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IMPROVING EXPLORATION CAPABILITY BY INTERACTING WITH START-UPS

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Abstract

This paper describes and analyses an exploration-capability model that is currently being introduced in an automotive OEM. An increasingly high environmental dynamism as well as a new level of competition in the automotive industry call for an improved capability to explore and realise more radical innovations to complement the established OEMs exploitation skills and present focus on incremental innovation. The model that is target for the study offers the employees in the OEM five different forms of interactions with start-ups as a way to develop the capability to explore. The different forms of interaction are found to make use of different modes of balancing ambidexterity and to introduce different means to improve and establish individual, entrepreneurial skills, as well as influence the innovation culture of the OEM. The paper lays the foundation for future research by describing how and why an OEM is designing a new model to develop its exploration capability through interacting with start-ups by analysing the model in relation to theory, and presenting propositions that will act as a baseline for further studies.

Keywords: Entrepreneurship, Innovation, Organizational processes, Management

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1 INTRODUCTION

The environment of automotive OEMs has changed drastically within the last decade. A high dynamism has struck this sector. Customers ask for new ways of mobility, e.g. e-mobility or car-sharing, and are less keen on investing money to own their car. Next to these challenges, there have risen a lot more competitors than before. Examples are start-ups like Tesla, Lucid, LeEco, Faraday, or BYD that approach mobility from new point of views as well as promote new ways in which cars are perceived.
This high environmental dynamism, as well as a new level of competition drive the automotive industry to search for more radical innovations, which in turn motivates these companies to strive for more of exploration (Sidhu et al., 2004; Levinthal and March, 1993; March, 1991), aiming to create possibilities for employees as well as organizations to search, experiment and focus on more variations (Tushman et al., 1996). Exploration often means to look for inspiration, new knowledge and new opportunities outside the own organization. Many times it could be equivalent to partner up and interact with other companies. Eisenhardt and Martin (2000) and a number of sources report on the advantages of interacting, however, to a large extent typically this interaction involves companies in the value chain or interaction between large firms.
In contrast to the changing environment a lot of the traditional OEMs are, due to their age, size (Sørensen and Stuart, 2000; Hannan and Freeman, 1984), and strong cultures focusing on efficiency (Sørensen, 2002) in mechanistic structures (Burns and Wholey, 1993), more set towards exploitation and incremental innovations. It is however necessary for them to adapt to the new situation and handle the new challenge of becoming more explorative.
This contradiction between what is needed from the environment and what is present within the OEMs, leads to the search of new ways of working and organising to build a capability of exploration. More and more mature organisations look for collaborations with small entrepreneurial firms in order to gain from their strengths in exploration (Weiblen and Chesbrough, 2015).
In this paper, the design of an interaction approach to increase the exploration-capability that is currently being introduced in a large automotive OEM is investigated. The approach offers the employees in the case company five different modes of interactions with start-ups as a way to develop the capability to explore.
By using the interaction approach the company wants to use different mechanisms to facilitate exploration (Lavie et al., 2010).
This conceptual paper will introduce the interaction approach by describing and analysing it in relation to relevant research literature. Expected effects of these modes will be presented in the form of propositions. The introduction and effects of using this approach will be investigated in future studies to find how it can be used to build the explorative abilities of OEMs.

2 EXPLORATION AND EXPLOITATION

March (1991) introduced two approaches for the development work in an organization: Exploitation and exploration. "Exploration includes things captured by terms such as search, variation, risk taking, experimentation, play, flexibility, discovery, innovation. Exploitation includes such things as refinement, choice, production, efficiency, selection, implementation, execution" (March, 1991, p.71).
A trade-off between the two concepts is inevitable. While exploitation delivers more short-term effects and the profit thereof is more clearly visible, exploration is needed for long-term survivability, especially if the surrounding conditions change. (March, 1991). Even though exploration and exploitation are essential for learning and prosperity, they target different aims (March, 1991). Exploitation is needed for the improvement of efficiency, execution, productivity, and also the reduction of variance. Exploration on the other hand creates possibilities for employees as well as organizations to search, experiment and focus on more variations (Tushman et al., 1996). Organizations that focus solely on exploitation will potentially lose their ability to adapt quickly. By focusing on exploration alone, the cost of experimentation and being a first mover might show to be overwhelming for an organization (March, 1991).
Therefore, there mostly is a co-existence of exploitation and exploration. Exploitation is even suggested to be a necessity for building an explorative capability and vice versa. As a result, there is an ongoing debate whether exploration and exploitation are complementary or contradictory (Lavie et al., 2010). What is agreed upon is however, that organizations should strive for achieving a balance between the

two. This finding has resulted in an extensive number of studies aiming to identifying measures of reaching this balance. Lavie et al. (2010) introduced a model that explains factors in the context, conduct, and performance of an organization that influence the balance between exploration and exploitation, from antecedents to performance. This stream of research leads towards suggestions how exploration may be fostered within an exploitative-heavy organization.

