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## **“Walls” to protect innovation? A case from industry**

This paper is about a consulting case in an industrial company, which produces on a large scale and where several departments are involved in inventing, developing and producing products. This company could be a pharmaceutical, biological or a chemical one; common to all three are the various steps involved in the process from lab to plant.

My assignment started in an engineering department. Its manager told me that its members of staff were being accused of not being able to communicate with their neighbouring departments. The communication, as perceived by the neighbours was too detailed yet not precise enough and to the point. Furthermore, the manager told me that he was most concerned about the image of their department in the whole company; he had heard that the department was being avoided by young graduates. This could be seen as a risk for their unit in the long run. In an explorative discussion with the manager I focused on the role and the task of the department in the company.

The system, in this case, consists of three departments: research, engineering and production. The research department works on finding new formulas and the researchers in the labs try to transform research ideas into experiments, producing small quantities of chemical products. After successful research they hand over their results to an engineering department, which then has the task of “scaling up” the experiment and developing a process to produce the product in larger quantities. After good results the engineers start the planning process for the real plant, which produces quantities on an industrial scale. The third player in the system is the business department, which runs the plant and sells the product with all the commercial responsibilities.

All three departments have different perspectives and interests: The research department wants to be innovative, creating products, which are proved to be viable by experiments in laboratories. The engineering department has to transform these ideas into reliable processes to be the foundation of production on an industrial scale. The business unit needs simple and stable processes and low production costs.

Further findings from interviews within the system were that the departments have a long history of conflicts with each other and that various approaches to mediate these conflicts ended without success. Additional projects to change the process from lab to plant failed as well.

This made me wonder, what the purpose of dividing a process over three departments is? What is the idea of the “walls” between the units? Did defence mechanisms have an influence on the decision to structure the process in this way?

My hypothesis is that the organisation of the process from “research to plant” with this segregation and the three departments has the purpose of defending against anxiety, which is typical for the research process. The engineers are treated as scapegoats for unsuccessful research and to do so “walls” or the clear division of these tasks between the units is “helpful”.

The researchers aim to create something new, which might not always be something reliable. Then the engineers take over “their baby” and could reject it because the experiment is not replicable on a larger scale. This hurts the researchers, who then perceive the engineers as looking at things in too much detail and being unable to communicate. However, if the engineers follow the researchers’ innovative ideas and try to transform them into an

industrial process, the business department may reject their work because the procedures are more expensive or simply different than expected. This means the engineering department is always a potential scapegoat, “left holding the baby”. Interestingly, the client described the role of the engineers using terms like midwife and/or undertaker.

The paper continues with my work with the group of engineers, who wanted to work on communication. I, however, had the hypothesis above, taking the systems view. How does one bring in such a hypothesis if the client prefers to live with their defence. Then emphasis should be laid on defence mechanisms and how they are an integral part of the structure of organisations.

Abstract:

This paper “walls to protect innovation” is about a consulting case in industry. The client asked the consultant to support him with a communication issue but further exploration showed that the structure of the system where the client is part of might be constructed to prevent the employees from the frustration to cooperate. What kind of defence mechanism is working in this system?