Aalto University
School of Business

The Effect of Proactive Personality and Perceived Organizational Support on Tertius Iungens Orientation and the Moderating Role of Organizational Openness

Organization and Management

Master's thesis

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Abstract of master's thesis

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Abstract

Tertius iungens orientation (TIO) is a strategic, behavioral orientation towards closing structural gaps in one's social network and it relates to creating ties between unfamiliar parties. The purpose of this study is to clarify the effect of both proactive personality (PRO) and perceived organizational support (POS) on TIO. Similarly, the effect of functional area is studied and in this case from the perspective of sales function. In addition, this thesis studies the moderating effect of organizational openness (OPEN) on these three relationships. TIO has been held as an important contributor to and facilitator of the innovativeness of an individual.

The data was collected through survey that was part of the Innonets II –project of Aalto University School of Business' Marketing department. The data collected with web-questionnaire consisted of 34 companies from different industries. The survey had two separate questionnaires for different hierarchical levels; one for middle management and one for their subordinates. The data consisted of 191 supervisor responses and 1004 employee responses and constructed hypotheses were analyzed with hierarchical linear modeling (HLM)

The results of this study show that PRO and POS have positive relationships with TIO. Additionally, TIO seems to be stronger among people working at sales function. The moderating effect of OPEN was also studied. OPEN did not seem to have a positive moderating effect on the PRO - TIO or POS - TIO relationships. On the other hand, OPEN did strengthen the positive association between sales tasks and TIO.

The presented results enable organizations to develop innovativeness through management and supervision issues. This thesis offers new information regarding the facilitating factors that may increase the voluntary and collective networking among employees. This is especially important among knowledge intensive industries.

Keywords Tertius iungens orientation, proactive personality, perceived organizational support, organizational openness, sales, innovation, knowledge networks

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Maisterintutkinnon tutkielman tiivistelmä

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Työn nimi Proaktiivisen persoonallisuuden ja koetun organisaatiolta saadun tuen vaikutus yksilön verkostoitumisorientaatioon sekä organisaation avoimuuden muuntava vaikutus näihin suhteisiin		
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Tiivistelmä

Tertius iungens orientaatio (TIO) tarkoittaa yksilön strategista verkostoitumisorientaatiota, jossa hän sulkee rakenteellisia aukkoja sosiaalisessa verkostossaan ja rakentaa suoria yhteyksiä toisilleen vieraiden tahojen välille. Tutkimuksen tavoitteena on selvittää proaktiivisen persoonallisuuden (PRO) ja koetun organisaatiolta saadun tuen (POS) vaikutusta TIO:on. Tämän lisäksi selvitetään tehtäväalueen vaikutusta TIO:on ja tässä tutkimuksessa asiaa tarkastellaan myynnin näkökulmasta. Tutkimuksessa selvitetään myös organisaation avoimuuden ja kokeiluhalukkuuden (OPEN) moderoivaa vaikutusta näihin kolmeen suhteeseen. TIO:n on osoitettu vaikuttavan positiivisesti yksilötason innovatiivisuuteen.

Aineisto on kerätty osana Aalto-yliopiston kauppakorkeakoulun Markkinoinnin laitoksen InnoNets II-projektia. Web-kyselyyn osallistui 34 yritystä eri toimialoilta ja se sisälsi omat osionsa kahdelle eri organisaatiotasolle; toinen oli keskijohdossa työskenteleville ja toinen heidän alaisilleen. Aineisto koostui 191 esimiesvastaajasta ja 1004 työntekijävastaajasta. Laaditut hypoteesit analysoitiin Hierarchical Linear Modeling (HLM)-ohjelman avulla.

Tutkimustulokset osoittavat, että PRO sekä POS vaikuttavat positiivisesti TIO:on. Sen lisäksi vaikuttaa siltä, että myyntityötä tekevevillä TIO on keskimääräistä voimakkaampaa. OPEN-muuttujan moderoiva vaikutus ei ollut muiden suhteiden osalta merkittävä, joskin se vahvisti myyntityötä tekevien suhdetta TIO:on.

Esitettyjä tutkimustuloksia voidaan hyödyntää organisaatioissa ja esimiestyössä innovatiivisuuden kehittämiseksi. Tämä tutkimus tarjoaa uutta tietoa liittyen tekijöihin, jotka tukevat vapaaehtoista ja yhteisöllisesti orientoitunutta verkostoitumiskäyttäytymistä. Asia on erityisen tärkeä tieto- ja osaamisintensiivisillä toimialoilla.

Avainsanat Tertius iungens orientaatio, proaktiivinen persoonallisuus, koettu organisaation tuki, organisaation avoimuus, myynti, innovaatiot, osaamisverkostot

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1. Introduction

This study is a master's thesis conducted at Aalto University of School of Business and its target is to clarify the effect of both proactive personality and perceived organizational support on individual's strategic connecting orientation that is called tertius iungens orientation (TIO) – Latin phrase meaning "the third who joins". Similarly, the effect of functional area, which in this case is sales function, is studied. TIO has been held as an important contributor to and facilitator of the innovativeness of an individual (Obstfeld 2005). West and Farr (1990, 9.) have defined the concept of workplace innovation as:"…intentional introduction and application within a role, group or organization of ideas, processes, products or procedures, new to the relevant unit of adoption, designed to significantly benefit the individual, the group, the organization or wider society". Especially due to the intentional nature of innovations it is important to understand the individual level actions and processes that promote innovative behavior. In addition, it is relevant to enlighten the moderating role of particular context and this study focuses on the element of organizational openness and experimentation.

This thesis starts with an introduction of the topic and reviews previous research related to the subject. I will also present a research gap that current literature has not completely fulfilled. After that the following section focuses on the research problem and objectives of the study. Eventually, I will present the chosen research methodology and the scope of this study, while finishing this introduction part with a summary of the key concepts.

1.1. Background

The subject of this study and its specification were especially motivated by the observation expressed by Fleming et al. (2007). According to them, more research and literature is needed that present individuals as active contributors in the interactive context of networks: "Little research in the controversy has started from the premise that individuals have biographies and experiences and attributes that they bring to their brokered or cohesive collaborations. This unnecessarily narrow structural focus would benefit from a more social-psychological approach that considers the interaction of person and social context. Rather than minimizing or ignoring individual or contextual

influences on the phenomenon and seeking all explanation in the structure of collaboration, it would be more productive to embrace such differences and consider how they interact with collaborative structure".

Innovation literature has constructed a quite harmonious picture regarding the advantages of networks. Literature focuses mainly on the organizational level systems that create and transfer organizational knowledge. Especially the external relationships have been emphasized as the most critical and beneficial channels for accumulating new information relating to emerging trends and business issues. (Tushman & Moore 1988).

While the macro-level perception of knowledge networks has reached a quite comprehensive state, some aspects have been neglected in many previous studies. Especially questions relating to the individual level and the social and multi-level nature of innovation process have not been answered thoroughly (Obstlefd 2005). Referring to this multi-level perspective, Todorova and Durisin (2002) have stressed the importance of future in-depth research concerning the internal power relationships and social integration mechanisms of organizational knowledge. According to Baer and Frese (2003), the innovation research needs to focus more intensively on the analysis of the multi-level designs. This view is also supported by Anderson et al. (2004), who presented that "Almost all larger-scale innovations will possess features which cross the levels of analysis between individuals, work groups, and organizations, and multi-level research is sorely needed to chart these effects and processes", which would eventually provide "a powerful, innovative pathway for future innovation research to progress our understanding of innovation as a quintessentially multi-level phenomenon".

Miles et al. (2000) have stressed that "firms can prepare for the continuous innovation era, specifically by developing the capability to innovate through collaboration-based knowledge management". While the collaborative relationships are critical sources of competitive strength, it is crucial to develop a thorough picture of the cooperation and collaboration mechanisms. Cooperation emerges in the context of a cohesive network, where different parties connect with each other and develop exchange relationships. Referring to the study conducted by Obstfeld (2005), it seems that individuals are responsible for the new combinations of knowledge and due to that they may create different amount of ideas depending on the collective standards.

According to a generally accepted theoretical perception, cooperative behavior among organizations is the foundation for success in modern business and an important prerequisite for new innovations (Schumpeter 1934). Obstfeld (2005) suggested that individuals who are closing structural gaps and functioning in the context of cohesive networks are more likely to participate in innovation activities and therefore he proposes that TIO facilitates innovation. In contrast to the brokerage model (tertius

gaudens orientation), where individual has a strong agency role with positional power, TIO is essential for creating a cooperative and collaborative context. As literature has presented (e.g. Coleman 1988, Nonaka 1994, Obstfeld 2005), knowledge networks are largely dependent on micro-level efforts regarding closing the gaps between untied parties, which eventually facilitates the creation and transfer of knowledge that is necessary for innovations.

Parker et al. (2010) have concluded that research needs to go further to draw clearer connections between proactivity and issues such as innovation. Similarly to Obsfeldt (2005), I will also study the effects of proactive personality (PRO) on the individual's strategic, behavioral orientation toward building connections between previously unfamiliar parties in one's network (TIO). My objective is to offer a supportive contribution to the research area that has been disregarded according to Parker et al. (2010). This study will strengthen the perception regarding the proactive personality's relationship with innovativeness and in this case especially through TIO.

