

Incorporating change; two cases about learning among organizations

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Among other industries, the construction industry is regularly described as traditional, resisting change and of low innovative power. Still, while walking around in city centers, for example see the Olympic park in London 2012, you realize that there are technological innovations in the construction industry, but you also see that these novelties do not reach a broader context. That leads to the hypotheses that not the process of innovation itself is suffering, but the dissimilation of innovative technologies is not efficient. Therefore, this paper illustrates the lack of innovation diffusion based on two case studies performed in 2002 and in 2010.

The **first case** from 2002 is about the use of a technology that was novel to one subsidiary of the company: prestressed concrete. This technology was already used in a different subsidiary of the same company. Between this two subsidiaries are about four hundred kilometers and they are both in Sweden. Despite regularly meetings involving people from all subsidiaries, the information that this technology was already used within the company did not reach the engineers from the subsidiary struggling with problems to use the technology properly. For the company this meant that additional spending were needed to involve external consultants, while the internal knowledge was not used. Additional information about the first case can be found in Knauseder (2007). From this first case we can conclude that companies are experimenting with novelties, but have difficulties to make greater use of them and make them applicable to larger parts of the company. Since, the difficulties of dissimilation of new knowledge were observed also by other researchers, the role of the knowledge broker was studied in the case from 2010.

The **second case** is about use of standardized reference buildings that are used for platforms where knowledge brokers from various companies can meet personal and virtually to exchange knowledge. We have seen that the platform enhances the diffusion of knowledge but also that the potentials are not used optimal. Furthermore, we could observe that the knowledge brokers had difficulties to spread the knowledge obtained via the platform within their mother companies, since there was quite some resistance to trust in knowledge that was not invented within the company. Additional information about this case can be found in Johansson (2007) and in Styhre and Gluch (2010). From the second case we can conclude that over time the resistance against exchanging knowledge was slightly decreasing. Furthermore, we could see that platforms were enhancing the dissemination processes of technological innovations. Still, the knowledge transfer process within the construction process is still not sufficient and there is a large potential to make greater and more effective use of innovative technologies.

With this contribution we try to illustrate the difficulties of **innovation diffusion** within a sector, exemplified by the construction industry. We could see that the diffusion process is improving. One of the main enhancers was the higher level of organization for the exchange of knowledge. That means that the developing of platforms for the exchange of information can be one possibility to improve the rooting of innovations within subsidiaries and among different companies.

Summarizing we can say that the construction industry shows quite some innovative power and that the innovation process is picking up. While, there is still a large potential to enhance the diffusion of innovation. It also seems that an user

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friendly IT solutions can support the exchange of new knowledge, but that face-to-face interaction is still of high importance, especially a first personal contact has to be established to achieve a level of trust that enables the participants of a platform to share their expert knowledge.

References:

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