2.1 Antecedents of ambidexterial balance

Lavie et al. (2010) categorise the antecedents of ambidexterial balance as environmental, organizational, and managerial. It is assumed, that factors that foster a more exploitative course of action are hindering exploration and the other way around (Lavie et al., 2010).
Highly dynamic surroundings will create the urge for organizations to lay more emphasis on exploration (Sidhu et al., 2004), whereas exploitation will be fostered by more stable environments (Hannan and Freeman, 1984). The more competitors within one market, the higher the pressure on one company and its resources (Porter, 2008). To stay competitive in such a highly competitive environment, organizations often need to turn towards exploration in order to create radical new technologies which will increase their competitive advantage (Levinthal and March, 1993).
Firm's internal characteristics also have a major influence on the ability to explore. Besides seemingly unswayable characteristics like age (Hannan and Freeman, 1984; Sørensen and Stuart, 2000) or size (Tushman et al., 1996), others like the culture (Alvesson, 2012; Dobni, 2008; Sørensen, 2002), structure (Burns and Wholey, 1993; Tushman et al., 1996) and management (Lavie et al., 2010) can be influenced.
To become more explorative through collaborations a high level of absorptive capacity grants organizations to determine whether external knowledge is valuable or not, make it usable internally, and transfer it to the market (Cohen and Levinthal, 1990). This skill also allows for an improved interplay with the organizations' eco-system through facilitating the exploration of new technologies and markets (Cohen and Levinthal, 1990; Lavie and Rosenkopf, 2006; Rothaermel and Alexandre, 2009). Additionally it enhances the learning inside and across subunits (Lane and Lubatkin, 1998).
Summing up, there is not much empirical evidence on why certain antecedents have certain effects on exploitation or exploration. Literature seems to focus more on what brings imbalance to the exploitation - exploration model. It might hence be more interesting to elaborate on the effort of balancing the two extremes i.e. to understand which mechanisms foster exploration or exploitation.

2.2 Mechanisms for Exploration

Four mechanisms exist in literature in order to find an explorative balance for firms that are too exploitative: contextual ambidexterity, organizational separation, temporal separation, and domain separation.(Lavie et al., 2010)
Through contextual ambidexterity both exploration and exploitation is performed by everyone within an organization. This will allow for explorative measures, whenever needed. (Birkinshaw and Gibson, 2004). Organizational separation describes a mode where units have with different tasks and topics i.e. have a focus either on exploration or exploitation (Tushman et al., 1996). The most consequent form would be completely separating the exploitation and exploration units, e.g. by forming a spin-out with the task of exploration (Ahuja et al., 2008). In contrast to organizational separation, for temporal separation efforts are separated over time within one organization. It allows to balance the ambidexterity by going from one task to the next over time (Duncan, 1976). Finally, domain separation is a mode where exploration and exploitation is separated to specific alliances. Specific alliances can be picked for exploration. (Lavie and Rosenkopf, 2006)

2.3 Characteristics of entrepreneurs and start-up´s way of working and culture

Since the approach described in this paper aims to improve explorative capabilities through the usage of different modes of interaction with start-up firms, literature concerning these and the people associated, i.e. entrepreneurs, is investigated. Need for achievement, locus of control, risk taking propensity, tolerance for ambiguity, innovativeness and self-confidence are characteristics that drive their explorative behaviour in founding a Start-up and bringing it to market (Gürol and Atsan, 2006). These skills paired with a skill and alertness for opportunity identification have found to help them identifying valuable possibilities to explore(Gaglio, 1997; Gaglio and Katz, 2001).