As it is noticed, personality traits or structural matters are not the only elements that facilitate innovativeness of an individual. If TIO predicts the likelihood that individual engages in innovation activities (Obstfeld 2005), the importance of interactive and dynamic relationship between social context and individual's strategic behavioral orientation increases significantly. Fleming et al. (2007) have mentioned, "some people are more creative than others and that personal characteristics interact with situations". This interactionistic perception is used in my thesis as well.

In this study, the factor that describes the social tie between the individual and his/her environment is perceived organizational support (POS). I will introduce the concept of POS and study its effect on TIO. POS has been suggested to be an important facilitator of mutual cooperation (Ghoshal & Bartlett 1994) that is a necessary condition for TIO. According to Baer and Frese (2003), "strong climates for initiative and psychological safety were associated with a positive relation between process innovativeness and profitability". Due to these observations this thesis contributes in making a clearer picture of the relationship of POS and TIO. Parker et al. (2006) have presented that only few studies have simultaneously studied proactive behavior at the individual-level, such as TIO in this case, and work environment antecedents of proactive outcomes. The study results of Scott & Bruce (1994) stressed positive relationship between the dimensions of the perceived, supportive organizational climate for innovation and the innovative behavior of individuals. Therefore a company encouraging employees to engage in initiative behavior is typically more successful in terms of achieving shared goals and having a higher return on assets. (Baer & Frese 2003)

According to Argyris (1962) "an organizational climate that fosters interpersonal openness, experimentation, trust, and risk-taking behavior supports changes in the organization". While

organizational openness and experimentation (OPEN) is related to the organization's ability and willingness to receive new ideas and perspectives (Slocum et al. 1994), it may function as a social context that facilitates initiative behavior.

Organization has different functional areas, which have very different natures and objectives. Organization's sales people work continuously with external stakeholders such as customers. Their performance is typically very dependent to their ability to build strong networks and obtain an access to diverse knowledge. Sales function is a channel through which company can commercialize its ideas (Powell et al. 1996) and as its social relationships mediate economic transactions (Granovetter, 1985), it is meaningful to assume that sales people give high priority for developing stronger ties with external partners as well as internal stakeholders.

Supported by these views, the focus of this thesis will be not only on the individual, but also on the organizational level. On the individual level I will study the relationships between POS and TIO as well as PRO and TIO. To be able to understand the meaning of the context in the behavior of an individual, I will study the mediating role of OPEN on these two relationships mentioned above. In addition, I will investigate the relationship between sales function and TIO as well as the moderating effect of OPEN on this relationship. (Figure 1.)

This thesis attempts to enlighten the potential benefits positioned in collaboration-oriented brokerage. Thus, this thesis contributes to the growing demand for a more cohesive picture of innovation and its prerequisites. The results may offer critical information regarding what promotes the innovativeness of individuals that to a great extent facilitates economic growth and enables new business opportunities.

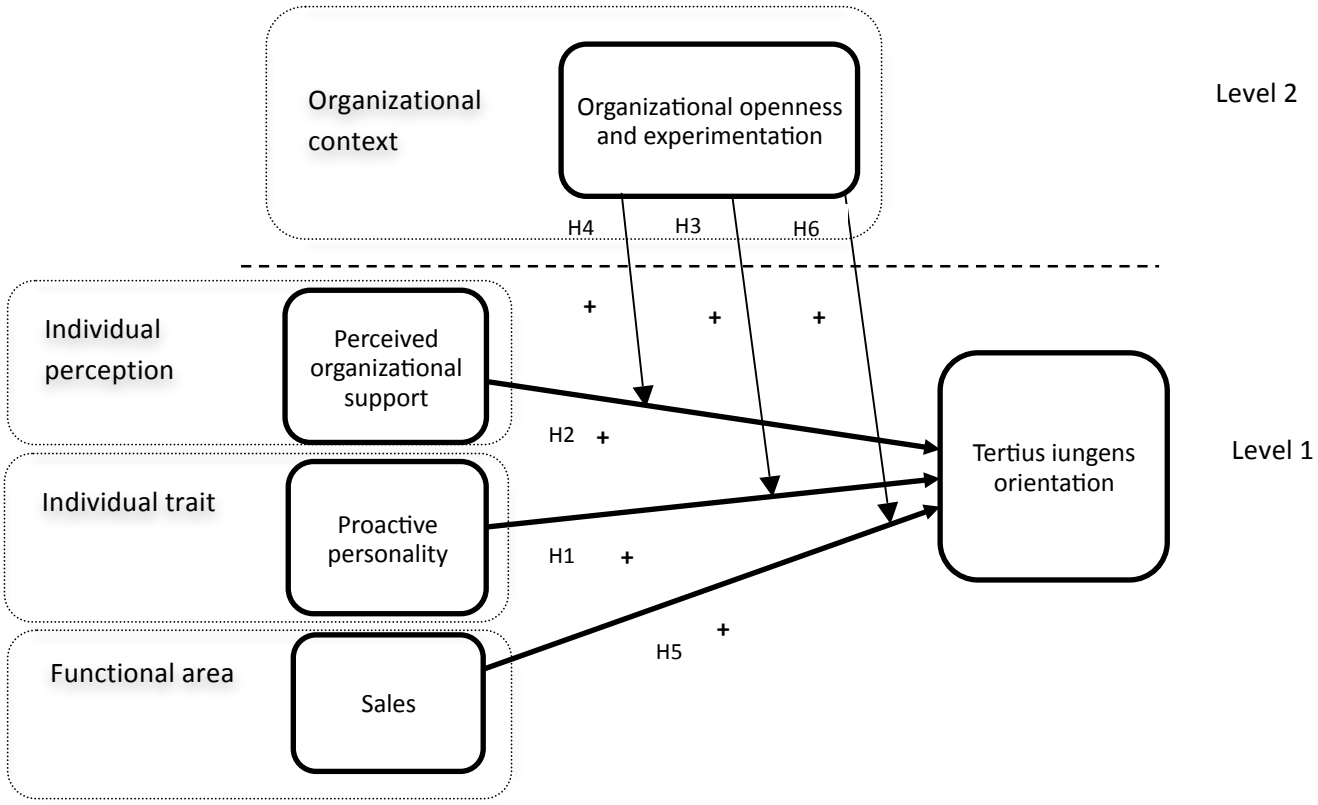

FIGURE 1. The proposed structural relationships.

1.2. Research problem and objectives

Starting point for the study of this thesis was the observation by Obstfeld (2005) that TIO increases the innovation abilities of an individual. This thesis tries to clarify the forces that facilitate TIO. But as this thesis strives for constructing a stronger picture of the social forces that support TIO, few important elements were chosen to explain this behavioral orientation.

Proactive personality is a natural trait of an individual and it has a meaningful relationship with individual's activity level. Referring to the findings of Thompson (2005) and Obstfeld (2005), it seems that there is a strong link between individual's network activity and proactive personality. This relationship is also interactive and intensifying. While proactivity increases probability of TIO, the created networks function also as channels of resources and knowledge that support one's performance (Thompson 2005). As Thompson's (2005) model suggests, proactive employees gain performance benefits by means of developing social networks that provide them the resources and latitude to pursue high-level initiatives. Organizations that foster network building, for example through encouraging cross-functional interaction and supporting a climate that values collaboration and open communication, are usually able to leverage and enable employee proactivity,

simultaneously increasing their job performance: “Fostering a strong network thus seems a likely avenue through which proactive employees achieve high levels of performance”. Therefore I assume that proactive personality is one important facilitator of TIO (Hypothesis 1).

Due to the implicit nature of a typical network tie, it is important that individuals at the interface of network parties are willing and able to receive signals and capitalize their positional advantage in form of timing, quality or diversity of information for the sake of collective interest. From the perspective of social capital, trust is a facilitating feature of collective interest and cohesive network building (Coleman 1988). Perceived organizational support (POS) is a signal of higher-level trust between the individual and the organization, which I hypothesize to strengthen TIO (Hypothesis 2). Individual’s belief that her/his contributions create certain obligations to the organization is the foundation for the development of a psychological contract and a reciprocal relationship. (Eisenberger et al. 1986, Rousseau 1989) The study conducted by Baer and Frese (2003) found out that psychological safety was positively related to longitudinal change in return on assets and firm goal achievement and moderated the relation between process innovations and firm performance.

I suggest that the effect of organizational openness and experimentation (OPEN) has a positive, moderating effect on the relationships between PRO and TIO, as well as between POS and TIO (Hypothesis 3 & 4). Organizational openness refers to the company’s culture, higher employee autonomy and its willingness to experiment new things and solutions, which is a condition that is highly dependent on the existence of trust (Argyris 1962). While mutual trust was similarly a critical element and prerequisite for POS, I assume that OPEN may function as a contextual facilitator - or if it is missing as a constraint - of cohesiveness and TIO. I also suggest that OPEN facilitates proactive behavior, because individuals are more autonomous and are mandated to experiment.

