a threat to their competitiveness. These businesses control a large part of the narrative.

Unfortunately, there are few IP role models in the corner office. Current examples of household-name, entrepreneurial CEOs whose success was based on intellectual property are vanishingly rare; Steve Jobs was unique for the number of patents in which he was an inventor and his focus on intellectual property of all types. Even today, some consider Samsung to have won the smartphone wars simply because it was not prevented by Apple from marketing a handset. That view fails to focus on Apple's extraordinary profitability compared to its rivals. Of course, there are exceptions, such as Qualcomm, where intellectual property is central to business strategy, but such sophistication is rare.

### ***Internal organisation***

Another part of the problem is that the complexity of understanding, organising and managing intellectual property as part of a business leads to organisational fragmentation of the IP function. Intellectual property is often viewed as a risk, and certainly an expense. Under generally accepted US accounting principles, internally developed intellectual property does not rank as a balance-sheet asset, leading to the expensing of the costs of its development. Intellectual property may only merit an appearance in financial statements in the event of material IP litigation.

However, intellectual property may directly generate revenue through licensing or, more rarely, litigation. Its characteristics are similar to software, which can be capitalised when it is intended for use in profit-generating activities for two or more years.

The role and perception of intellectual property has organisational implications. If it is regarded as a risk and cost of doing business, then it may make sense for intellectual property to report

into the legal function. If it is an asset and revenue generator or an investment in a new product, it appears to more closely resemble a business function.

Given the relentless focus on reducing legal costs, reporting into legal may result in a confused structure when investment in intellectual property is needed for strategic reasons. On the other hand, given that intellectual property is a series of legal rights ultimately enforced through litigation, it may be equally confusing to have it sit entirely outside legal.

Even within intellectual property, matters are not clear. The IP function itself is often siloed between patents, patent litigation and patent licensing on the one side, and more consumer-oriented intellectual property such as trademarks, copyrights and designs on the other. Trade secrets may fall between the IP, HR and IT functions. A project such as a new product introduction or a new line of business may require drawing upon multiple types of IP expertise.

Given the multivalent nature of intellectual property, it would make sense to have a unified voice for interacting with the top management team. Yet few organisations have a chief IP officer (CIPO) who can speak for the IP function as a whole. In the absence of a CIPO, intellectual property may have multiple reporting lines with the possibility in each case that the most senior report may not in fact have any depth of specialist knowledge. In terms of accounting, the budget cost of intellectual property may not be aligned with the business function benefitting from the IP spend.

### ***Communication***

Just as business leaders rarely receive any education in intellectual property, IP leaders rarely have a background in business strategy. This leaves them unable to communicate in a manner that connects readily with top management. Intellectual property is only one factor in assessing appropriability and may be only one of many in making a complex business decision—in such circumstances it should not be oversold as the solution to a business issue. The ability among IP leaders to understand the bigger picture will lead to more productive interactions with top management. This requires a seat at the table as strategy is developed.

When it comes to more nuanced advice, IP issues can quickly degenerate into impenetrable jargon and detail. In addition, IP law, which tries to balance the rights of the IP owner and the rights of the public, is constantly developing. As a result, only rarely can simple or definitive answers be given. There is nothing wrong with that—and business people are used to uncertainty—but providing concise advice that is both accurate and understandable is difficult.

IP experts should also be open and not defensive about the limitations of intellectual property. When appropriability is weak for a patented or other innovation, there is no point in pretending otherwise. Moreover, innovative companies face an elevated risk of IP theft through human or cyber channels by global competitors, some with state backing. For many companies, it is too late to get smart.

In the absence of a CIPO position, IP communication may seem so unfocused as to be unhelpful. Critical questions often require more than one type of IP expertise. For example, resolution of a patent infringement claim may require a patent prosecution lawyer close to the technology, a patent litigator and, if a business solution is hoped for, a licensing expert. A new product introduction and the assessment of appropriability may require the involvement of human

resources (trade secrets and training), patents, design rights, copyright and trademarks. The multiplicity of experts can also lead to communication difficulties.

