

Dear Reader

I am pleased to send you our first newsletter about the ongoing project “Collaboration between University and Industry in the field of Product Innovation”. Its purpose is to keep you up to date about the progress of the project which started November 10, 2003 in Clemson, South Carolina and lasts until March 12, 2004.

The project-team involves members of Clemson University (Department of Mechanical Engineering and the Spiro Center) and ETH Zurich, Switzerland (ZPE Center for Product Development).

Feel free to forward this newsletter to persons you know and might be interested. If you do not want to get this newsletter again or if you have ideas or suggestions to make, please send your e-mail to: marting@student.ethz.ch

Who we are: *Martin Gunzenhauser*, candidate MS in Mechanical Engineering from ETH Zurich, *Heather Nichols*, candidate BS in Mechanical Engineering from Clemson University and *Lisa Roth*, MS in Bioengineering and candidate MBA from the Spiro Center at Clemson University.

The project is supervised by *Dr. Georges Fadel*, professor Clemson University, *Dr. Caron St. John*, professor Clemson University, *Dr. Joshua Summers*, assistant professor Clemson University and *Dr. Markus Meier*, visiting professor from the ETH Zurich.

Our research-objective: Innovative industries need to have fast access to new technologies and scientific results in order to keep up with today’s global and highly competitive environments. Since one of the main roles of Universities is improvement of knowledge through science, a successful collaboration with industry is advantageous for both, and an important factor for a thriving community. Therefore we want to analyze and classify all existing kinds of collaborations between University and Industry in the field of Product Innovation.

“Science to Market” – our model: In Innovation management, the expression “time to market” signifies that efforts are undertaken to shorten the time from the project start to its successful implementation and deployment to the market. It is an important driver for successful companies. A similar expression and a model for “science to market” you find in the picture below (Figure 1).

Some relationships are well known by expressions such as “Technology Push” and “Market Pull”. We propose new transfer-processes like “Technology Pull”, “Science Push”, “Innovation Pull”, and so on. These new processes need to be listed, structured and analyzed for a planned strengthening.

A thorough search of all existing and possible ways of collaboration between University and Industry and their classification into these vertical “push” and “pull” - processes is our primary goal. Furthermore we want to come up with recommendations for sustainable and good ways of collaboration and compare them with examples of “best practice” found worldwide.

In order to facilitate this scheme we created what we call “containers”. Containers are ways of collaboration and can be assigned to the “push” and “pull” - processes. i.e. a science fair as a container for the push process from science to technology.

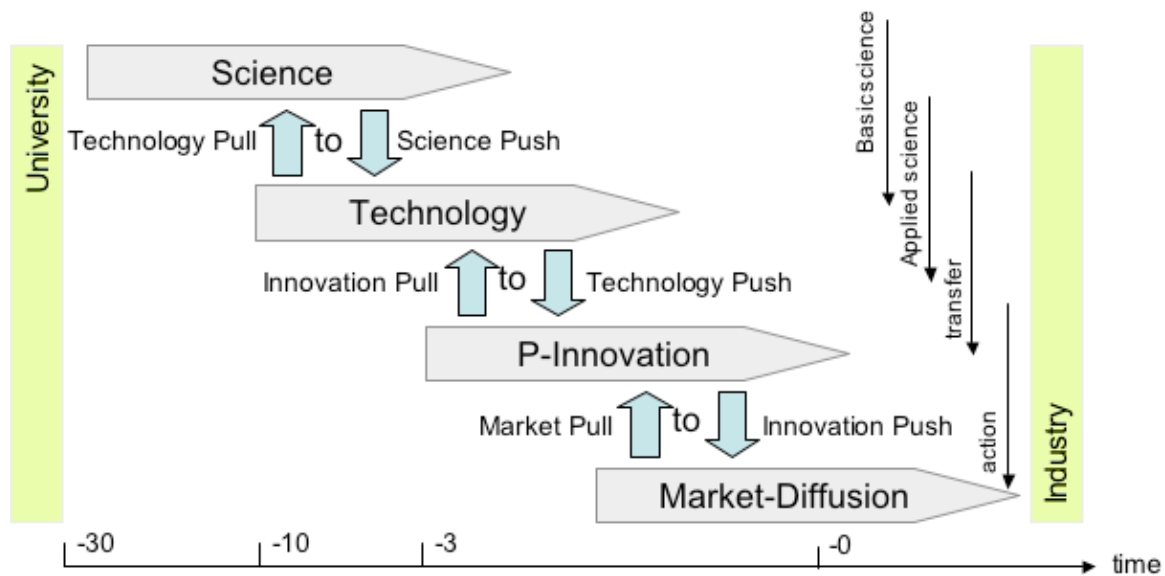


Figure 1: The model “science to market”

