



INNOVATION COUNCIL

# Enhancing Intellectual Property Management and Appropriation by Innovative SMEs

## **SMEs and the Importance of Sound IP Management**

Small and medium-sized enterprises (SMEs) are significant contributors to employment and job creation across countries. Indeed, SMEs account 99 per cent of all firms and roughly two thirds of jobs in OECD countries. This briefing note focuses on “innovative SMEs”, which are especially impactful. These firms, which tend to be concentrated in high-technology sectors, have a high propensity to experiment and to generate new inventions and processes. Unfortunately, SMEs are often unable to properly protect their intellectual property (IP). This can open the door for competitors to imitate their offerings without making their own significant investments. In contrast, when innovative SMEs manage their IP effectively, this can help them to secure investment, identify and attract potential partners and buyers, manage litigation risks, and, importantly, derive value from collaborations.

## **SMEs and Collaboration: Benefits, Risks, and Strategies**

The nature of SMEs renders them subject to important constraints relative to bigger, more established players in the market. These include scarcity of resources and expertise, lack of scale, competition and market entry problems, poor infrastructure, and lack of distribution channels. Collaboration with both public and private entities – small or large companies, research centers, and universities – can be instrumental in helping SMEs to overcome these constraints. Such collaboration requires at least some degree of sharing knowledge and technology, which can put SMEs at significant risk of losing control of their IP. IP theft can substantially harm their profitability and future prospects.

With this in mind, the following approaches to IP management can help innovative SMEs to engage in beneficial partnerships with external partners, while simultaneously protecting their intellectual assets: a) use of formal, registered intellectual property rights (IPRs), including patents, b) reliance on alternative, or “complementary,” protection methods, such as secrecy, and c) use of hybrid strategies that combine formal IPRs and complementary methods.

### Use of formal IP rights

Formal IPRs are granted by specialized government agencies and include, inter alia, patents, industrial designs, and trademarks. Though their key purpose is the appropriation of the benefits of R&D investment, they can also serve other important purposes, such as facilitating trade with other technology firms via cross licensing, allowing for the use of patents as bargaining chips in inter-company negotiations, indicating the value of an R&D project to investors, and enabling SMEs to derive value from an invention without necessarily engaging in manufacturing. Despite these advantages, however, SMEs rely consistently less on formal IPRs than do larger companies; this is due at least in part to costs associated with formal IPRs, especially patents.

### Complementary strategies

Complementary, or alternative, strategies can be viewed as substitutes for formal IPRs, and include approaches such as secrecy, capitalizing on first-mover advantages, intentional product or process complexity, defensive publishing, focus on market share in niche markets, strong branding, and relationship-building with customers. These alternative protection methods have the advantage of being relatively resource-effective, and are thus often the default strategies of SMEs.

### Hybrid strategies

Hybrid appropriation strategies combine formal IPRs with alternative appropriation methods, predominantly secrecy. For instance, a firm may patent a part of an invention while opting to protect the most important know-how as a trade secret. Such a combination of strategies may be most efficient for innovators, especially as formal, registered IPRs may be too costly or merely ineffective in certain situations. Indeed, recent research has revealed that most successful innovative SMEs strategically blend formal and alternative mechanisms.

## Recommendations for Governments

Actions by governments to ensure effective IP protection – and enforcement – frameworks can help innovative SMEs to protect their ideas and inventions and achieve their potential. Research points to the importance of governments acting to, first, improve the formal IP system, and, second, to catalyze innovative interactions between SMEs and potential partners.

Steps that governments can take to improve the formal IP system include improving patent quality, ensuring that IPRs and their enforcement are not overly expensive, facilitating patent filing and prosecution by SMEs, instituting outreach and training programs for SME business leaders, making it easier for SMEs to successfully litigate when faced with infringement, and enacting modern trade secret laws.

Actions that governments can take to catalyze innovative interactions include supporting the establishment of innovation networks and geographical “clusters”, where innovative activities in relation to specific sectors are concentrated. Governments can also develop frameworks that enable the patenting and licensing of publicly-funded research (and that enhance collaboration between the private sector and public research institutes), and can support the creation of incubators that offer support (such as coaching on business skills and IP management strategies) to SMEs. In addition, governments can also adopt the strategy of directing funds towards technology solutions that have already been appropriately protected.