Start-ups have also been found to have certain ways of working that are formed to cope with challenges that are associated to exploration by aiming to develop explorative capabilities. Ries (2011) developed the lean start-up methodology to evaluate ideas by quickly iterating a build-measure-learn-cycle involving customers. This allows for fast and less expensive failures and a focus on the needs of the customer which is known to be essential to stay competitive (Blank, 2013).
Start-ups have also been prominent within the Open Innovation literature in order to find new sources for innovation (Chesbrough, 2006). A recently developed model shows different ways of interacting with Start-ups (Weiblen and Chesbrough, 2015), which should also foster more disruptive innovations (Bruse et al., 2016).
Scholars also found, that interactions with start-ups facilitate both tacit and explicit knowledge, e.g. of a developed technology, (Gassmann and Becker, 2006) and may be forming a creativity network (Harryson, 2008). These factors might often be more important than monetary profits (Gassmann and Becker, 2006).
Literature is hence clear about the potential for established companies in interacting with start-ups. How established companies go about to build an increased exploration capability by interacting with start-up firms is however not well-understood. What types of interactions are selected and what are the underlying reasons? What mechanisms are the different types of interactions potentially supporting?
This conceptual paper presents the approach for creating explorative capabilities through interactions of an established automotive company is sketched. A critical analysis of the different designs of interaction in use is performed in order to understand the underlying reasoning and to identify what mechanisms ambidexterity modes are targeted. In addition, suggestions for the design of future research studies are made.

3 METHOD

The present paper is conceptual and presents a study of an interaction approach introduced in an OEM with the purpose to increase the exploration capabilities in the company. The potential of the interaction approach to influence exploration is discussed by analysing it in relation to literature resulting in a number of research propositions.
The study presented in the paper was performed by 1) analysing the different modes of interaction in use in the company; 2) performing a literature review to understand critical mechanisms related to exploration and innovation; 3) analysing the modes of interaction using the literature and 4) identifying and formulating relevant research propositions.
The analysis of the interaction approach was performed using document analysis which was facilitated by one of the authors being employed at the OEM and got access to internal documentation allowing for a detailed description of the interaction approach in use.
The review of literature in the fields of ambidexterity and entrepreneurship was performed with the purpose to discuss and analyse the modes of the approach in the scientific context and was important for deepening the understanding of the mechanisms at play.
The analysis of the different modes of interaction was performed using the literature. This enabled the identification of potential relations between each mode and different aspects of exploration and innovation.
Finally, resulting from the final analysis, research propositions were formulated and presented.
This conceptual paper will be a starting point for future research, which will be inspired by action research (Coghlan and Coughlan, 2008) where one of the researcher is engaged in changes in the organization while also studying them. This provides an opportunity to have full insight in the contextual aspects of development and deployment of the different modes. To further deepen the understanding and providing insights into the causal relations at play, case studies (Yin, 2013) to research different cases within the modes will be performed.

4 DESCRIPTION OF THE EXPLORATION CAPABILITY APPROACH

The company investigated in this study has defined an approach for different modes of interactions with start-ups in order to allow for increased exploration. The five modes are: joint technology development, establish suppliers, start-up investment, problem-solving, and spin-outs. The scenarios are established or are currently being established within the case company. First cases are starting at this point in time,

while others will start at the beginning of next year. Ongoing research will portray some of them to study the expected effects.
The modes are not developed as different options to profit from start-ups on a short-term or on a monetary basis. The main objective is to enable a switch in the mind-set, open employees towards more exploratory behaviour and therefore creating a competitive advantage within a traditional industry that is currently under the influence of significant environmental dynamism.

4.1 The Modes in the Exploration Capability Approach

In order to shift traditional automotive OEMs towards exploration, the proposed approach gives different possibilities of interacting with start-ups. The five modes will be described, and the hypothesized benefits will be shown. For better readability the expected results will be portrayed without constantly mentioning their hypothetical nature. The goal of each mode is to offer a learning possibility for the organization and its employees.

Mode 1: Joint Technology Development
Joint technology development is an interaction within which the start-up and the corporation develop one specific technology together, or adapt the start-ups technology to the specific needs of the corporation. The goal is to use the know-how and agility of the start-up with the resources of the corporation. To enable the employees to use this mode success factors would include management support and an available budget.
The start-up is profiting from this interaction with access to a big corporation, funds, and potentially a new customer while the corporation profits from the agility and lean working of the start-up. The close relationship between the start-up and the corporation will also provide the employees of the corporation with first-hand experience of the advantages of working like a start-up.
Another goal of the joint development is to create a sense of ownership of the innovation for the employee at the corporation, in order to motivate the employee to push the new technology within the corporation towards a market launch.
Indicators for success of this mode will be transferred technologies.