How we proceed:

We are currently trying to collect all existing kinds of collaborations between University and Industry worldwide. These examples of “containers” have been gathered in groups and subgroups describing their kind and also considering different perspectives, such as time, parties involved, nature (active, passive), etc.-

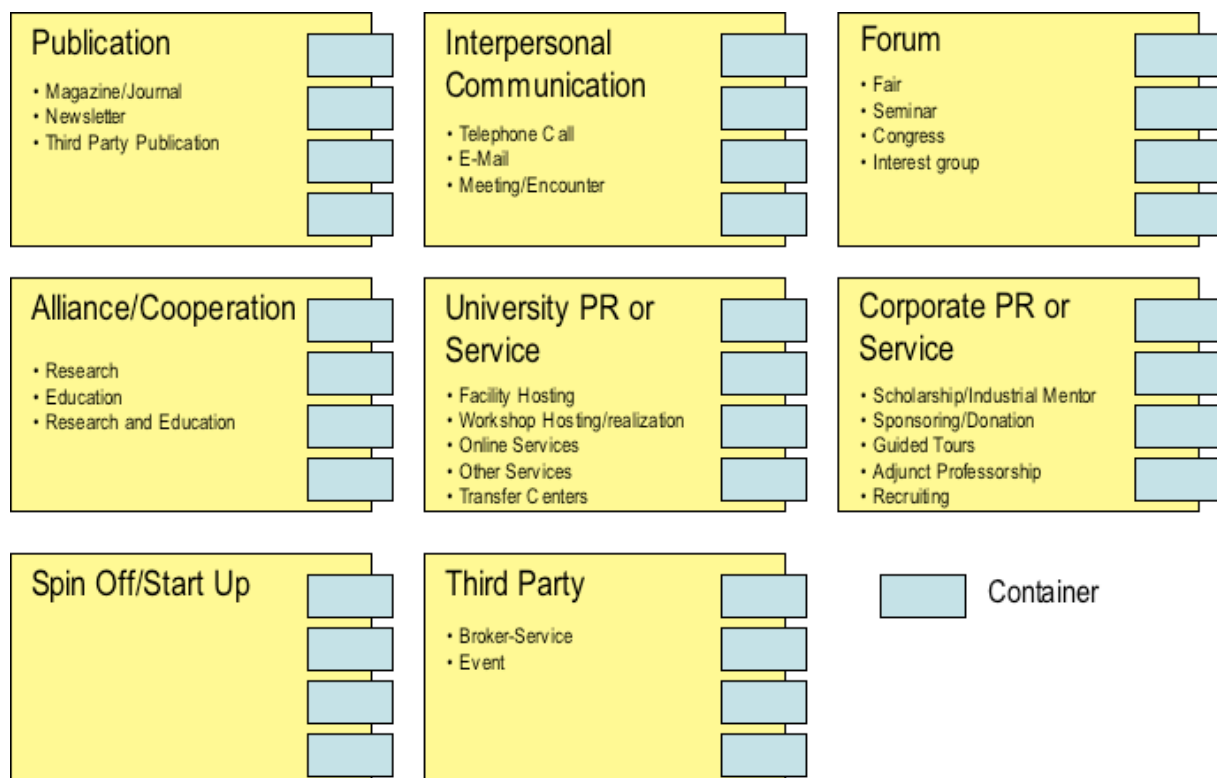


Figure 2: Gathering in groups and subgroups

In a next step we are going to interview faculty members of Clemson University and try to learn from their experiences in collaboration and get to know their valuable ideas. This should help us in completing our search for all existing kinds of collaboration-containers.

With this profound knowledge about collaboration-processes we are then ready to go and perform interviews with Industry-representatives from carefully selected companies in the field of automotive-suppliers and bioengineering in the region of Georgia, South and North Carolina.

After having heard their opinion and needs our thorough analysis of collaboration-containers should be complete and therefore we can come up with recommendations and a valuable selection of “best-practice” examples.

I hope you enjoyed this brief update on our project!

Best regards

Martin Gunzenhauser

Some interesting links:

Example for an elaborated Collaboration-container between Clemson University and BMW:

<http://greenvilleonline.com/news/2003/11/12/2003111218901.htm>
<http://www.clemson.edu/autoresearch/>

Benefits and outcomes of University-Industry collaborations of the US Engineering Research Centers (ERC):

<http://www.nsf.gov/pubsys/ods/getpub.cfm?nsf9840>

MIT's Technology Review:

<http://www.technologyreview.com/>

What is going on in Switzerland:

<http://www.ethlife.ethz.ch/> the daily online newspaper from ETH Zurich (also in English!)