As mentioned earlier, proactive personality is a natural trait of an individual, which existence is not adjustable by environment. But environment and the context of action might have crucial moderating effects on the motivation of action and the goals that one chooses to strive for. This can be analyzed from the perspective of exploitation and exploration, where exploitative individual might emphasize short-term benefits at community’s expense. TIO reflects explorative nature of action, where altruistic behavior and long-term benefits are in the primary role, without clear and immediate expectations of repayment. This emphasizes the meaning of mutual trust, which is a fundamental element of POS and OPEN. (Argyris 1962, Eisenberger et al. 1986).

Because organization’s sales people work continuously and closely with external stakeholders, it is obvious that their performance is highly dependent on the quality of their networks. Their ability to gather market knowledge is also a key element of organizational ability to innovate and sales

network is similarly a channel through which company can commercialize its ideas (Powell et al. 1996) Therefore it is meaningful to assume that sales people have higher tendency to close gaps in their network and create bridges between unfamiliar parties. I suggest that sales people are more Tertius iungens oriented than people on average (Hypothesis 5). Additionally, I also suggest that organizational openness has a positive, moderating effect on this relationship (Hypothesis 6).

The goal of this thesis is to achieve a clearer picture of the dynamic relationship of micro-level action and psychological dilemmas behind the behavioral orientation. Hypotheses mentioned earlier concentrate both on the individual and organizational levels. Especially the role of trust is examined, through the conditions of POS and OPEN. With an emphasized focus on these trust related issues, I want to highlight the importance of social context. While TIO supports cooperative behavior, it is valuable to understand the underlying elements that may enable individuals to strive for collective and long-term benefits.

1.3. Key concepts of the study

Tertius iungens orientation (TIO) is a strategic, behavioral orientation of an individual, where he/she closes gaps in the social structure and creates direct contacts between the unconnected parties. Latin verb iungo means to join, unite or connect and the concept of TIO was introduced by Obstfeld (2005). The concept of TIO works as well in situations where parties already have existing ties, but they are unconnected in relation to a particular project or initiative. (Obstfeld 2005) This idea of a "non-partisan" behavior, alternative to the mediator type of tertius gaudens, was originally presented by Simmel (1950). While Simmel emphasized "non-partisan's" role especially in the set of conditions, where colliding interests and tension between the parties is dominating, tertius iungens activity may truly evolve also without these tensions and is typically supported by elements such as trust, reciprocity and reputational incentives. Obstfeld's study (2005) found that the people functioning in the context of cohesive networks were more likely to report being participated in innovation activities. This is related to the nature of the behavior, which focuses on building bridges and cooperation on the basis of collaboration.

Proactive personality (PRO): Literature has approached proactivity from many different perspectives, but there is still no homogeneous agreement how to conceptualize it generally. As proactive personality is a trait of an individual (Bateman & Crant 1993), some researchers, such as Frohman (1997), have emphasized personal dispositions. Frohman (1997) has presented proactive individuals

as initiators who see a problem and attack it proactively, without any specific order to do so. He adds that proactive self-starters push to find new and better ways to do things and do not accept the status quo without consideration. It is very typical that researchers see proactive behavior as a function of situational cues and increasingly emphasize the meaning of context (Parker 2000). That is why proactivity literature focuses on the reciprocal relationship with individual and his/her environment, which is characterized by causal links influencing continuously the behavior of one another (Thompson 2005.).

Perceived Organizational Support (POS): Eisenberg et al (1986) have defined perceived organizational support (POS) as an employee's perception concerning the degree to which an organization values her/his contributions and cares about her/his well-being. Employee's unilateral belief, that her/his contributions create certain obligations to the organization, is the foundation for the development of an implicit, psychological contract. This contract is related to issues that are mutually expected and accepted in the reciprocal relationship (Rousseau 1989.). Therefore organizational support is also a characteristic of higher level trust between the organization and the employee (Eisenberger et al. 1986), which is an important element of mutual cooperation (Ghoshal & Bartlett 1994).

Organizational Openness and Experimentation (OPEN): Organizational openness is related to the organizational ability to welcome new ideas and perspectives emerging from internal as well as external stakeholders. (Slocum et al., 1994; Sinkula, 1994). Openness to new ideas and experimentation are interactively connected to each others and facilitate effectively organizational preparedness to manage organizational changes. As Argyris (1962) suggests, "an organizational climate that fosters interpersonal openness, experimentation, trust, and risk-taking behavior is conducive to such structural changes".

1.4. Scope and Methodology

The literature used for this thesis was mainly related to organizational behavior, psychology and sociology. Due to the socio-psychological approach this multidisciplinary nature of source literature was a prerequisite. The empirical part of the study is conducted as a part of research project called InnoNets II, organized by Aalto University School of Business and its Department of Marketing. This project focuses on the management solutions that enable organizations to be simultaneously innovative and efficient on different organizational levels. The data was gathered via web-based

questionnaire and it had respondents from 34 different companies, including 191 manager-level participants and 1004 from the employee level.

1.5. Structure

The structure of this thesis is following. The chapter 2 introduces the most relevant literature and previous research that focus on TIO. Chapters 3, 4 and 5 focus on the literature regarding PRO, POS and sales function. Similarly, the hypotheses 1, 2 and 5 are presented in theses chapters and they are based on previous research literature. Chapter 6 introduces the element of OPEN and presents the three hypotheses regarding the moderating effect of OPEN. Chapter 7 concentrates on empirical part of the thesis and introduces the data and analysis method that were used during the testing of hypotheses. Chapter 8 presents the empirical findings, while chapter 9 discusses about them more profoundly. The chapter also focuses on the limitations of the study and suggests a direction for future research.

2. Theoretical Background to TIO

In this section I will try to construct a thorough picture of the individual's connecting orientation in the multilevel and dynamic context of knowledge networks. Increasing amount of literature has been focusing on the innovativeness of individuals as well as organizations. Many researchers have focused on the organizational structures, management styles or personal traits, but few have emphasized the multilevel perspective of knowledge networks or the role of individuals as active contributors.

Because the processes of creating and transferring knowledge are the core elements of innovations (Miles et al. 2000), it is relevant to cover literature that focuses on those issues. I have chosen to start with presenting previous studies relating to network structures, while gradually approaching the factors that have an effect on the behavior of individuals. While the network structure itself may offer functional access for new information and enable sharing of resources, the individual is still the one, who eventually decides how to behave or act. Finally, I will present TIO, the individual's strategic behavior orientation toward connecting others, which is the core issue of this thesis.

2.1. Social Networks

It is widely recognized that innovativeness is an essential part of organization's long-term competitiveness. Organization's capability to innovate is largely dependent on the creation of organizational knowledge that emerges from the efficiency and diversity of organization's social networks. The ability to process knowledge, and thus create social capital that is embedded in the networks, helps organization to capitalize new information and knowledge. This is closely related to the cognitive structures of learning. Similarly, the knowledge transfer between external environment and organization as well as across its internal units is important and all of this takes place at the individual-level. (Cohen & Levinthal 1990)

A quite traditional approach to network strategy is to increase the volume of social connections and to incrementally build stronger relationships between parties within and outside the organization. It is also acknowledged, that the high level of tacit information or knowledge presumes stronger and

more direct network ties (Granovetter 1973). This macro-level approach is very useful and reflects how organizational knowledge develops. But system-level does not sufficiently highlight the micro-level processes that have a radical effect on the efficiency of these networks. If network is not efficient, organization's potential to transfer or capitalize knowledge is low. Ties and their functionality are strongly dependent on the micro-level action as well as on the willingness of individuals to facilitate this desired cooperation. Literature has traditionally seen individuals as brokers or gatekeepers, who act around the structural holes (Burt 1995) and therefore they possess positional power and control over the linkages they have created. Broker's position opens opportunities to enable cooperation but also exposes one to a temptation of self-serving exploitation, which naturally would decrease the functionality of the network. (Obsfeld 2005)

Thus, one obviously critical element of innovativeness is the individual-level orientation and one's engagement in acting as a "gatekeeper" between organization and its environment. If broker chooses to exploit his/her positional power, he/she enhances the importance of his/her position and increases the network's dependence on him/her. On the other hand, broker could choose a strategy of "bridge building", which refers to strategic behavioral orientation toward connecting others and facilitating new cooperation. This latter behavioral orientation is called tertius iungens orientation – "The third who joins". (Obsfeld 2005) In the following sections I will construct an insight of the relevant elements of network behavior and move from organizational-level towards the individual's behavioral orientation.

2.2. Knowledge Transfer

Network's structure can fluctuate between dense and sparse, which affects its abilities to transfer different kind of information or knowledge (Hansen 1999). While networks function as conduits for organizational knowledge, they generate the property of human capital. In addition, networks transform themselves into a certain form of relational capital that is embedded in the social relationships (Lin 1999). From this capital perspective it is important to understand two issues. The first is the value of the resources that network contacts hold and the other is the general structure of the contacts. All in all, networks may offer information benefits in three forms that are access, timing and referrals. (Burt 1995, 12-13.)