Mode 2: Establish Suppliers
An existing start-up has developed a highly interesting technology or product. Yet the start-up does not possess the resources that it would need in order to be a supplier for a big corporation. They are for example not able to scale up as quickly as necessary in order to be a relevant supplier. In this mode the OEM can work as a first customer and mentor. Matching the department where the start-ups product is meant to be used and the start-up in order to create the possibility for the start-up to scale up fast enough. A requirement for that is the possibility to finance a first proof-of-concept project to showcase the potential of the technology.
The start-up will benefit from this mode by getting access to a first big customer. By gaining access to a first big customer the Start-up will be enabled to know how corporate processes work and how they scale up their business in order to be a viable source for the OEM.
This scenario will allow the corporation to enable new, maybe radical, technology to become market-ready without taking too much of the risk.
The effect of this mode may also be measured by transferred technologies out of this mode.

Mode 3: Start-up Investments
The third mode is a Corporate Venture Capital (CVC) - investment. The goal is to get access to the start-up and be able to steer it in a direction that is profitable for the OEM. The exploration is firstly done by the Start-up and the equity helps to create influence and give direction.
The goal of a CVC - investment is always strategical and financial, i.e. will mostly be measured by strategic fit and return-rate. Start-ups that get an investment out of the fund are therefore relevant to the company, for learning more about the topic that they are working on and profiting from their speed in the implementation. On the other hand, they should have a high growth potential in order to meet financial goals.
Start-ups profit from investments by getting access to resources and coaching that will enable them to grow and sharpen their product to fit their customers.

Mode 4: Problem-solving
In order to profit from a Start-ups agility, they get access to a problem, which could happen in form of a competition or simply by commissioning a challenge to the Start-up which should then provide a solution that is feasible within the company.
This mode will call for the necessary openness of the company to share problems and technologies in order to profit from them at a faster pace.
A Start-up might profit in two ways. First they get access to a new technology that is not quite market-ready but has great potential. On the other hand they get access to a new customer and basically guaranteed buyer of the developed product as long as it fits the needs of the OEM. Employees of the OEM could profit by seeing how start-ups approach a problem that they have been tinkering with for some time. The Start-ups can find a new problem to solve, i.e. a new business case, and prove to a big OEM that they are a potential supplier and that the OEM could be a first customer.
Measurement of that mode may be the percentage of solved problems.

Mode 5: Spin-outs
The Spin-out process proposed here will create an own legal entity without taking equity as a must. Taking equity will be only an option, e.g. for the CVC-unit of the OEM. This scenario will allow employees to build their own company with a technology that was developed during their time in the mother company which has a greater potential when being pursued outside of the company, e.g. because of processes that won't allow for radical innovations. Typically Spin-outs are today used in a situation where the spun-out start-ups are re-integrated if useful or sold if not useful. Which implicates that they are not really their own company. The difference of this mode is, that the spun-out start-ups are kept outside and they are self-sustaining. The goal needs to be that they are companies from which the corporation will buy a product at some point.
Requirement is a process that guides through the creation of an own entity while being fair towards the employees and the corporation.
The upcoming Start-up will have the advantage of filling a need of the mother company, which will enable to contact it as a first customer. Access and network of the mother company also fosters growth and enhances a chance of survival for the Spin-out.
The OEM will profit from this scenario by establishing companies within its eco-system from which it could profit in the long-term by buying products that they could not build themselves or that are very risky in an early stage, e.g. radical innovations. This eco-system might also prove to be of competitive advantage in the long-run. Another reason for the OEM to profit is by providing a possible use for radical innovations that would not be given without a spin-out scenario. By providing this option, it will motivate engineers to develop radical innovations in-house. Not all of those innovations should be spun-out, some of them might stay. But nonetheless the option to spin-out should provide the environment necessary for a culture within which innovation can flourish and exploration takes place.
For building that eco-system, it is important to know the needs and pains of a corporation. The best people to know those needs are the people working for the corporation. Therefore spin-outs have a much better chance to fit and build a desired eco-system of a company.
The success of this mode may be measured by calculating the value of the technologies provided through the spin-outs in the eco-system.

