Partnering For Succeeding At Technology Commercialization: A Negotiation Master Class Case Study

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Abstract

Cooperations in which know-how and resources are synergistically combined increase the chances for effective commercialization of new technologies in international markets. Negotiations are necessary for partnering and are a kind of collaborative problem solving. This requires soft and hard skills, as well as proper preparation. Mock negotiations are a praxis proven way to train and empower both aspiring and experienced negotiators. LESI and the European Patent Office (EPO) have jointly developed an advanced training format combining training on IP strategy and IP management with a three party negotiation case study about innovation management and patent transactions. Participants join negotiation teams and, in a "safe" environment, apply what they have learned and hence advance their soft skills. The three-party negotiation is about marketing a medical technology with an Industry 4.0 ICU console that requires a combined approach of IP, AI, GDPR, telemedicine, block chain, control of big data, patient specific customized therapy, re-use of consumables and many more current aspects.

Introduction

Small and medium-sized enterprises (SMEs) are eager to commercialize their technologies in collaboration, but are usually challenged with finding business partners across borders and by the complexity of conducting negotiations to set up technology transfer agreements. To a large extent, the key to successfully addressing these challenges lies in the ability of the businesses to acquire good negotiation skills. Therefore, business management that is better equipped to utilize, enhance and exploit its IP assets can more effectively implement good IP management tactics and strategies.

For that reason, the EPO's European Patent Academy and the Licensing Executives Society International (LESI) joined forces to fill the gap with corresponding training offers.² Their experts developed the new two-day advanced training course Succeeding at technology commercialization and negotiation—Connecting the dots between

*IP and business.*³ The course is based on the experience of various courses that had been organized and run for many years.⁴ It is designed for entrepreneurs, intrapreneurs and intellectual capital and business development managers

from SMEs, start-ups, spinoffs, emerging enterprises, multinational corporations (MNCs), technology transfer and research organizations.

Training Goals and Course Design

The Succeeding at technology commercialization and negotiation course provides a comprehensive set of tools and techniques to help firms benefit from their IP and put it at the heart of their business strategy. It covers the following topics:

- Refining the IP strategy to align with the business
- IP management and opportunity creation
- IP assessment: Which IP should be pursued?
- Scrutinizing the invention and patent filing tactics
- Licensing best practices with examples from life science
- Negotiation and post-contract issues
- IP valuation and royalty rates

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- 1. European Patent Office. 2019. "Market success for inventions. Patent commercialization scoreboard: European SMEs," *epo.org/scoreboard-smes* (accessed 16.03.2020).
- 2. Following the execution of the Memorandum of Understanding between Licensing Executives Society International (LESI) and EPO in Miami on 26 January 2019, LESI and EPO launched in June 2019 the new training course series.

These interactive classroom trainings last one-and-a-half days and include a speed networking session. The IP

- 3. The first trainings were held in Basel (June 2019) and Istanbul (October 2019) engaging the national chapters LES Switzerland and LES Turkey, respectively.
- 4. The negotiation masterclass is particularly based on the experience with negotiation case studies that has been used in licensing courses of LES Benelux for approximately 15 years.

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negotiation masterclass training lasts the remaining half day and shows in practice how to come to a commercial deal by negotiating and agreeing on terms with commercial partners. It also covers the process of managing the deal once contracts are signed.

Participants prepare for that part of the course before it begins by studying the general information about the case, which is provided electronically. The actual negotiation takes place during the afternoon in a compressed and efficient version, focusing on essential aspects of the potential deal.

The aim of the negotiation lesson is to give participants an opportunity to try out whatever negotiation skills they possess and acquire in a supportive atmosphere. It attempts to be as close as possible to reality in terms of the parties involved and the IP, technology and content issues that are being negotiated. Of course, the short time given for conducting the negotiations means that some typical aspects of negotiations must be compressed or even eliminated to better fit the time restrictions.

Based on experience in other environments or due to simple misconceptions many inexperienced people have regarding negotiation, it is oftentimes thought to be either something like an art that they can't learn or a battle between opponents over resources that need to be shared.