The interaction at the micro-level has an effect on the macro-level patterns, because these interpersonal networks develop a functional micro-macro bridge. Essential factor in these

relationships is the strength of the tie, which is a combination of duration, emotional intensity, intimacy and reciprocal services. The stronger the tie, the more similar and closer the parties usually are. (Granovetter 1973) Political factors, such as different motives of the parties, and the existence of mutual trust have also a substantial effect on the functionality of relationship. (Burt 1995, 13-15.).

One's ability to predict and affect other party's behavior builds trust between the parties. Typically a pre-existing tie is an important motivational factor that guides behavior in the trustworthy direction. (Granovetter 1973) Borgatti and Cross's (2003) study supports the perception that learned social relationships have an influence on the knowledge-seeking behavior of the individuals. Fostered social networks help organization to identify relevant information more efficiently. Due to one's volume limits of managing intellectual information, networks function as screening devices and offer critical signals about emerging opportunities or possible dangers. The timing of these signals or pieces of information is similarly very important. Relevant contacts may offer access to information much sooner compared to the average player in the market. (Burt 1995, 13-15.)

Relationships have also costs, which are time and energy needed in maintaining functional ties between parties. One effective way to benefit from the size of one's network, with lower maintenance costs, is to have large number of indirect ties. The ability to recognize the nonredundant contacts maximizes the ratio of information benefits and maintenance costs of the relationship. Dense networks with many direct ties return less diverse information compared to sparse. Therefore networks with dense ties are less likely to provide access to new resources or information. High connectivity level among the network members implies that they may have only few external links. (Burt 1995, 2001). This absence of diversity can be characterized as an idea problem (Obstfeld 2005). It should also be acknowledged that the relative benefits of indirect ties might be greater for parties with few direct ties. Parties with many direct ties have already functional access to knowledge flow brought by others, which however limits their ability to exploit the profit from indirect ones. (Ahuja 2000)

Dense networks and direct ties have a significant impact on knowledge creation. They facilitate cooperation among the members of the network (Coleman 1988) and strong ties are perceived to increase productivity due to their higher capacity for communication. Shared values, norms and cohesive ties build reciprocal relationships and trust among members of the network. (Reagans & Zuckerman 2001). Dense networks and their overlapping knowledge promote also sharing and integration, which help to build consensus and solve even complex problems (Grant 1996). These features are especially important if knowledge is tacit and complex (Polanyi 1966). Collaboration offers opportunities to enjoy from the economies of scale. This is especially relevant in research and

development functions, as collaboration enables larger projects and better access to knowledge. (Ahuja 2000) Due to the higher cohesion and reciprocal relationships, people may be more willing to create new connections in the network (Gulati 1995). This general sense of collectivity builds strong attractiveness and trust between the parties, which might create the danger of negative encapsulation. This means that parties could be less likely to be exposed to new and diverse information from beyond their own primary circle (Granovetter 1973). But generally strong ties are very beneficial - especially in terms of knowledge transfer - because they decrease opportunistic behavior, such as withholding knowledge from others (Yli-Renko et al. 2001).

But as it has been said, in addition to these stronger and closer connections, knowledge transfer and creation needs weaker ties as well. Zahra and George (2002) have argued that social integration mechanisms increase organization's capacity to process knowledge and lower the barriers that disturb transformation and assimilation of new knowledge. This view has been held incomplete as the potential negative influence of strong social integration is almost completely neglected. The benefits of weaker ties are quite widely supported by different studies and especially certain abilities to process knowledge point out the benefits of weaker ties. They transfer codified knowledge more efficiently and enable better knowledge access (Hansen 1999). Weaker ties are also less costly to maintain (Polanyi 1966) and they transmit diverse information and accelerate project completion if the knowledge is not complex. (Granovetter 1973) The findings of Hansen (1999) also support these claims and he suggests that both strong as well as weak ties are needed and beneficial in terms of knowledge creation.

Thus, strong ties and social integration mechanisms are useful especially when knowledge is complex. As for exploring opportunities and in case of simple knowledge, weak ties are more effective than the stronger ones. Tiwana (2008) promotes an idea that the bridging, weaker ties create potential for novel knowledge recombination, which enhances network's ability to achieve simultaneous alignment with objectives and adaptability to changes. But this would happen only if it is realized through knowledge integration. Though weaker ties offer access to diverse expertise, perspectives and capabilities, the critical challenge occurs at the implementation level. Bridging ties pose this action problem (Obstfeld 2005) due to the heterogeneity of individuals, which may prevent them to synthesize their perspectives and knowledge. Because of the plausible differences of norms, vocabulary and social culture that individuals are embedded in, it is difficult to develop effective context for knowledge sharing in the network of bridging ties. (Dougherty 1992).

One important factor needs to be noticed, if the knowledge process – especially the exploitation of external one – is desired to be profoundly understood. Both stronger and weaker ties are affected by

power relationships. Individual actors, who have power in their networks, may influence the knowledge absorption process to achieve their own personal goals. Intraorganizational power relationships may either enable or inhibit the exploitation of new knowledge, while internal power relationships have a moderating impact on the transformation or assimilation process. (Todorova & Durisin 2002) Studies have found that the power of current external stakeholders (e.g. customers) may diminish the willingness of an individual to exploit knowledge in selfish manners (Hill & Rothaermel 2003, Christensen & Bower 1996). Still, Todorova and Durisin (2002) stress especially the importance of more in-depth research concerning the internal power relationships and social integration mechanisms. As Burt (1995) has described, the configuration of ties is essential for the network's performance. Individuals may have different roles in serving the network and they can act as brokers, translators and interpreters. These functions help to integrate knowledge that is accessible by bridging ties. (Tiwana 2008)

Kotter (2012) has presented a model, which helps to understand the role of knowledge networks in strategic change and development. Kotter suggests that organizations need two "operating systems" to stay innovative and agile. According to him, traditional hierarchy and organizational processes keep the operational tasks running, which make them naturally important. But what is typically missing is a complementary second operating system that would provide diverse knowledge and signals needed in the development of strategy. In Kotter's theory, this second operating system is a network that consists of voluntarily performing individuals, collecting and sharing knowledge (FIGURE 2.). The dynamic and flexible structure of the network liberates information from the "hierarchical layers and enables it to flow with far greater freedom and accelerated speed". This individual willingness and motivation to build new connections between unfamiliar parties facilitates faster and more efficient knowledge transfer.

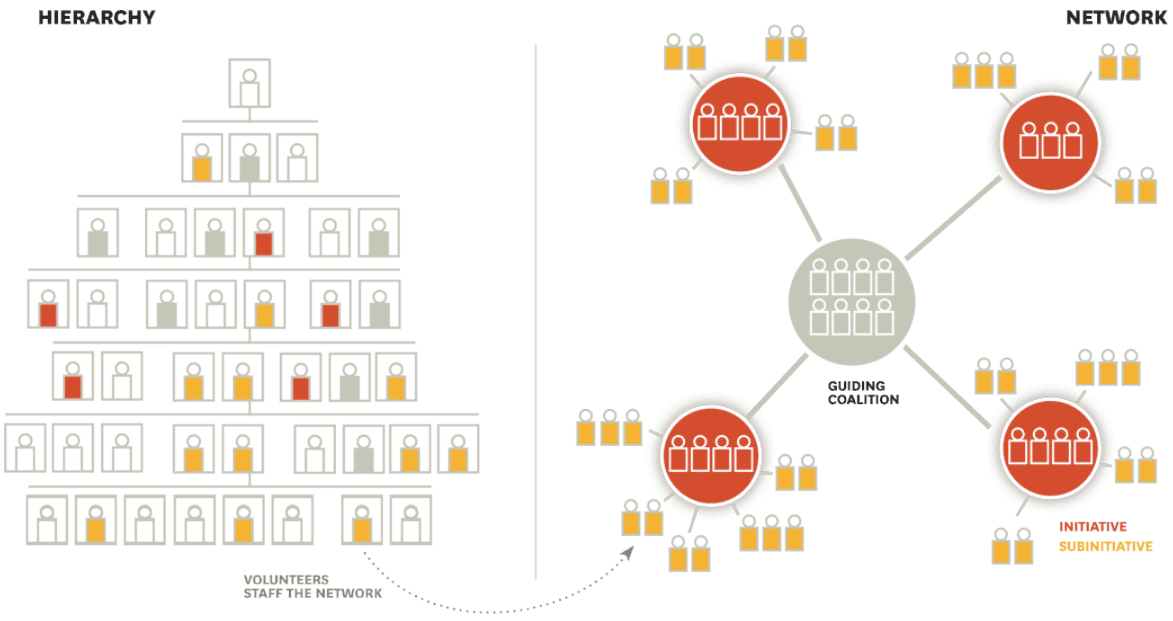

FIGURE 2. Two Structures, One Organization (Kotter 2012)

2.3. Structural Holes

In the light of network types, there are two key aspects of combinatorial innovation: the creation of new ideas and the coordinated action to implement them. Different forms of information transfer more efficiently via ties that are strong or weak. Complex information needs stronger ties, while codified information transfers efficiently through weaker ones (Hansen 1999). Dense networks are very functional for implementation phase, but they are usually isolated from novel information and therefore they are not as able to generate new ideas as sparse networks. On the other hand, while sparse networks offer many opportunities for new and diverse ideas, their structures lack the ability to coordinate the implementation. (Burt 1992) This composition creates an action problem in the context of sparse networks: good ideas are situated in places, where they are difficult to coordinate due to their structural disconnectivity (Obstfeld 2005). These gaps are commonly presented as structural holes. (Burt 1992).