### **What can be achieved if both sides understand each other's thinking?**

A simple example of the benefits of a coordinated approach is a product upgrade for a product currently manufactured in China, where similar rival products are also on sale from other Chinese sellers, indicating that the necessary manufacturing expertise is widespread. Prototype manufacture might have shown that there are some necessary and difficult manufacturing innovations required for the upgrade. Early integration of IP considerations into the decision-making process could lead to the conclusion that these innovations should be protected as trade secrets and, other factors permitting, the proposal that manufacturing take place in a country with strong and effective legal protection for trade secrets.

A more complex example is Apple's 2019 decision to internalise the development of 5G modems through its \$1 billion acquisition of Intel's telecoms modem business. This not only achieved the business goal of bringing design leadership in-house but also achieved the IP goal of potentially reducing royalties payable to third parties because it included the purchase of a significant portfolio of wireless technology patents that could be cross-licensed to other owners of patent portfolios.

Here we identify a number of steps that can help to integrate IP expertise into innovation and strategy formulation.

#### ***Education and training***

One benefit of the otherwise challenging COVID-19 crisis is that the opportunities, skills and technology surrounding remote teamwork are all increasing. The following suggestions can help IP practitioners take forward steps in this regard:

- Break down silos within intellectual property: the IP function within businesses should look for opportunities for cross-functional training, with the goal that all senior IP group members have an appreciation for—and the ability to advise on—what the different types of intellectual property bring to the table at a business (not technical or legal) level.
- Speak the same language: IP leaders should be encouraged to attend executive MBA-type courses and customised classes so that they can better understand business thinking. Equally, the IP function can talk to the CHRO or chief innovation officer about specific courses for business leaders on how intellectual property fits into innovation. While few business schools offer IP courses, many can create tailored executive education courses. The IP function can also consider internal training on communication including radically reducing the level of complexity of advice.
- General education: leaders in the IP community should advocate and volunteer for intellectual property to be taught at business schools and colleges within their communities. There are already a number of organisations promoting IP knowledge and education with

which they can engage. These include the [Michelson Institute for Intellectual Property](#) and the [Center for Intellectual Property Understanding](#).

### ***Organisation***

As noted, intellectual property can be difficult to place in the corporate structure, having aspects of risk and expense, legal compliance, income generation and strategic value. Various structures have been adopted including reporting to general counsel or the CIPO and the patent function reporting into R&D.

The following are also recommended:

- Silos within intellectual property: coordination should be established across the IP function and with other corporate functions that have IP aspects, such as human resources and information technology. Speaking with one voice will increase business acceptance.
- Budgeting: however reporting lines are organised, IP budgets should be borne by the business function incurring the expense. This will help to ensure that it has an interest in understanding what it is getting and does its best to ensure that the money is wisely spent.
- Reporting: IP functions should have at least a dotted-line report into the marketing and innovation functions.

There are a number of additional barriers that may prevent IP experts from being present early in the innovation or business strategy process. These include factors such as separate locations and the time and expense necessary to be part of a lengthy series of meetings. However, the increased availability of—and advancements in—video-conferencing technology may enable an IP expert to be virtually involved, at least at regular intervals. Just as design thinking is an iterative process, IP experts should be part of a process where ideas are proposed, subjected to cross-functional analysis and, if they can, be bettered, rejected or modified. In short, it is past time for intellectual property to have a seat at the table where it can add value and prevent value loss.

### **Action plan**

Intellectual property is often lost among a company's strategic priorities for a range of reasons, including a lack of understanding among senior executives and the fragmented nature of internal IP functions. But companies can take a number of steps to ensure that it is better integrated into their wider fabric:

- Better training on wider business matters for senior IP leaders and those leaders advocating for IP principles to be taught more widely.
- A more coordinated approach across a company's IP function and other groups such as human resources and information technology.
- Other steps that can help include the IP group having a dotted-line report into marketing and innovation teams and clarity on budgeting so that an IP budget is borne by the business function incurring the expense.

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