

IMPLEMENTING OPEN INNOVATION IN EUROPE: CURRENT STATE AND FUTURE CHALLENGES

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For the past couple of years, open innovation has been receiving an increasing amount of attention both in academia as well as in business. More and more firms have included open innovation as a central part in their strategy and examples of open innovation practices around Europe are manifold. Consider for example the open innovation practices by leading firms such as Nokia, which has formed strategic partnerships with a number of academic partners to foster innovation. Another example is the High Tech Campus Eindhoven (Netherlands), an ecosystem where than 90 companies share equipment, services and facilities.

Following Chesbrough et al. (2006: p1) open innovation can be defined as “the use of purposive inflows and outflows of knowledge to accelerate internal innovation, and to expand the markets for external use of innovation, respectively.” This suggests that open innovation consists of two main activities: bringing external knowledge into the firm and bringing internal knowledge outside the firm. However, another crucial aspect of successful implementation of open innovation can be found in the organization itself. In order to successfully transfer knowledge across firm boundaries, it is important that open innovation is understood and supported among the employees of an organization. A certain mindset, therefore, is needed to successfully implement open innovation practices.

Recently, Atos Consulting has done a large-scale survey research among firms¹ the Netherlands, Belgium, France, and Spain in order to asses the current state of open innovation within firms . The survey was divided among four sections: innovation strategy, bringing external knowledge inside the firm, bringing internal knowledge outside the firm, and the open innovation mindset. The results of this study show that open innovation is not yet widely practiced; some organizations have implemented many open innovation strategies, whereas others have barely started doing this. Particularly the mindset of firms seems to be problematic as well as bringing internal knowledge outside. Firms seem to be much more comfortable sourcing external knowledge than they are sharing their knowledge. The next section shows the main results of this study.

Results

Innovation strategy

Figure 1 below shows how the four countries that were included in this study responded to the questions regarding their innovation strategy.

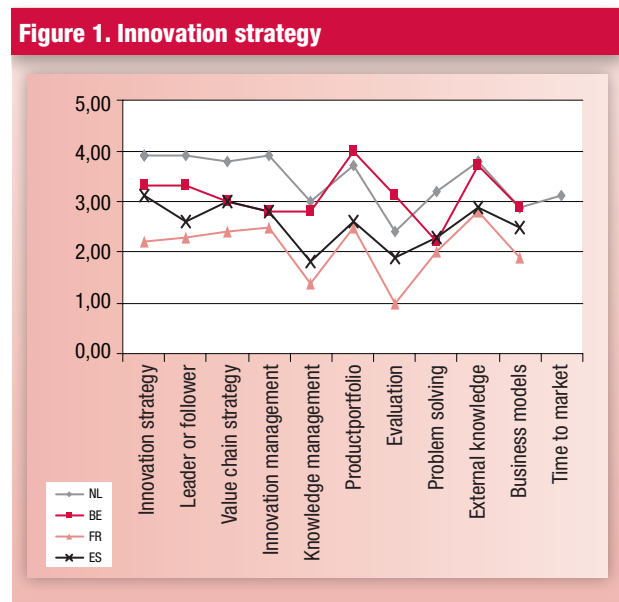


Figure 1 shows that many aspects of the respondents' innovation strategy are well covered, particularly in the Netherlands and Belgium. Spain, and to a larger extent France, seem to lag behind those countries. In general, two areas appear to deserve more attention within firms. Knowledge management seems to be well organized within firms, but the management of external knowledge flows is still relatively underdeveloped. In addition, evaluation of innovation projects leaves room