Structural holes develop between parties that focus solely on their internal activities and therefore stay distant from others. Although structural holes open opportunities for diverse information, they include implementation challenges regarding the language differences, unrelated interests and unique perspectives of different parties. (Burt 2004) Schumpeter (1934) has described innovations as results emerging from novel combinations of people, knowledge and resources. Networks have

central role in the interaction of these elements and they are essential force and predictor of people's involvement in innovation processes. Bridges between the social worlds help parties to communicate efficiently, despite the distance between them. Structural holes are not valuable per se in terms of social capital or knowledge creation. But what eventually actualizes the underlying potential of these structural knowledge gaps, is the individual-level brokerage action around them. (Burt 2004) Therefore the joining activity of strategically positioned individuals is critical in terms of social capital and innovations (Obstfeld 2005, Ahuja 2000).

2.3.1. Tertius Gauden Orientation

Because recent network literature recognizes the social side of knowledge creation and incorporates that interactive perspective into the framework of economic transactions, it helps one to understand the behavioral approach of an individual. In this contextual composition it is understandable that relationships matter and have an effect on one's actions and strategic goals. (Shi et al. 2009) The term *Strategic orientation* refers to the means for approaching problems in a social context (Frese & Fay 2001), where individuals are acting as brokers. Broker, with structurally important position, links pairs of unconnected actors and has bargaining power in exchanges of resources or information between these actors (Fernandez & Gould 1994). This linkage role is also an important structural property (Shi et al. 2009).

People connected with networks that work as bridges between structural holes have an advantage in receiving more diverse signals. That helps them to detect rewarding opportunities before others. (Burt 2004) This brokerage action and the opportunities that rise from the broker's advantageous position are traditionally seen in the light of exploitation of the structural holes (Burt 2000).

Burt's theory (1992) presents the expansion model of strategic networks (Figure 3.). This model focuses on the efficiency and effectiveness of broker's network, where Burt emphasizes the importance of choosing the right contacts and the efforts to maximize the exploitation of knowledge benefits inside one's network. This central player tries to develop a great volume of benefits from structural holes, with as low costs as possible. Therefore it is important to build strong ties with few selected parties who have a rich and diverse network because of their role as central players in their network (Figure 2, Network B). This generates a broader information screen and offers signals regarding opportunities or threats.

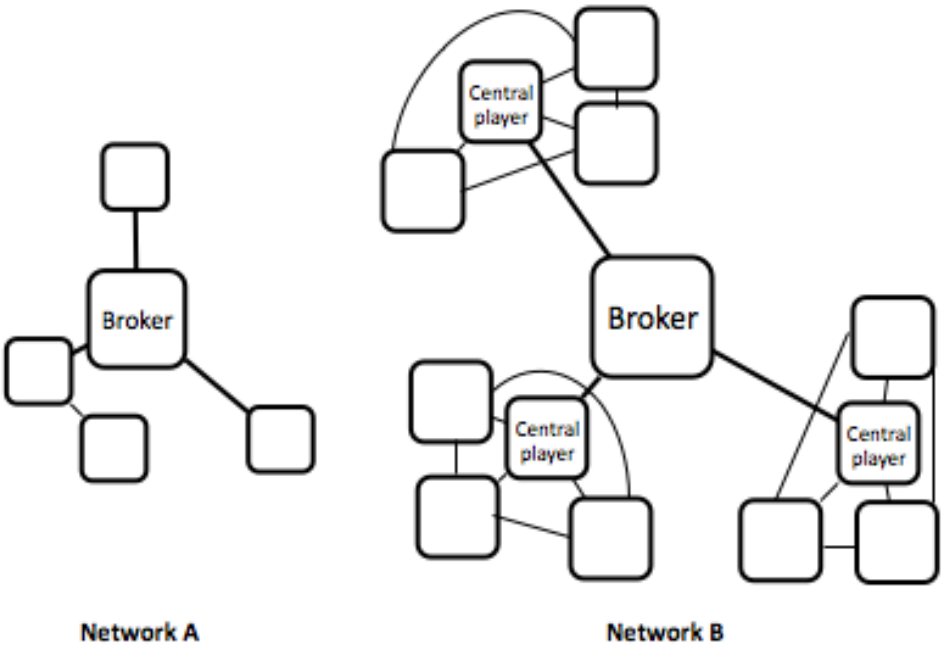

FIGURE 3. Strategic Network Expansion. (Burt 1992, 20.)

In Burt's concept, the amount of contacts represents volume benefits. On the other hand, the network quality is enhanced by the diversity of connected clusters as well as through the connections with the central players of those networks. Therefore the theoretical maximum of network efficiency is achieved when the number of nonreduntant contacts equals the total number of contacts. In practice, it is rather typical that after certain point of contacts the efficiency level drops due to the overlapping information and increasing redundancy of the contacts. (Burt 1992, 18-25.)

Fernandez and Gould (1994) have represented the brokerage relations with five structurally distinct types: liaison, representative, gatekeeper, itinerant broker and coordinator. Liaison brokerage refers to a situation where all three actors occupy different groups and broker mediates between two external actors that are disconnected. Together with liason brokerage, representative type of brokerage is an example of boundary-spanning. Representative broker represents his own subgroup in the relationship with external parties and exchanges information with them, whereas gatekeeper screens or gathers resources from outside and distributes them among his/her own subgroup. Itinerant broker functions as an external mediator between two members from the same out-group. As all the previous brokerage types have action across group boundaries, the coordinative role is typically executed only within the broker's own subgroup. (Fernandez & Gould 1994)

This thesis limits its focus on the boundary-spanning brokerage, where brokers gather, process and transfer information and knowledge on their networks. As mentioned above, the brokerage types that have external dimensions and also internal relations regarding information processes are gatekeeper and representative roles. (Fernandez & Gould 1994) Especially the gatekeeping brokerage is pivotal in terms of organizational knowledge and innovation abilities. Including Allen's (1977) findings regarding the informal contacts of an individual and his/her role as a gatekeeper, innovation research has started to emphasize individuals as beneficial links between the organization and its environment. From organizational perspective the accumulating knowledge and embedded, network-based information are indispensable sources of competitiveness. While it might seem obvious that the gatekeeper between unconnected parties has a significant role in the innovation process, the research has seen gatekeepers as passive players. This is related to the concept of weak ties, which did not focus on the activity of joining people. Rather, it focused purely on information bridging as a structural matter. (Granovetter 1973)

Burt's (2004) model suggests that brokerage has four-levels. He supposes that the simplest form of brokerage is making both sides aware of the interests and difficulties in the other group. Brokerage may develop further and reach a level in which broker transfers best practices between parties and creates mutual added value. If the relationship advances even further, the broker is able to recognize his/her counterparty's unique way of behaving and thinking. This is typically very difficult for individuals who have spent long time inside one group and therefore it generally requires previous experience from multiple organizational environments or groups. The third level refers to one's ability to draw analogies between groups and combine irrelevant matters in the form that may be beneficial for one's own group. Fourth and the most advanced level of brokerage is synthesis, where parties are able to combine elements from each other in the light of new beliefs and behaviors.

Brokerage is action with entrepreneurial nature and it unfolds from the embedded social structures. Therefore it should be noticed that multiple aspects of power have an effect on this institutional entrepreneurship. One important issue is the possible competition for broker's attention and resources that might arise between the disconnected parties (Simmel 1950). This view emphasizes the political aspects and the negotiations regarding different behavior decisions. These power aspects are closely related to the positional advantages of two forms: informational and control benefits. Control benefits describe the broker's power to withhold information, as he/she is able to choose to whom the information is delivered. While gatekeeper's structural position is especially suitable for divide-and-conquer strategies, it may courage one to exploit the unfolded opportunities for political maneuverability and to use positional power for personal gain (Rodan 2004).

According to Burt's (2004) research, brokerage is associated with the employee's salary level, especially in the higher ranks. In addition, brokers are typically held as important sources of good ideas. This relates to their positional opportunity to read the organization and to identify potentially valuable projects. His studies also support the presumption, that brokerage is associated with a certain visionary advantage, better compensation level, positive performance evaluations and promotions.

