



OPEN INNOVATION

FORGING INNOVATION AND COLLABORATION

In the first of a two-part series, Joel Smith, Rebekah Gay and Rachel Montagnon of Herbert Smith Freehills LLP explore how organisations can manage and benefit from the changing nature of innovation and collaboration.

Innovation ecosystems are becoming ever more complex and diverse. Technology is connecting individuals and businesses across sectors, and it is easier than ever before for anyone, anywhere to innovate. Organisations sense a need for increasingly rapid innovation as they try to stay ahead of the curve. All of this means that there is a compelling imperative for organisations to look externally when it comes to innovation.

While open, or collaborative, innovation presents exciting opportunities, allows greater access to talent, and may lead to reduced costs and greater sharing of risk, it requires a flow of information into and out of the business (see box “What is open innovation?”). The traditional rules of engagement around research and development (R&D), collaboration and innovation will not always apply. This can leave a business more vulnerable,

its boundaries more permeable, and the ownership of intellectual property (IP) and data less certain. Organisations therefore need to consider how to both deliver and safeguard future value.

This article, the first in a two-part series on open innovation, provides a detailed overview of the issues involved for in-house lawyers in managing innovation and collaboration.

CHANGING PATTERNS

The days in which innovation was achieved solely within an organisation’s defined, and often siloed, internal R&D team are long gone. Knowledge and technology might still come from traditional collaboration partners such as universities, research organisations and trusted suppliers but, increasingly, these partners now take on a number of

guises, even that of a direct competitor (see Briefing “Intellectual property rights and competition law: a balancing act”, www.practicallaw.com/3-605-4047). In January 2019, for instance, automotive giants Ford and Volkswagen announced a global alliance to develop zero-emission vans and pickup trucks, and in July 2019 announced that this would be expanded to include electric and autonomous vehicles (www.volkswagen-newsroom.com/en/press-releases/volkswagen-ag-and-ford-motor-company-launch-global-alliance-4568; www.volkswagen-newsroom.com/en/press-releases/ford-volkswagen-expand-their-global-collaboration-to-advance-autonomous-driving-electrification-and-better-serve-customers-5188).

Often, innovation partners include start-up and scale-up businesses, consumers and not-for-profit organisations, which might

come from related sectors. In technology-based innovations, which depend on niche expertise, innovative partners might derive from multiple non-related sectors. Ideas and technologies may also be co-created by the value chain, or fostered in group forums or through innovation competitions.

Tools for success

In theory, these changing patterns of behaviour are helpful in pushing the boundaries of possibility but not all open innovation pursuits are successful. Effective innovation requires clear and properly executed strategies, discipline and leadership, and a genuine innovation culture. It will involve skills, tools and expertise, and will take time to embed. Unsurprisingly, this means that while most organisations understand the importance of innovation to their business, far fewer report that they are satisfied with their performance in this area (www.mckinsey.com/business-functions/strategy-and-corporate-finance/how-we-help-clients/growth-and-innovation).

Supporting the strategy

Rapid change in approaches to innovation has meant that many organisations are playing catch up. For those that have developed an innovation strategy, it may not be in tune with the business strategy. New approaches to innovation can be met with considerable internal resistance due to a lack of buy-in from senior management, an internal mindset that continues to focus on traditional approaches to R&D, or a lack of the cross-disciplinary skills and co-operation that is needed for successful innovation. Businesses and their in-house legal teams need to manage these challenges. The rapidly changing and diversifying innovation ecosystem means that legal teams must consider how they support their organisation's innovation strategies.

In 2019, Herbert Smith Freehills LLP published a report compiled from a series of interviews with businesses across a wide range of sectors to assess the impact of innovation pressures and how these are being managed, in particular, by in-house legal teams (the report) (www.herbertsmithfreehills.com/latest-thinking/open-innovation-collaborate-to-innovate). Its findings were illuminating (see box "Innovation trends").

What is open innovation?

Organisational theorist Professor Henry Chesbrough coined the term "open innovation" in 2003. He has since characterised it as a distributed innovation process based on purposively managed knowledge flows across organisational boundaries (www.ssrn.com/abstract=2427233).

Open innovation has come to encompass a number of different ways of improving efficiency, using new technology and allowing organisations to gather multiple ideas from a range of sources. The aim is for organisations to use both external and internal ideas and paths to market as they look to advance their technology.