¹ See Appendix 1 for a description of this study

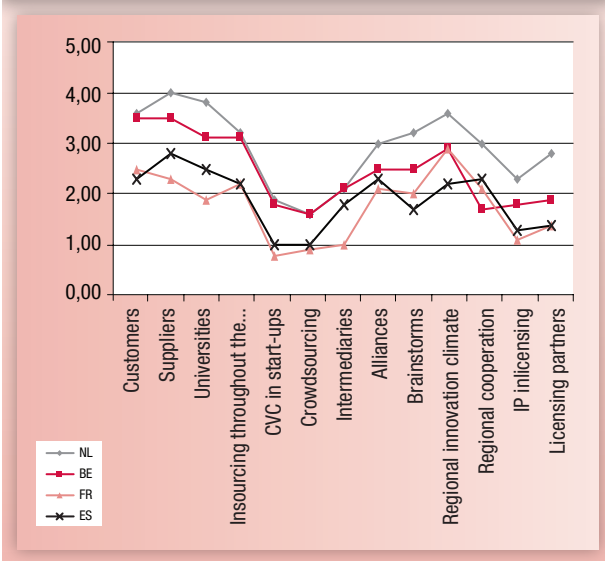
IMPLEMENTING OPEN INNOVATION IN EUROPE: CURRENT STATE AND FUTURE CHALLENGES

for improvement. Although the results of the study show that innovation projects are checked for false positives (projects that pass the evaluation but turn out to be unsuccessful on the market), false negatives are hardly examined. These are projects that didn't pass a certain stage, but in hindsight should have been continued.

Outside-in

The second part of the study focused on the outside-in movements of open innovation. Figure 2 shows the main results.

Figure 2. Outside-in

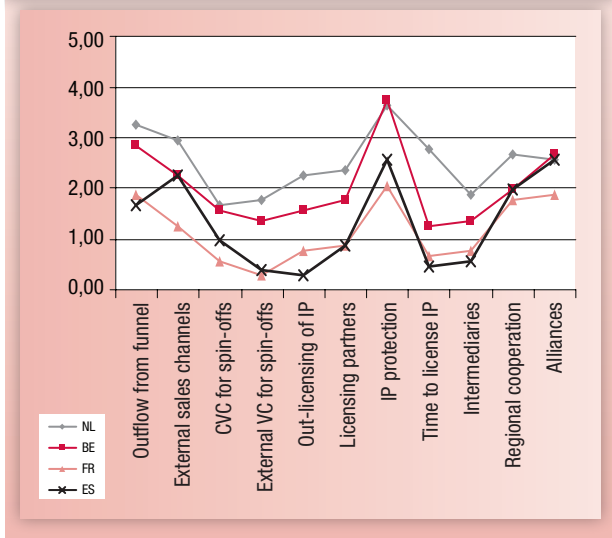


Looking at Figure 2, it becomes apparent that bringing external knowledge into the firm is mostly implemented in the Netherlands followed by Belgium, followed by France and Spain. Nevertheless, all countries follow similar trends: traditional ways of getting access to external knowledge, such as cooperation with customers, suppliers, and universities are commonly used. Other methods that have more recently gained ground (such as corporate venture capital (CVC) investments in start-ups, crowdsourcing, and the use of innovation intermediaries) are still not very common. Also in-licensing of IP seems to be underdeveloped at this stage.

Inside-out

In this part of the study, questions were asked regarding the extent to which firms bring internal knowledge outside the firm. The results are shown in Figure 3.

Figure 3. Inside-out



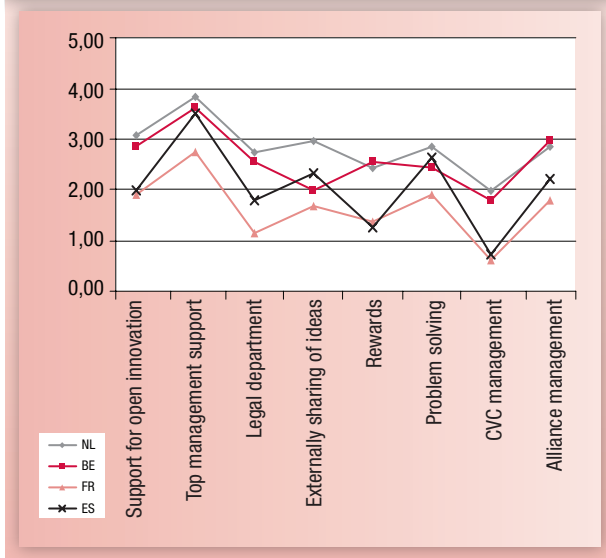
Looking at Figure 3 we can conclude that bringing internal technology outside the firm is not a very common practice yet. Although it is done to some extent in the Dutch and Belgian firms in our sample, firms in Spain and France seem to hardly bring any knowledge outside the firm. Only IP protection is commonly done. IP protection is an important aspect of knowledge protection, which is needed in order to profit from the knowledge. Although firms are well aware of the importance of IP protection, the question as to how unused IP can be monetized outside the firm has been given little thought in most companies. This is supported by the result of another part of this study, which shows that many patents are not being used. To some extent this can be explained by the fact that not all patents are equally valuable and some patents are filed to protect competitors to enter the market rather than using the patent for own products. However, there are also patents that are valuable but just don't fit the firm's strategy. These patents could for instance be licensed-out in order to gain some financial benefit. However, this rarely happens.