This behavior towards exploitation of one's positional power is presented as tertius gaudens orientation (TGO). It refers to action, where broker is primarily guided by his/her self-interests and personal profits. Rather than acting as a passive player, gatekeeper operates actively, preserves his/her privileged position and has positional power and opportunities to exploit the relationships that he/she has generated. (Obstfeld 2005)

Xiao and Tsui (2007) have presented four elements that highlight the egocentric nature of brokerage. Brokerage theory preassembly starts from the premises of the broker and prioritizes mainly personal goals. It also concentrates on task achievements rather than building reciprocal relationships. Therefore social capital that is embedded in the social structure is nothing more than a resource for broker's competitive efforts, instead of being a collective and organizational asset. The elements of bonding and trust are missing, which makes brokerage concept unsuitable for collective environments and cultures. A study regarding Chinese companies discovered that structural holes were negatively correlated with the career performance (Xiao & Tsui 2007), contrary to the results of Burt's (2004). This might explain the importance of the context and organizational culture in terms of brokerage efficiency.

Cultural matters have an effect on the broker's decisions as well as the level of one's commitment directs his/her behavior and goal setting. In a high-commitment organization the potential benefits of exploiting structural holes are fewer, because organization rewards group performance and therefore reduces the market opportunities for exploitative brokerage. On the other hand, if the organizational culture operates strongly on the market-competition and has an individualistic culture, brokerage is a very functional concept. (Xiao & Tsui 2007)

One relative element affecting the brokerage behavior is the lack of incentive to connect unfamiliar parties. In the organizational structures that have many structural holes, the strategic thinking is usually left for headquarters. The lack of operational level presence in the strategic decision-making affects the organization's ability to close these gaps between parties and utilize the potential of these structural holes. (Burt 2004)

2.3.2. Tertius Iungens Orientation

Brokerage theories have promoted the idea that the network ties and implicit contracts between parties are typically self-interested and profit seeking, rather than altruistic by their nature (Macneil 1978). Thus, recent literature has increasingly started to criticize brokerage theory for its egocentric emphasis (Obstfeld 2005, Xiao & Tsui 2007). Brokerage, in terms of TGO perspective, does not support or stress collaborative partnership, which needs a certain level of underlying trustworthiness to be productive. Studies have found that these embedded, entrepreneurial networks are coordinated through promoting knowledge transfer and learning. Miles et al. (2000) presented that knowledge is the key asset of innovation and "collaboration is the meta-capability by which knowledge will be exploited to drive innovation and reap its economic benefits". And while collaboration is fundamentally a voluntary action and process (Gray 1989), it is jointly undertaken and has expectations of mutual benefits and equitable sharing of returns (Miles et al. 2000).

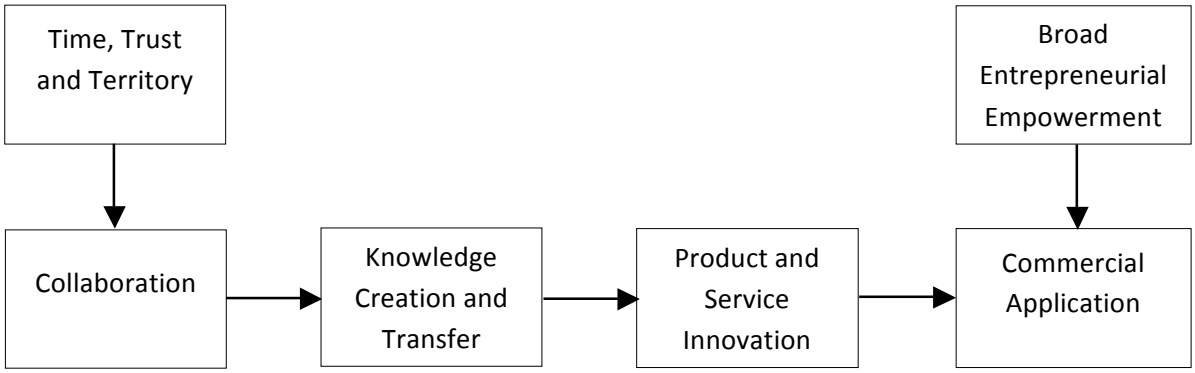

FIGURE 4. A general model of the innovation process (Miles et al. 2000)

It is also important to acknowledge the changed direction of focus among actors of the network. In a collaborative context, the focus shifts from short-term profit gaining and exploitation tendency towards building long-term cooperative ties and opportunities for resource sharing. Embedded relationships are enriched by trust and personal level ties and these special characters decrease the transaction costs of the exchange relationship, similarly lowering the need for monitoring. (Uzzi 1997) Trust has a decreasing effect on the threat and suspicion of opportunistic behavior, which usually rebates the coordination and resource sharing in the inter-organizational context. (Gulati & Singh 1998) A key asset for innovative organizations is the voluntary knowledge supply by those who possess it and participate in its expansion (Miles et al. 2000). This setting is an example of the

instrumental value of trust as a platform for collaboration, mutual dependence and obligations (Xiao & Tsui 2007). The benefits of resource sharing emerge from combining unique skills of organizations, sharing the diverse knowledge of an organic network and realization of joint projects that enable scale of economies. All these elements require trust between the partners to be functional and beneficial. (Ahuja 2000)

Due to the reasonable and also empirically justified critic that brokerage theory and its exploitative tertius gaudens form has received, it is beneficial to introduce a different type of behavioral orientation. The behavioral orientation towards connecting people in one's network is strongly related to third and fourth of the brokerage action types, presented by Burt (2004). Ability to use and see the value in presumably irrational operations of outer group, as well as ability to exchange and integrate external operational elements, reciprocally reflects the individual's role in creating organizational knowledge and supportive cohesion among the network members. Most importantly, the gap-closing activity is directed by collective interests and affected by altruistic influences. This behavioral orientation is commonly represented as tertius iungens orientation (TIO), "the third who joins". (Obstfeld 2005)

TIO is a strategic behavior of an individual, where he/she closes gaps in the social structure and creates direct contacts between the unconnected. Additionally to the context of disconnected parties, this mediator may function also in situations where parties already have existing ties, but they are unconnected in relation to a particular project or initiative. (Obstfeld 2005) This idea of a "non-partisan", alternative to the mediator type of tertius gaudens, was originally presented by Simmel (1950). While Simmel emphasized "non-partisan's" role basically in the context of colliding interests, tertius iungens activity may truly evolve even without these tensions.

Brokerage activity has a multidimensional nature and according to Obstfeld (2005) it can be executed with four different strategies: 1) coordination of action or information between parties that do not have immediate connection, 2) maintaining or enforcing separation between parties, 3) introducing or facilitating interaction between parties in a way that allows the gatekeeper role to diminish, 4) introducing or facilitating interaction between parties and maintaining the essential coordinative role. The first two strategies are examples of an active separation behavior, referring to TGO, where broker actively maintains and protects his/her positional power. The latter two, on the other hand, are examples of building bridges and cooperation on the basis of collaboration.

Collaborative climate and leadership has been held crucial for innovation. The study results of Powell et al. (1996) support the view that networks of collaboration provide access to a form of knowledge, which is not easily produced inside the boundaries of a firm. They argued that firms grow trough the

support of networks that may offer beneficial resources or information. Especially in the field of rapid technological development, innovation is typically located "within the networks of inter-organizational relationships that sustain a fluid and evolving community". Rather than just using external relations as a temporary mechanism to compensate the missing capabilities, firms sustain a collaboration to expand their competencies and promote a sense of community-level mutualism. These findings support the view presented by Xiao and Tsui (2007) as well as Fleming et al. (2007) according which cohesiveness enable innovative initiatives.

Xiao and Tsui (2007) highlighted the difference between brokerage and integration. The integrators close structural gaps without the individualistic desire to maintain their profitable positional power. A study carried out by Xiao and Tsui (2007) proposes that in the culture of high commitment, sustaining structural holes is actually negatively correlated between salary level and job performance. Rather than preserving and protecting one's position around structural holes, integrator closes gaps and builds bridges that facilitate faster communication and exchange. Because modern innovation processes are characterized by a high degree of interdependence of distinct processes (Dean & Snell 1991), there is an increased need for employees to collaborate in their work (Parker & Wall 1996).

Cohesive network enables its member's reputation to function as a facilitator in idea diffusion, as it makes the intentions of others less uncertain. Obstfeld's study (2005) found that the people who were functioning in the context of cohesive networks were also more likely to report participation in innovation activities. Therefore in contrast to the traditional broker role, presented by Burt (1992), this integrating Tertius Iungens behavior builds collective value that is embedded in the organizational system. Tertius Iungens behavior is generally supported by trust, reciprocity and reputational incentives, which were also the key elements of Coleman's social capital model (1988).

Networks, where people actively close gaps and therefore create higher cohesion among the members, offer trustworthy interface for social exchange. What's more, the context of higher cohesion builds supportive environment that facilitates risk taking. (Fleming et al. 2007) Repeated interaction between network members and the mutual expectations of trust may appear also as a behavior where risks are held as collective responsibilities, including also third-party-ties. While risk taking is necessary for innovation, it is beneficial for the organization that the network structure nurtures supportive climate and a certain level of distribution of negative, as well as positive outcomes. (Uzzi & Spiro 2005)

Also the findings of Uzzi and Spiro (2005) support the view that network cohesion and collaboration would be connected with organization's profitability and its positive performance. One important aspect regarding the benefits of cohesive network is the structure of ties. If collaboration is restricted

to happen only through broker, the parties are more likely to differ considerably in their previous backgrounds. This makes it more difficult to change ideas or understand the multiple elements of knowledge combinations. Open network structure and broker position constrain the development of member reputation and the usage of third-party references (Uzzi & Spiro 2005).