5 ANALYSIS AND DISCUSSION

In the following section the mechanisms, as identified in literature, characterising each form of interaction are highlighted in order to understand how they supposedly will lead to a more explorative behaviour of the employees and more exploration on an organizational level. The modes are analysed according to their anticipated effect through the four mechanisms (organizational separation (Tushman et al., 1996), temporal separation (Duncan, 1976), and domain separation (Lavie and Rosenkopf, 2006), contextual ambidexterity (Birkinshaw and Gibson, 2004)), on the individual level (locus of control, need for achievement, tolerance for ambiguity, innovativeness, self-confidence, alertness for opportunities (Gürol and Atsan, 2006), new start-up methods (Ries, 2011)), and the innovation culture (Dobni, 2008) (innovation propensity, organizational learning, creativity and empowerment, market orientation, value orientation, and implementation context).

In addition, since building capabilities for companies requires both time and effort, the expected level of engagement, and the resources required is discussed in order to highlight the costs to enable each mode of interaction. The level of engagement is discussed on an individual level, whereas the required resources is regarded on the organizational level. Engagement is seen as the level of commitment, and therefore time invested. Resources are seen as money or time invested in the interactions by the organization and its employees involved.
Following the detailed discussion, research propositions are formulated, which will be used in future research.

5.1 Analysis of mechanisms

Mode 1 can be considered to enable contextual ambidexterity (Birkinshaw and Gibson, 2004), where a certain project will be improved by the explorative abilities of a start-up while other projects may not be directly influenced. By this, exploration is performed in certain projects by engaging with start-ups. The decision on whether to focus on exploration or exploitation is made by the individual employee at the point of asking a start-up for support or not.
The modes 2 to 5 are utilizing organizational separation (Tushman et al., 1996) to some extent. In mode 2, a certain task is separated from the corporation in order to profit from the outcomes. The corporation will enable start-ups in the supply network to scale up their technology fast enough to make it usable for the OEM. The suppliers are considered separate organizational units that perform the exploration. CVC investment in mode 3 also supports the use of organizational separation as a tool to gain access to explorative abilities through the use of start-ups as explorers. The fourth mode uses contextual and organizational ambidexterity in order to foster exploration within very specific tasks. Finally, Spin-outs are a classical approach of organizational separation (Ahuja et al., 2008) to promote exploration.

Propositions

Mode 1 is proposed to have a positive influence on the exploration capability of the organization by enabling contextual ambidexterity.

Modes 2-5 are proposed to have a positive influence on the exploration capability by enabling ambidexterity using organizational separation.

5.2 Influences on the individual level

Apart from mode 3, every mode provides an influence on the employee's innovativeness by offering new possibilities to develop ideas that couldn't have been developed before due to a lack of methods and agility. Mode 1 offers new possibilities for developing technologies and products in-house and mode 5 offers new opportunities that may allow employees to develop radical ideas, that might not be feasible in-house, and therefore allow to look for new opportunities.
Through the different modes, especially mode 5, it is shown that projects will be done if there is enough driving force behind them and that it usually is in the project owners responsibility to create that driving force.
New problem solving skills will be showcased through all modes, potentially except mode 3. This will provide learning opportunities and the possibility to see new approaches towards the understanding and solving of a problem. It could be especially valuable to see how a problem that was not yet figured out will be solved in mode 4.
Future research will be analysing if these learning opportunities are used by the employees and if it changes their characteristics towards a more entrepreneurial mind-set, which will foster exploration. Characteristics that are researched will include the need for achievement, self-confidence, and the alertness for opportunities, as well as a tolerance for ambiguity or the locus of control of employees (Gürol and Atsan, 2006; Gaglio, 1997; Gaglio and Katz, 2001).

Propositions

The modes 1, 2, 4 and 5 allow the employees to learn skills that are entrepreneurial in nature and foster exploration.

Mode 5 will establish and nurture a creativity network of start-ups that are loosely connected to the OEM which will increase the exploration capability of the OEM.

5.3 Influencing the way of working and company culture

Start-up methods (e.g. (Ries, 2011; Blank, 2013)) are promoted by modes 1, 4 and 5. Start-ups need to approach challenges with other methods, due to limited resources and the need to build the product exactly according to the customer's wishes. They are also associated with explorative orientation.
Mode 1 will provide the possibility for a common project of a start-up and the OEM. Therefore the OEM's employees will get insight on how start-ups plan and execute a project. Learning possibilities in mode 4 include seeing those methods being used on a previously unsolved internal challenge.
Both these modes could therefore potentially influence the employee's way of working on future project with newly learned methods.
Cultural tendencies, as defined by Dobni (2008), are potentially affected. Major influences on organizational learning and the implementation context are expected by the modes 1, 2, 4, and 5. The organizational constituency might benefit from modes 1, 4 and 5. Creativity and empowerment, market and value orientation should be positively affected by the modes 1 and 5.
The change in culture will potentially be fostered through the new possibilities provided by this approach. For example mode 5 will provide new possibilities to use potentially radical ideas. Whereas radical ideas were discouraged by blocking them during the development or even in the idea phase. Spin-outs provide the possibility for these ideas to be valuable to their owners. Therefore cultural tendencies, e.g. creativity, are pushed towards a more innovative and explorative direction.

