Standard Development: Opportunities For SMEs

By Matteo Sabattini and Alessandra Mosca

Standards allow companies of all sizes to actively contribute to a collaborative and yet challenging ecosystem by making new technologies widely accessible through interoperability and providing several benefits to all users. Small and Medium Enterprises(SMEs), however, require a tailored standardization strategy that can leverage their key strengths, exploit their assets and access new markets and opportunities.

Standardization and Innovation Lifecycle

The 21st century will be driven by the ability to foster the creation, dissemination and use of knowledge. In our article titled "Standard Essential Patents and Licensing," we have described a successful innovation framework that companies of all sizes should embrace: the open standard approach. In said article, we have explained how licensing revenues based on the FRAND compromise (the so-called "two way street) can create a parallel revenue stream that can fund further R&D activities and thus create a self-sustaining "innovation loop." In this context, IP has become a crucial, strategic asset for most corporations.

Consistent with this approach, in March 2015, the European Commission stated:

> *The benefits of standards for European industry are extensive. Standards help manufacturers reduce costs, anticipate technical requirements, and increase productive and innovative efficiency. The European Commission recognises the positive effects of standards in areas such as trade, the creation of Single Market for products and services, and innovation. (European Commission)*

Innovation critical for society should always be facilitated by a standardization effort, as standards allow different platforms, services and devices to interoperate, enable core and strategic services for the public and governments alike, avoid lock-ins into competing, proprietary solutions, and ensure a shorter time to market for new technologies.

"In an internationally connected marketplace, we need industry standards and interoperability to encourage new developments. This is especially true in fields where many small companies are involved," says Gerard Owens, co-ordinator for public policy issues at the EPO.

The OECD, Organisation for Economic Co-operation and Development, estimates that standards issues impact 80 percent of world commodity trade.[1] By participating in standardization activities, entities of all sizes can get exposure to best practices while de-risking R&D activities. Reputable standard setting organizations (SSOs) like ETSI or ISO give participants access to a wealth of standardization opportunities, spanning innovative sectors such as Information and Communications Technology (ICT), industrial automation, energy, healthcare.

■ Matteo Sabattini,
Sisvel Technology,
CTO,
Turin, Italy
E-mail: matteo.sabattini@sisvel.com

■ Alessandra Mosca,
Sisvel Group,
R&D Engineer,
Turin, Italy
E-mail: allesandra.mosca@sisveltech.com

SSOs and SMEs: Unnoticed Factor for Business Results

It has been shown that companies of all sizes can gain substantial strategic advantage by following and actively participating in standardization activities. Some of these advantages include:[2]

- Participation increases market share;
- Avoid costs by being informed early;
- Gain market share through influence in standardization;
- Savings on product testing;
- Transaction costs reduction through standardization;
- Formation of strategic alliances;
- Increase product safety and decrease participants' liability.

> *"Businesses not only reduce the economic risk of their R&D activities by participating in standardization, but can also lower their own R&D costs. The businesses surveyed responded that these costs increase at a considerably slower rate when they participate in standardization than if they do not […]. The expense of R&D can be reduced when the participants in standards work make their results generally available, and research need not be duplicated."*
>
> *Economic Benefits of Standardization, Beuth Verlag*

Case studies based on the experiences of 11 companies operating in a variety of business sectors in 10

1. OECD, "Standards and conformity assessment in trade: minimising barriers and maximising benefits."

2. HJ de Vries, "International standardization as a strategic tool," RSM Erasmus University.

countries shows that implementing standards can provide economic benefits from between one-half percent and four percent of their annual sales revenue.[3] In a recent survey of several SMEs published by ETSI,[4] some of the principal benefits of participation as reported by SMEs have been identified. These include:

- Increased reputation of the company;
- Greater networking opportunities;
- Increased contact with potential customers;
- Increased partnership possibilities;
- Exposure to new ideas;
- Competitive advantage over companies not present;
- Exposure to industry best practice;
- Better competitive intelligence.

The major benefits of participation are strongly related to visibility, reputation and networking from one side, and to technical advantage on the other side.

In addition to products and services, strategic alliances, etc., transfer of standardized technologies to the market through patent licensing is one complementary avenue that enterprises have to recoup investments in R&D and active participation to standardization activities.

IP Strategy for SMEs and the Need for a Diversified Portfolio

Patent strategy is complementary to, and yet very different from, product/service strategy. It involves looking broadly at the technology landscape, identifying white spaces while protecting the business, thinking very long term while optimizing limited financial resources. On the other hand, product strategy requires laser-focused efforts to differentiate, improve, and accelerate time to market. This is even more important for smaller companies.

It has also been shown that IP is crucial when it comes to raising money or attracting investors.[5] Not only IP solidifies the business and create some barriers to entry. It is also key to risk mitigation and valuation. It is no secret that several high-tech newcomers that started with little or no IP—companies such as Facebook, Uber, Xiaomi—are now aggressively growing their portfolios through acquisitions and investments in R&D.

SMEs should also look at diversification strategies that would allow them to build balanced portfolios. The primary goal should be, of course, to protect the products or services that are at the core of the business model. However, building a "defensive" portfolio is no longer enough. Investors and customers want to see a full-fledged patent strategy that aims at diversifying the portfolio and ultimately hedging risk. Patenting activities should extend to adjacent verticals, track major competitors, identify and cover white spaces, leverage participation to international standards in order to build a SEP portfolio,[6] etc.

Indeed, all the activities conducted within SSOs to promote and disseminate technologies require huge investments by all participants (in terms of R&D spending, but also for active participation to standardization meetings, presentation and discussion of proposals, pre-meeting preparations, etc.). For this reason, it is a common practice to build a coherent set of proposals, from different companies working together on the same standard that can be jointly presented at SSOs like MPEG or ETSI.

In addition, SMEs and universities could lower the barriers to entry (hence reducing risks) seeking external services from partners offering their knowledge in order to help them build a solid IP strategy, protecting and monetizing technology and ideas. These outsourced patent departments are able to guide the generation of IP with a comprehensive scope supporting the whole innovation lifecycle: from inception, through protection, and later to monetization. By leveraging the expertise in standardization of specialized companies, SMEs could position themselves as active participants to international standards. The goal is to foster an ecosystem that can focus on innovating, while offloading some of the burdens to outside service providers.

The views, opinions and positions expressed by the authors in this article are theirs alone, and do not necessarily reflect the views, opinions or positions of the Sisvel Group or any employee thereof. ■

Available at Social Science Research Network (SSRN): *https://ssrn.com/abstract=2896211*

3. "ISO standards—What's the bottom line?," 2012, link.

4. Franck Le Gall, Martin Prager, "Participation of SMEs in Standardization," *ETSI White Paper No. 6*, 2011.

5. Bijan Khosravi, "Why You Want IP For Your Startup," *Forbes* 2014, link.

6. Refer to our previous article for a definition of SEP.