A study conducted by Fleming et al. (2007) found out that if creativity arises from cohesive collaborative structure, it is more likely to be used in practice and diffused further. Their study results suggest that the knowledge flows more efficiently within cohesive social contexts, which supports the assumption that closer ties and trust are beneficial in knowledge transfer and in the creation of social capital (Coleman 1988, Lin 1999). However, Fleming et al. (2007) presented that cohesive brokerage structure supports creativity and innovation mainly when collaborators have a broad work experience from multiple organizations and they work with external collaborators.

In contrast to the TGO, which is competitive by its nature and egocentric (Burt 1992, 2004), the concept of TIO offers a behavior model that creates premises for cohesive network and collaboration.

3. Proactive Personality

Bateman and Grant (1993) have defined proactive personality as a "disposition toward taking action to influence one's environment". Proactivity is related to the five-factor-model of personality, which is generally called "The Big Five". The five personality traits are conscientiousness, extraversion, openness, agreeableness and neuroticism. Researchers have studied known personality traits and then factor-analyzed different measures in order to explain the underlying factors of personality. The Big Five-model functions as a general concept that builds bridges between personality and behavior and therefore helps to organize other, more narrowly focused personality traits. (Poropat 2009) One narrowly focused personality trait is proactivity and previous research (Bateman & Crant 1993; Crant 1995) has suggested that it is associated with conscientiousness and extraversion. But most importantly, proactive personality has helped science to explain some variance in the organizational behavior that has not been explained by the Big Five-model alone (Seibert et al. 2001).

Until recently, organizational literature has seen employees as passive and reactive respondents to their context. Contrary to this view, there has lately been continuously growing amount of recognition that employees can actively shape and influence on their environment. (Parker et al. 2010) Cambell (2000) has presented proactive employee as "an individual highly involved and committed, an independent contributor with initiative and a well-developed sense of responsibility". It is widely argued that a company achieves competitive advantage from having flexible employees, who engage actively in broad, open-ended and interdependent roles. These employees use their knowledge in proactive ways and they also display personal initiative. (Frese et al. 1996) Parker et al. (2010) have defined proactivity as a two-step behavior model: it is the motivational state of proactive goal generation as well as actual striving to achieve the proactive goal. Research results have demonstrated that proactive personality is a construct that is positively related to a number of important individual and organizational outcomes, such as job performance (Crant 1995).

While proactive personality is a trait of an individual (Bateman & Crant 1993), one might think that companies could achieve this advantageous workforce behavior just by recruiting the right persons with the necessary skills, attitudes, abilities and personalities. But this is practically impossible for two reasons. Firstly, the workforce can hardly ever be selected from scratch and secondly, the behavior of individuals is affected by many factors. Despite their proactive personality types, people may not choose to behave in ways that benefit the organization. (Parker 2000) Literature has

approached proactivity from many different perspectives, but there is still no homogeneous agreement on how to conceptualize it generally. Some researchers have emphasized personal dispositions. For example Frohman (1997) has presented proactive individuals as initiators who "saw a problem and attacked it. They saw that the job got done based on their own energy. Proactive, inquisitive self-starters, they pushed to find new and better ways to do things and didn't accept the status quo. They were curious and skeptical, asking to understand how things are done".

Typically researchers see proactive behavior as a function of situational cues and emphasize the role of context (Parker 2000). As individual is in a dynamic, reciprocal relationship with his/her environment, which is characterized by causal links that have continuous influence on the behavior of one another, proactive employees tend to seek allies and advocates to support personal initiatives. They also strive to attach themselves to people who occupy positions of influence and power. Through these strong networks proactive employees achieve performance benefits that help them achieve self-directed objectives. (Thompson 2005.)

People with proactive personalities are relatively unconstrained by situational forces and they are inclined toward changing their environment. Therefore the key element of proactive personality and behavior is an active and comprehensive approach toward work in general (Bateman and Crant 1993). Due to this comprehensiveness, proactive behavior is a potentially high-leverage concept and can increase effectiveness of the organization. While companies rely more increasingly on employee initiatives to recognize problems or opportunities, they have decreased the level of surveillance. Proactive behavior is related to four constructs that are proactive personality, personal initiative, role breadth and taking charge. (Crant 2000)

Affected by their higher activity levels, people with proactive personality are able to gather greater knowledge regarding social and political factors and show a greater accumulation of this type of knowledge. They feel responsible for providing added value to their organization and see this as an element that supports their career advancement. Because of these positive contributions Seibert et al. (2001) have linked proactive personality with extrinsic and intrinsic career success. Extrinsic success refers to such objectively observable career accomplishments as salary and promotions. Intrinsic success on the other hand is related to one's own feelings of accomplishments and satisfaction with career development.

Additional to these perspectives, some literature focuses on the proactive personality and its effects on work related outcomes, such as career success or job performance. If combined, these individual- and context-specific concepts offer base for integrative framework to understand the antecedents and consequences of proactive behavior. According to this integrative perception, certain individual

antecedents - such as proactive personality - are affected by different contextual factors (for example organizational culture) and have an influence on the realization of proactive behavior and its direction. (Crant 2000, Figure 5.) As Frese and Faye (2001) pointed out, proactive behavior is actually very context-related. What is standard and routine behavior in one environment could be proactive in another situation.

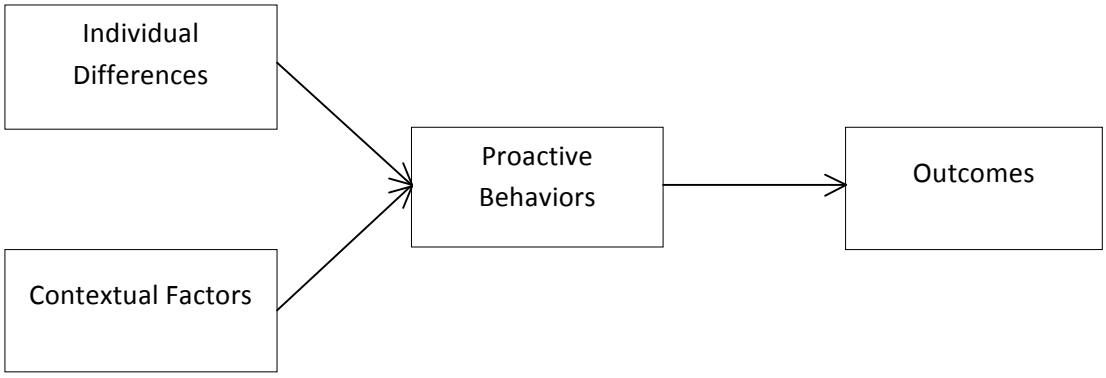

FIGURE 5. An integrative Model of the Antecedents and Consequences of Proactive Behaviors (Crant 2000)

Bateman and Grant's (1993) definition for proactive personality as a "disposition toward taking action to influence one's environment" is based on the interactionist perspective relating to the person-situation relationship, where individuals have an active role in creating their environment. Proactive behavior has its roots in the people's needs to have an influence on their environment. This means people do not just react; rather they are foreactive, which emphasizes the agency role that proactivity typically generates. Through the proactive behavior of individuals, they affect their own groups but can have influence on external groups as well. Active opportunity scanning highlights also the prospect of innovations and creativity. While passive individuals may succeed in meeting deadlines, completing tasks under budget or setting sales records, they typically do not participate actively on constructive environmental change. (Bateman & Grant 1993)

Researchers have found that proactive personality indeed is closely associated with beneficial outcomes to individuals and organizations. As Seibert et al. (2001) have presented, "proactive individuals tend to actively seek opportunities to identify new ways of doing things that can result in innovation and creative outcomes". Studies have recognized that proactive persons might engage also in counterproductive behavior. Therefore it is essential to understand the process and the conditions that translate proactivity into meaningful and beneficial action. (Li et al. 2010)

Trust in job community is important facilitator of proactive behavior, because it creates supportive climate for risk taking and help individuals to push extra-role matters forward inside organization. The study findings of Parker et al. (2006) suggest that proactive behavior is not strongly related to job supervisory, rather it is more dependent on matters with larger scale, such as organizational culture and individual differences. While encouraging supervisory may facilitate job autonomy, it does not seem to be able to be a true prediction for proactive behavior. Especially the step from proactive intention to actual implementation of an idea is largely affected by organizational factors (Axtell et al. 2000). Clegg et al. (2002) see trust as the most important and predictive utility of innovative behavior at the individual level and therefore it supports the behavioral upgrade from passive towards proactive intentions and activities. While individual matters are more crucial in the intentional phase, the implementation is more dependent on social factors such as received support and expected benefits.