Mindset

The final part of the study deals with the mindset that firms have towards open innovation. The results are presented in Figure 4.

IMPLEMENTING OPEN INNOVATION IN EUROPE: CURRENT STATE AND FUTURE CHALLENGES

Figure 4. Mindset



As shown in Figure 4, the mindset of firms towards open innovation shows some room for improvement. Open innovation is not yet part of the core of organizations. Interestingly, the results suggest that open innovation is promoted within the firm, but employees do not receive rewards for practising it. Knowledge that has been obtained through an external source is less appreciated than knowledge that has been developed internally. This appears to be a big gap between theory and practice: if firms want open innovation to become a success part of their corporate strategy, it is important to value both internally and externally developed ideas equally. Many new management tools require additional investments, which apparently firms are not (yet) willing to make.

Discussion

Based on the results of this study, a number of things become apparent. First of all, the results show that open innovation is not yet widely applied within firms, and that differences exist also between different countries. Overall, respondents in the Netherlands and Belgium have implemented more open innovation principles than their Spanish and French counterparts. However, notwithstanding the differences between the countries, the general trends are similar for all countries involved in this study. Focusing on the two main aspects of open innovation, i.e. outside-in and inside-out movements, we can conclude that open innovation is not yet fully implemented. It seems that firms face four key challenges when implementing open innovation.

First of all, although most firms have formal innovation strategies that are oriented towards open innovation, the mindset that is necessary to implement and benefit from open innovation is still not present among employees. A lot of firms are still in the process of making the transition from closed to open innovation, which has not been concluded for many of them. A second challenge is related to bringing internal knowledge outside the firm. Although in-sourcing external knowledge is becoming more and more common, the other way is less commonly applied. Hence, there is a lot of valuable knowledge lying on the shelf. In order to create value from internal knowledge that cannot be applied within the own organization, firms need to become more aware of the usefulness of some of the open innovation techniques that can be used to externalize this knowledge. A third challenge concerns the techniques that firms have to practise open innovation. While we see an increase in the use of more traditional techniques, implementing newer techniques is more problematic. Crowdsourcing, for example, calls for new questions and challenges concerning the ownership of the new IP. Who will be the owner of the IP? How can you make sure that the ideas that are brought to you through crowdsourcing is not yet patented by another firm? As a result of these uncertainties, firms are less inclined to experiment with newer strategies for open innovation. Finally, when top management says to support open innovation, but does not adjust the reward system and neither invests in the development of management support in this area, implementing open innovation will not be an easy task. When firms want to make a successful transition from closed to open innovation it is important to provide full top management support. Just saying that things need to be done will not be sufficient.

References

Chesbrough, H., Vanhaverbeke, W., West, J., 2006. Open innovation: Researching a new paradigm. Oxford University Press, London.

IMPLEMENTING OPEN INNOVATION IN EUROPE: CURRENT STATE AND FUTURE CHALLENGES

APPENDIX 1

For this study, a survey was held among 120 firms, which all had a relationship with Atos Consulting. The final sample consists of 76 firms from the Netherlands, 11 from Belgium, 19 from France, and 14 firms from Spain.

The survey was divided into four sections. In the first section, respondents were asked question regarding their innovation strategy. Questions included their innovation ambition, the extent to which they are looking outside, and the effectiveness of using external knowledge. The second section concerns the use external knowledge. Questions in this section regarded the use of different mechanisms to bring external knowledge within the firm (e.g. the use of suppliers

and customers, and strategic alliances). Next, the third section dealt with bringing internal knowledge outside the firm. As for the second section of the survey, questions were asked concerning the use of transfer mechanisms, including spin-offs, licensing, and innovation intermediaries. The fourth section contained questions regarding the mindset for open innovation. Questions that were asked in this section concerned top management support and alliance management for instance. Finally, some questions were included to measure the innovativeness of the respondent firms such as number of successful new product introductions and sales as a result form new products. All of the questions were answered using a 5-point likert scale, where higher numbers indicate a higher use of the open innovation practices under study.