Different models

It is clear that, across sectors, as businesses look to innovate by collaborating with a broader and more diverse range of partners, many organisations are seeing open innovation as being particularly helpful in providing them with quick access to new ideas and technology. For example, the pharmaceutical sector has seen significant shifts in its innovation strategies from an introverted approach to a more external focus, including the integration of external innovations to early and diverse alliances relating to new drug candidates.

There has been a corresponding awareness of a greater need for flexibility on the legal and intellectual property side, although accompanied by a clear position on what positions are not negotiable. Despite this, there is not necessarily a clear understanding of what open innovation is and many organisations seem to have developed their own sense of what it involves.

Innovation models can be seen as a spectrum from "closed innovation", when a business develops and commercialises new products in-house, through to what may be termed "free innovation", when ideas and information are shared freely with no restriction on their use. Between these two extremes sit a range of approaches to innovation, with varying levels of collaboration, structural flexibility and openness to external parties.

Internal open innovation. Open innovation is sometimes used to describe a way in which organisations can gather and develop ideas and technologies from within, in addition to a process involving external collaboration.

Through internal open innovation, organisations seek contributions from

their existing employee talent pool, rather than relying on a dedicated R&D team, a separate innovation or ideas unit, or external consultants. This often involves incentivising and rewarding employees to innovate, as well as providing simple mechanisms that encourage the submission of ideas.

Some have attributed this so-called "insourcing" to the constant pressure to reduce costs, while others simply see their employees as previously untapped resources who are already attuned to the business and who can therefore offer potentially valuable improvements. These organisations are therefore investing in systems to connect employees with the expertise and frameworks that they need in order to develop emerging ideas.

External open innovation. External open innovation can take the form of collaborations with third parties. These can be individual arrangements or arrangements with curated communities of specialists in a given field, interacting on agreed terms and conditions within a community, and sharing problems that require innovation. Other approaches are even more open, such as those that use a public-facing platform to float issues and collect ideas from a community of patients, carers and clinicians.

BUILDING BLOCKS

While there may be differing views as to what open innovation is, it is clear that most businesses are becoming more receptive to new forms of collaboration to stay ahead of the curve, or at least to prevent being left behind. In doing so, they are looking to implement processes and structures that are built on four fundamental building blocks: speed; flexibility; trust; and talent and diversity.

Speed

Businesses interviewed for the report stressed the importance of getting access to the market first; if the collaboration is slow, it loses value. In the race to innovate, the advantage of being the first to move is key as missing out on a technological development can freeze a business out of important sections of the market.

This commercial driver, which some described as overriding almost everything else, has focused organisations towards efficiency rather than perfection, even if it makes the initiative riskier. With that in mind, in-house legal teams across multiple sectors have recognised that they need to support their businesses in assessing and understanding risk, rather than being focused on hammering out the intricacies of the perfect deal.

Flexibility

As one of the interviewees said, the key is to “declutter innovation”. As with any project, it is not always clear at the outset whether it will gather traction and interest. It is important to be flexible in order to be able to reach the best outcome collaboratively. One in-house lawyer involved in academic partnering described technology transfer as the “art of the possible”, adding that it needs to work for both partners.

Businesses need to be light on their feet in order to allow a collaboration to gather momentum. The reality is that not every project is taken forward, so a more flexible approach means that businesses can avoid wasting time on the details of initiatives that do not progress. To address this, organisations from various sectors suggest a staged approach to new projects. Multiple interviewees in sectors as diverse as mining and pharmaceuticals also identified that having a clear, upfront understanding of the business’s baseline position on key issues, such as IP, can give the business flexibility on the rest of the deal at an early stage.

Businesses that report the greatest confidence in these new forms of innovation are those that emphasise:

- Communication between innovators and legal teams early and regularly, so that all teams are on board with the project.
- Flexibility and adaptability throughout the development process.

Innovation trends

Many businesses have adopted the approach of opening up challenges or contests to the public at large, for example, by posting them on their websites or through “hackathons”, which allow businesses to identify potential innovation partners with the right skills (see “Supporting the strategy” in the main text).

Many also report an almost inevitable expansion in the range of their external collaborators, including the active sharing of non-core assets with competitors, as well as an expansion out from a business’s traditional remit in order to sponsor, and thereby harness, a more diverse range of technologies than could be generated internally. Sometimes these collaborations are with external start-ups that are effectively incubated by the business, with the successful ones later either being fully integrated or spun out into separate businesses.

