Role and Impact of Transfer Scouts in University-Industry Interaction Sarah Schneider and Dana Mietzner

INTRODUCTION

Most companies are not capable or willing of developing technologies and innovations exclusively on their own (Schuh et al. 2014). Universities and research entities are addressed by companies as a transfer partner in



research and development in different ways. Knowledge and Technology transfer (KTT) as a key aspect in the innovation system and the toolbox of KTT offer various instruments to support university-industry interaction (see e.g. Preissler 2016, Piller 2013).

METHODS

In this study we investigate the **role and impact of transfer scouts** in order to increase **KTT activities**. We define **transfer scouts as mediators and translators between the individual actors of the regional innovation system**. Transfer scouting includes active search, documentation and evaluation of technologies and research results for their economic exploitation. The aim of the study is (a) to implement, (b) execute and (c) evaluate KTT activities by transfer scouts in order to learn more about the role and impact of transfer scouts in KTT. During the time period of **25 month** (04/2018 – 04/2020) we investigated 45 KTT cases conducted or supported by seven transfer scouts based at two universities and one associated research entity.

Figure 1: Classification scheme for categorizing transfer activities according to their trigger mechanisms.

It was possible to allocate each KTT case to one pattern although each KTT case can be considered as rather "unique". The approach of clustering the transfer scout activities into patterns of transfer, delivers insights into the commonalities of transfer cases:

- The time interval of the transfer activities lies in the range of 6–12 month, with the company demand cases being much shorter than the transfer potential or project idea cases.
- Professionalism in terms of fast response and action of the scout in an appropriate way is key for an ongoing transfer activity.
- The speed of the interaction with the transfer partners significantly depends on the scout.

RESULTS & CONCLUSION

In order to categorize transfer activities we sorted them according to their trigger mechanism, Figure 1. We classified four generic patterns of triggers:

- (1) **Transfer potential:** Scouts or scientists recognize the potential of already existing scientific results and try to transfer it directly to companies.
- (2) **Company demand:** Companies recognize their need for scientific support from university partners.
- (3) Project idea: Scientists or Scouts have a project idea and search for company partners to implement it.
 (4) Events & Matchmaking for networking partners and making the transfer potential of universities visible.

SME joins the ZIM cooperation network "Graphen"

The potential to create highly interdisciplinary transfer cases is a key advantage of the KTT supported by transfer scouts.

For each case we visualized and described the KTT activities with a special focus on the role and impact of the scouts. Figure 2 shows an example for the trigger mechanism "company demand". The initial transfer activity of connecting the right partners resulted in three successive and successful transfer activities: (1) the implementation of the SME in the cooperation network, (2) a starter project with regional funding and (3) an application for the Central Innovation Programme for SMEs of the German Federal Ministry for Economic Affairs and Energy.

LITERATURE

Schuh, G., Aghassi, S., Schneider, B., & Bartels, P. (2014, September). *Influencing factors and requirements for designing customized technology transfer portals.* In 2014 IEEE International Conference on Management of Innovation and Technology (pp. 105–110). IEEE

Preissler, S. (2016). Interorganisationaler Wissens-und Technologietransfer: Eine transaktionsökonomische Analyse zwischen Markt und Hierarchie. Springer-Verlag.

Piller, Frank Thomas, and Daniel Appelhoff, eds. *Praxishandbuch Technologietransfer: innovative Methoden zum Transfer wissen*schaftlicher Ergebnisse in die industrielle Anwendung. Symposion Publishing GmbH, 2013



Ø	Concretisation of the	Meeting with the R&D	Monitoring and support of the further R&D	Participation of the SME at a transfer	Project application for
	SMEs research demand	manager of the SME	activities of both partners	workshop "(Bio)Sensorik & Analytik"	national funding program:
a	• Contacting the approp-	First meeting of the	Research on technologies & potential users	@ TH Wildau	expected funding start is
	riate research group	potential partners	Research on funding opportunities		Q2/2020

Figure 2: Visualization of the KTT case "Laser-based exhaust gas analysis in glass melting plants". Trigger mechanism was a company demand (see Figure 1), the transfer scout supported the case with various activities indicated with the 🎲 - icon.



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Trigger: Inquiry of SME