Ultimately, in the context of technology commercialization, people negotiate with each other because they have a shared interest in solving a problem or reaching agreement. For that to happen, they need to feel that their issues and interests have been heard, understood and addressed. Consequently, negotiation is not about applying tricks or playing games or being the most effective liar. Those strategies tend to ruin what could turn out to be long-term professional relationships. Instead it should be emphasized that negotiation is focused on collaborative problem-solving. With technology commercialization, the best outcome is to build long-term trusting and mutually beneficial relationships, and these combative and outdated approaches to negotiation arguably have no place.

Negotiation Scenario

The subject matter of the negotiation course is an industry 4.0 Intensive Care Console (ICU) for "smart health."

The negotiation study is fictitious, but is based on a variety of real events and cases. Although the topic fits in well with current global events, it was actually developed before the recent outbreak of SARS-CoV-2/COVID-19. It is relevant to the problems facing health care providers fighting highly contagious pandemics where remote monitoring (tele ICU) is one promising approach. In the lesson, key components of the technology are owned or created by three separate companies. The negotiation

study suggests that, if negotiating teams can reach agreement, the three parties could together develop such an ICU console, which would then be capable of monitoring and even partially treating patients without jeopardizing the safety of some of the care providers, who with this technology can be located well away from the patients. In addition, the reuse of consumables is a foreseen option. This is not only an environment and cost factor, but also has relevance when supply chains don't function. The negotiation study demonstrates that cooperation, including licensing of patented devices and facilitated therapies, can not only be essential to solving customer problems, but also enhance health system outcomes during difficult times.

The Organization of the Negotiation

In advance, each participant receives background information about the three fictional parties in the negotiation case study. As in a real-life negotiation, participants have to study this material diligently in preparation of the actual negotiation. On the day of the course, each participant is assigned to one of the three companies. The participants then work in teams, each team representing one of the three companies. Specific confidential instructions, each designed for the team representing one of the companies, are distributed on the day of the course.

- The aim of the exercise is to learn about innovation management by co-operating. The participants have to analyze these specific instructions to solve technical, financial and licensing issues, as well as arrive at an agreement of how to define the overall business case for the Industry 4.0 ICU console for "smart health." In doing so, participants are confronted with issues relating to:
- IPRs such as patents, know-how, trade secrets, etc.
- Artificial intelligence and machine learning
- Patient-doctor confidentiality
- Control of big data and General Data Protection Regulation (GDPR)
- Remote monitoring and telemedicine supported by block chain technology
- Increased efficiency for patient-specific customized therapy
- The importance of being first to market
- Cost containment leadership
- The importance of product differentiation
- Life cycle management, including *recycling plastics vs. re-use of plastics*
- Product liability concerns
- Non-disclosure agreements
- The importance of setting milestones.

Asymmetric Information

A key component of the mock negotiation is that none of the three teams possesses a comprehensive set of important information or abilities. One of the three com-

^{5.} Participants should receive background course materials about three weeks prior to the event to allow them to study the material comprehensively beforehand.

panies is an SME, one is a large multinational conglomerate and a third is a specialized medical equipment manufacturer. This allows the teams to explore specific issues of how innovative SMEs can work with more powerful multinationals during the training. A large multinational company may be reluctant to integrate vital equipment supplied by an SME and may, for example, demand a second source. These issues can be dealt with through suitable milestones that guide behavior in the future. The difference in size of the companies can result in asymmetry of information, which means that the teams must endeavor to communicate properly. For example, they need to share the information that only they possess, so that synergies can be spotted and common ground can be defined.

Complexity of Multiparty Negotiations

A vital aspect of advanced negotiations is the ability to form coalitions. The complexity of such a negotiation increases rapidly as the number of parties increases.

One of the important goals in the three-party negotiation is to achieve "balance," *i.e.*, the aspect that all participants are actively involved in a balanced way. This requirement can conflict with the need for coalitions as these oftentimes exclude one party. Even though the norm is that one party is excluded from discussions about an alliance between other parties, the negotiation in this lesson is designed in a way so that all three parties continue to be involved right up to the end of the negotiation. This means that any coalition must not isolate a party completely as the aim should be a "winning coalition" that includes all parties. Indeed, the distribution of the technical information in the lesson is devised so that all three parties are required for a successful deal. See Figure 1.