In some cases, internal start-ups are encouraged and the best concepts retained. However, this can sometimes lead to a loss of innovative talent where employees’ ideas are not taken up by the business in the longer term and those staff then leave to continue to develop the project independently. Other businesses pose questions or challenges internally on their intranets so that anyone in the business can interact and submit ideas or solutions.

There are also trends towards industry-wide participation in the creation of common platforms, for example, the energy sector is exploring the use of distributed ledger technology for contributions to national grids (for background, see Briefing “Blockchain technology: emerging from the shadows”, www.practicallaw.com/4-634-8506). Businesses in heavily regulated sectors report using start-ups or independent ventures to innovate in a less restrictive environment before absorbing successful innovations back into the main business in a fashion acceptable to their regulators.

While organisations define open innovation in a variety of ways, it is almost always based on the fundamental idea and realisation that knowledge is spread throughout a business, industry or society, rather than just being held internally. By accessing both internal and external knowledge, organisations are able to exploit a wealth of information and create a bigger pool of ideas in order to seek the best solution to a specific problem that they are facing.

Trust

In the report, businesses identified that a major stumbling block for innovation collaborations can be if people are regarded as competitors rather than partners, and if the process ends up being adversarial rather than collaborative.

Here, it is possible to draw a parallel to the open source software community, where there is an expectation that participants will act in the right way, even if it is not strictly legally required. A failure to comply with that expectation runs the risk of falling out of favour with the community. The position is similar when it comes to open innovation; participants have to be more upfront, more open, and clearer about what they want and the direction they want to go in.

Interviewees spoke of this in terms of openness and “speaking the same language” as their collaboration partners. It is necessary to act quickly but also in a way that preserves long-term reputation and goodwill in order to remain a desirable collaborator in future projects.

Talent and diversity

The battle to attract the best talent has intensified as a critical part of driving internal innovation and creativity within the business. This is coupled with most business’s burgeoning investment in technology, and a heavy demand for software and systems development; in particular, input around data science, artificial intelligence, machine learning and blockchain. However, there is widespread

recognition that this brings new challenges to ensure that a diverse pool of talent is recruited so that teams are enabled to maximise the range of ideas, contributions and skillsets available to harness innovation.

STRUCTURES AND OBSTACLES

While recognising that speed, flexibility, trust, and talent and diversity are key, it is necessary to decide how to frame each collaboration. While a structure is required, there is no one-size-fits-all approach.

Hurdles to structural success

Particular hurdles in establishing an ideal structure might include:

- A clash of interests or priorities in a collaboration with academia.
- Differences in approaches and histories of different jurisdictions or subsidiaries.
- Difficulties in striking a balance between the profit and charity elements of social entrepreneurship.
- The need for regulatory compliance in heavily regulated sectors, such as financial services or energy.

In overcoming these obstacles, start-ups or newer businesses might be more likely to be comfortable with the idea of open innovation, while mature businesses may be more inclined to run with policy-driven approaches to ensure consistency and efficiency.

Ownership

At least one of the reasons that start-ups or newer businesses may be more aligned with the drivers of open innovation is their shift in thinking around the ownership of rights. Businesses interviewed for the report explained that, while the emphasis has historically been on owning and protecting the products of innovation, the focus is beginning to shift toward a more flexible approach to ensuring access to technology in collaborations.

This does not mean that nothing is worth owning; on the contrary, more than ever before, IP is core to the value of many businesses. However, the way in which it is used and valued is shifting; it is now being used to facilitate collaboration through

access regimes ranging from licensing to open source platforms, rather than being used to lock others out of the market.

Businesses also reported a shift away from their traditional focus on owning all potential IP assets to owning core assets or securing rights through licensing. Investors in start-ups still look for IP rights (IPR) as a form of security, and collaborators seek ownership or unrestricted use of the results of collaboration. However, the approach is becoming more flexible; licensing often takes the place of ownership in order to provide the flexibility and collaborative environment with which to get ahead in the market.

Aligning goals

The alignment of legal and business desires is crucial to drive innovation. As lawyers are fundamentally advisers on risk, some business people feel that the legal mindset is inherently traditional. This may be because, for example, the in-house legal department requires strict compliance with a standard non-disclosure agreement or the negotiation of a full collaboration agreement before any work can get started, or even has a take-it-or-leave-it attitude on terms and conditions. By approaching innovation from a legal angle, lawyers may be tempted to play it safe, and therefore reduce the flexibility and security of collaboration arrangements. To avoid this, parts of some businesses may not consult their legal teams at all or may do so at a deliberately late stage in the project, when it is too late to go back.