Propositions
Modes 1, 2, 4 and 5 give direct insight in the practical ways of working within a start-up. That is proposed to influence the ways of working, methods used and culture within the OEM through the adaption of useful new skills that were observed by the OEM's employees.

5.4 Level of engagement and resources

The level of engagement that is asked from the employees and the organization differs for the modes. The modes 1 and 5 ask for a high engagement of the employees, this is due to the anticipated amount of working time spent with those collaborations. Mode 1 will for example ask for the same attention that an employee has towards other projects. Mode 5 will even turn into a full-time task. Mode 4 will ask for a high engagement in the beginning and turns into a more observational task later. Modes 2 and 3 ask for little engagement by the employees.
In contrast to that modes 2 and 3 will ask for a lot of resources. Since mode 3 will be a CVC, the resources that go into one investment will be, depending on the amount of shares and the market value of the start-up, significant.
Mode 1 only asks for little resources from the company, depending on the project. A medium amount of resources is expected to be needed for the modes 4 and 5.

Propositions
Positive relations between the level of engagement required for a mode and the effects on the individual's exploration capability, as well as the use of resources and the effects on the organization's exploration capability are proposed. Therefore, modes 1,4 and 5 are proposed to have the most significant influence on the individual level and modes 2 and 3 have the most significant influence on the organizational level.

5.5 Summarising the potential of this approach

The analysis of the exploration capability approach reveals an interesting design that goes well beyond the rather single-sided view in literature on why corporations interact with start-up companies. The study hence is complementing the thoughts of Gassmann and Becker (2006), showing how the goal of the approach is used to not only profiting from a start-ups technology and from its agility and speed, but also from changes that the contact with the Start-up brings to the innovation culture of the corporation. The objective is to implement start-up-thinking, e.g. build-measure-learn, and involving customers more frequently. This also involves a tendency to experiment and explore in order to create the product needed by the customer. (Blank, 2013; Dobni, 2008; Ries, 2011). The modes of interaction with start-ups proposed by the case company make use of insights of how an established OEM can profit from the fast and agile start-ups in their eco-system or by influencing the eco-system in such a way that a lot of start-

ups have access to the firm and generate value. In literature, studies have laid more emphasis on understanding how corporations, by interacting with start-ups, simply could get access to disruptive innovations (Weiblen and Chesbrough, 2015; Bruse et al., 2016). Contrary to that, the effects on the way of working in the case company have another and more long-term purpose and are aiming on improving the explorative capabilities of the corporation. In contrast to the traditional models, start-ups are seen as partners to enable exploration for an established corporation with the ambition to improve the innovative culture of the OEM, as well as enhancing or learning organizational and individual skills that lead to more exploration.

This approach will potentially facilitate exploration for the corporation and allow for employees of the corporation to have a different mind-set towards exploration and innovation in general. Potentially they will adapt some behaviours that are classified as entrepreneurial, like accepting risks and ambiguity, locus of control, as well as innovativeness (Gürol and Atsan, 2006), and alertness for the identification of opportunities (Gaglio and Katz, 2001; Gaglio, 1997). Whether the approach will have this impact or not is still to be investigated.

6 CONCLUSION AND FUTURE RESEARCH

This paper described, analysed and made propositions for a newly developed and introduced approach of interacting with Start-ups which hypothetically promotes exploration by fostering entrepreneurial abilities, introducing an innovative culture, and establishing a creativity network. For doing so it provides five modes of interaction to an OEM.

The propositions established by the analysis build a base for future research. This research will be done by the authors within the case company, as the approach gets implemented and first cases can be portrayed. A number of different issues can be defined as critical to investigate based on the discussion above: how the start-up way of working is perceived by employees in the organization and how the communication is being established between start-ups and the OEM, the different roles that OEM and start-ups have in different modes and how that affects the end result, how the learning aim of the approach is operationalized and how important conditions for learning as individual motivation and reflection processes are put in place. Also performance parameters for exploration capability need to be defined in order to be able to evaluate the approach.

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