Figure 1. A Well-Balanced Negotiation Approach Will Keep All Parties Busy At All Times In Order To Achieve An Overall Agreement In Time



Layers of Difficulty

Providing a training course for professionals differs significantly from teaching pupils and students in that each professional brings along a combination of experience and knowledge. Hence, participants are automatically in a position to raise or lower the bar based on their existing skills and experience. However, the difficulty of supporting participants with potentially great differences in experience and knowledge remains. This potential problem is best addressed by having a team of trainers, preferably with different backgrounds, act as facilitators.

The negotiation makes use of layers of difficulty in accordance with what is known as "subjective difficulty" in video games. That means participants can start at a kind of entry level or go to advanced levels. All the layers of difficulty are presented to the participants at the same time. However, some layers are obvious and some more covert. The covert layers do not disturb or confuse the participants with less knowledge as they do not necessarily identify the covert layers that go beyond their knowledge. On the other hand, the experienced participants have an opportunity to make an extra contribution with their identification and analysis of the covert layers.

Decision Rules

In real negotiations, decision rules among negotiation teams are defined in advance to speed up achieving an agreement with other parties and to prevent individuals from blocking or delaying the negotiation team in its decision taking.

For the mock negotiation, no rules are specified, and each team may select whatever scheme they prefer. Participants are also free to decide upon the number and scope of required meetings.

No restrictions are applied as to achieving intermediate

results. The only result that is of any importance is the achievement of an agreement which allows the product to be successfully launched in the marketplace.

Relevance of the Stakes

The technical content of the EPO—LESI negotiation is based on real events and facts. The reason for being meticulously careful to base the negotiation on real events is that the participants can deal with subject matter of the kind they may meet in real life. Although the participants were given as much freedom as possible, they were required to accept

6. Based on the experience with past courses, two trainers are recommended as a minimum. Up to 50 participants can be effectively supported with three facilitators.

the facts of the case presented to them as being true. The technical content has been made consistent with modern concepts of industrial organization. Important issues of ecology have also been included. See Figure 2.

Figure 2. The Technology Relates To Mechanical Ventilation Of Patients Who Cannot Breathe On Their Own⁷



Further Training Aspects:

• IP Audit

It would be conventional to have an IP audit in the course of a real-life negotiation. For efficiency reasons, the case described is focused on a few relevant IP rights, such as patent applications, granted patents, know-how and copyright. The participants should be in a position to analyze the IP situation in a rather short time.

Marketing

One of the learning goals is to better understand innovation management, of which licensing of IP is only one part. Accordingly, teams must conceive a marketing strategy beyond IP, such as how being first to market can be a good strategy even without patent protection.

The case study includes the option to license patent applications and not just granted patents. It is also relevant

to work on the challenges of synchronizing the patent protection with the requirements of the market.

• On-site Support

In order to help teams move forward and to address any stumbling blocks, supervisors were available to monitor negotiation activity and to solve observed challenges. Experienced course supervisors have to assist with and resolve any difficulties encountered by the teams. For example, the supervisors should be able to assist in pointing out areas of agreement among teams and providing other helpful advice.

• Team Size

The size of teams is ideally set at six members, with a typical range being between four and eight. The maximum number of participants who are split into groups to carry out negotiations in parallel thus far has been approximately 150, although 36 to 48 is more usual and easier to manage.

Debriefing

The negotiation teams present their results and reflect on their experiences so that participants can learn from other negotiations as well, not just the negotiation in which they were involved. This final presentation is moderated by the trainers. A significant part of the lessons learned is covered by this exercise. In any case, the wrap up can be combined with a debriefing to fill potential gaps and layers that might have been overlooked by the participants.

Outlook

The current EPO—LESI two-day licensing course is made accessible by the Education committee of LESI and the European Patent Academy. While it does have elements that are life-science specific, in the future, variations of the course for information and communication technology areas, as well as one dedicated for scale-ups, is foreseen. The technical and legal details of the negotiation study will need to be adapted to specific legal and/or technical issues.

Available at Social Science Research Network (SSRN): https://ssrn.com/abstract=3583075

^{7.} The publication about Aerogen inspired the drafting of the negotiation case study. For more information see: Thomas Bereuter, Yann Ménière & Ilja Rudyk (eds.), 2017, "Unlocking Untapped Value, EPO SME Case Studies On Ip Strategy And Ip Management, *epo.org/sme* (accessed 16.03.2020).