This is particularly pertinent in heavily regulated sectors, such as banks or charities. The consequence of this misalignment is that flexibility and co-operation are affected, and often simple legal solutions can be missed.

Resolving the tension

Some of those interviewed for the report explained that they solve this problem by integrating the legal function into the innovative areas of the business, so that the in-house legal teams are involved at the start of new projects and can appreciate the commercial needs as well as being able to identify the legal ones at an early stage. This approach also allows commercial and R&D teams to understand the legal issues and help in developing a joint approach that works from both a commercial and legal perspective.

The key message from the businesses interviewed for the report is that the earlier that the legal team gets involved, the more successful an innovation project is likely to be. Creating a legal framework around open innovation will emphasise the outer limits or “red lines” of projects and, crucially, provide an overall structure. It is within this overall structure that any tension can be resolved more comfortably. Suggestions for the legal team’s input included:

- Considering termination provisions in joint venture scenarios.
- Providing a checklist to cover all legal aspects for start-ups, spin-outs or entrepreneurs.
- Providing training to the business on the key legal issues.

By setting out at the outset the kinds of legal protection, such as IPR or contractual protections, that may be available in a particular sector, businesses will be better placed to understand the legal context within which they can launch innovation projects. This may require a shift in culture within legal teams, with the inclusion of different backgrounds, generations and perspectives to push innovation forward.

When creating risk models, which lawyers inevitably do, it is important to challenge norms and change the psychology of teams over time. Rather than having a single approach to structure, terms, conditions and levels of acceptable risk in respect of any and all contracts that the business enters into, in-house lawyers should adopt their approach to fit the nature of the collaboration, taking into account what the business ultimately wants to achieve and the level of risk that it is willing to take on.

Any pessimists within the legal team should be engaged with early so that the legal team is seen as a contributor that protects and adds value, rather than an obstacle that is always placing objections in the way. Ultimately, the legal team needs to achieve a balance of pragmatism and flexibility to support the business, as innovation continues to become a more diverse and flexible process.

FUTURE DIRECTION

Despite teething difficulties, the organisations interviewed for the report

are seeing significant benefits from open innovation, many of which outweigh the risks of leaving behind more traditional approaches. They reported that their pool of external collaborators is expanding and non-core assets are being shared more widely, creating routes into increasingly diverse technologies.

External collaborations are often seen as essential to ensure the speed with which innovation needs to happen. Exclusivity and rights ownership may sometimes be worth sacrificing to ensure a first-to-market position or simply to keep pace with the sector. Insourcing is also gaining traction as a way of coming up with ideas, rather than relying solely on R&D teams and consultants (see “Different models” above).

As the ways in which businesses innovate and collaborate, and the range of internal and external innovators and collaborators, rapidly expand, in-house legal teams are having to adapt. Open innovation is an entirely new ball game for many legal teams, and warrants a shift in culture and make-up. Risk models must reflect the emerging collaborative landscape, and challenge long-standing norms and protocols.

This is not always an easy process and businesses continue to report on the challenges of moving from more rigid, policy-driven approaches to strategies that provide speed and flexibility, and are built on trust; attributes that are now seen as essential to accommodate effective innovation and collaboration. In-house legal teams that are agile, educate their businesses on risk rather than being overly risk-averse, and are brought into the innovation process at an early stage, report the most success.

Rather than attempting to circumvent the legal department, as seemed to be

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happening in a few businesses, most agreed that the legal team’s involvement early in the open innovation project promotes a better overall outcome. “Man-marking” was a phrase used by some to describe the legal team’s involvement in innovative areas of the business. Having a known or dedicated lawyer for each project or business subgroup was seen as a distinct advantage.

The early provision of a legal framework within which both inter-organisational and intra-organisational tensions can be addressed and resolved, and ownership issues identified and clarified, is an essential part of a smooth innovation process. Flexibility is also key. Too many non-negotiable red lines can provide barriers to collaboration and slow down vital innovations. Close involvement

allows the legal team to become an enabler of innovation, rather than a potential obstacle, helping the business to pursue the market advantage of being the first to move.

IP continues to be a key area, both as a motivator for innovation and a dictator of the structure of collaborations. The second article in this two-part series will look at this aspect in detail, as well as other areas, including data and employee incentives.

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