Shared feeling of ownership regarding problems at work increases the likeliness of employee proactivity. If job autonomy is combined with a large variety of tasks, employees feel more generally related and engaged in the different processes of an organization. This higher level of concern increases the use of personal initiative and makes it more likely that employees suggest constructive ideas or feel responsible for taking charge of emerging matters and problems even outside their of official, work-role related duties. (Parker et al. 1997)

3.1. Personal initiative

Frese et al. (1996) have been the front line introducers regarding the active nature of work and especially the concept of personal initiative. According to them, when individual shows personal initiative, it means that he/she behaves in a self-starting, proactive and persistent way. Examples of this kind of behavior are self-set goals that are consistent with the organization's mission, doing tasks without being told and ability to complete one's responsibilities without explicit and all-embracing instructions.

The more high-level tasks are at hand, the more difficult it is to define when one shows personal initiative. Especially high-level managers, whose tasks are mainly strategic, are often required to behave proactively and show personal initiative as a part of their official job description. On the other hand, personal initiative is not necessarily even desirable in the low-level jobs. On the assembly line, for example, the tasks are standardized and great amount of personal initiative might harm the

process in general. Assembly line tasks include also low-degree of job autonomy, which limits the existence of personal initiative. Although low-level jobs may include less opportunities for personal initiative in the operating level, employees may engage in initiative activities besides their primary tasks that enhance the quality of the own work or general processes. (Frese & Fay 2001)

As personal initiative is an abstract matter, conceptualizing it is rather difficult. Personal initiative may be shown in small-scale actions, such as ordering proactively snacks for corporate guests, or larger-scale impacts, such as making a suggestion that helps company to cut energy costs by thousands of euros. It is all about having a long-term focus and making an action before it is an absolute must. This longer-term focus includes individual motivation and ability to observe emerging issues and act before they achieve the critical point that might cause harm or a stage where the potential advantage has already passed. (Frese & Fay 2001)

One important element of personal initiative is persistence, meaning that individual should be able to manage setbacks and negative consequences. Ability to adapt to something new and readiness to abandon one's routines are sometimes necessary to reach the goals that have been set. This ability to overcome barriers facilitates proactive behavior and reinforces self-starting activities. There is a large array of self-starting goals in between the given task and eventually doing something. Redefining problem is an integrative part of self-starting behavior, meaning that one can change the current conditions under he/she works. (Frese & Fay 2001)

Due to the self-starting attitude, proactive individuals might show personal initiative that is not welcomed by managers or colleagues. While ability to handle changes and the willingness to support the status quo varies between individuals, the passive personalities might think that proactive individuals are rebellious. If employees challenge their supervisors and ask why to do something instead just doing as they were told, the supervisors might feel their positions threatened. This emphasizes the importance of supporting and approving context for self-starting behavior. (Frese & Fay 2001)

One concrete example of self-starting behavior and the benefits for organizations are innovations. While idea is only an intention and "raw material" for something new, without individual's self-starting outlook, the idea would never achieve the implementation phase and execution. As previously said, environmental forces such as organizational culture and supervisor's support have a meaningful role in the realization of personal initiative. This creates a quite fundamental link between individual creativity and the contextual factors that helps to implement ideas in the practice for the good of larger community such as organization. (Frese & Fay 2001)

3.2. Extra-role behavior

Proactivity can be an integrated part of one's in-role job behavior, meaning that employees are proactively enhancing their performance and abilities to complete their duties or targets in their current role. But proactivity is not restricted by the role limits; rather individuals can extend their activity scope outside their current position and role. This extra-role behavior can be related to personal motives, for example managing one's career, or it can appear in more collective and altruistic manners. (Crant 2000)

The expectations regarding one's role are influenced by both personal attributes and the context where the role exists. This point of view combines psychological (such as individual contributions) and sociological (for example organizational framework) perspectives. Traditional role theory functions as a concept to view work only from the jobholder's perspective, although the number of potential roles for an individual is limitless. Therefore it is beneficial to process roles at work with multidimensional approach. These dimensions are job, organization, career as well as team and innovator role. (Welbourne et al. 1998) Proactive individuals are typically more willing to enhance and improve their current task roles and define new direction for their activities. This behavior refers to taking charge of one's own position and willingness to improve performance beyond the scope of individual's official work role. This kind of personal initiative is an example of individual's active and self-starting approach to work. (Morrison & Phelps 1999)

Proactive personality creates positive change in his/her environment and therefore may engage in behavior that goes beyond role expectations or job requirements. (Seibert et al. 2001) Frese and Faye (2001) have emphasized that rather being either completely proactive or passive, employees can engage in work activities with many different degrees of proactivity. This extra-role behavior is related to the constructs of personal initiative, role breadth and taking charge, as suggested by Crant (2000). Typically proactive individuals feel personally responsible for improving their environment and while proactive personality has been shown to support creativity as well (Kim et al. 2009), this combination helps individual to create new ideas and innovate. Innovation process is identification of a problem or opportunity, generating novel ideas and implementation of new products (Welbourne et al. 1998). Thus, proactive people have higher tendency to involve in change toward the community and situations which is a necessary activity for innovations (Bateman & Grant 1993).

Innovativeness is also a form of individual influence and control, which is closely related to intrinsic accomplishments in one's career and work itself (Seibert et al. 2001).

Morrison and Phelps (1999) refer extra-role behavior as taking charge, which means entailing voluntary and constructive efforts to effect organizationally functional change. This action is not originally requested or expected by the organization and it is influenced by the respect to the contextual matters, such as how work is executed in different areas or job roles. Closely related to the taking charge behavior, employees may also engage in issue selling. Issue selling is directing organization's focus on emerging trends, developments and different events that might have an effect on the organization's performance. While taking charge is concentrating on the operative level and means for accomplishing organizational goals, issue selling emphasizes strategic issues. While the taking charge activity is a relatively stable behavioral tendency, it is still variable depending on the situation.

What drives individual to behave proactively are not just altruistic motives and collective interest. The study conducted by Bon and Marunka (2006) presented that while participation in decision-making and many other managerial factors play influential roles in structuring both motivation and behavioral effort, the opportunity to improve personal image was also a motivational factor. For example gathering and sharing market information that was beneficial to the organization was supported with the existing expectations of improving one's own position and receiving recognition through creating collective advantage.

There are certain empirically studied processes through which people influence their environment. The first is selection, where people choose in which situations to participate and in which not (Schneider 1984). Second process is cognitive restructuring that refers to situations where people perceive, construe or appraise their environments (Lazarus 1984). The third and fourth are evocation - people unintentionally evoking reactions from others - and manipulation, which means intentional efforts to shape, exploit or change their interpersonal environments (Buzz 1987).

While research has acknowledged that proactive personalities have a tendency to be happy, assured, and buoyant (Judge & Erez 2007), it makes them more likely to attract sponsors or resources that gives them competitive advantage. This socially appealing personality and perceived insider status (Kim et al. 2009) may open opportunities for exploitation one's positional benefits. Higher level of social power, reputation and influence, is traditionally linked to higher extrinsic career outcomes (Seibert et al. 2001). Thus, network building functions as a conduit through which employees are able to behave proactively within the organization. (Thompson 2005.) The emerging trend is that companies expect to transform what previously was held as extra-role behavior into in-role behavior.

Biggest challenge for the firms is the willingness to accept unpredictability, if employees agree these new, broader role expectations. (Cambell 2000)

Social support is a contextual factor that may extend the activity scope of employees. Wanberg and Kammeyer-Mueller (2000) have indicated that proactive relationship building is an important element in achieving social integration within an organization. The creation of strong social networks is similarly crucial to the development of social capital and reputation on the individual level. (Burt, 1997).

3.3. Hypothesis 1: Relationship between Proactive Personality and Tertius Iungens Orientation

While Cambell (2000) has presented proactive employee as "an individual highly involved and committed, an independent contributor with initiative and a well-developed sense of responsibility", it is understandable that a company may achieve competitive advantage from having flexible employees who engage actively in broad open-ended and interdependent roles. These employees use proactively their knowledge and display personal initiative. (Frese et al. 1996)

As Bateman and Grant (1993) have defined, proactive personality is a "disposition toward taking action to influence one's environment". Proactive employees tend to seek allies and advocates to support personal initiatives and actively strive to attach themselves to people who occupy positions of influence and power. Through these networks they achieve performance benefits that help them achieve their objectives. (Thompson 2005.)

Miles et al. (2000) have presented that knowledge is the key asset of innovation and "collaboration is the meta-capability by which knowledge will be exploited to drive innovation and reap its economic benefits". Because collaboration is fundamentally a voluntary action and process (Gray 1989), some proactive behavior, which strives to create a positive change in one's environment, is needed. This kind of behavior goes beyond the role expectations or job requirements (Seibert et al. 2001) and includes activities such as opportunity scanning that highlights the prospect of innovations and creativity (Bateman & Grant 1993).

It should be noticed that proactive employee does not automatically have a behavioral orientation towards connecting people. Obstfeld (2005) conducted a confirmatory factor analysis to test the discriminant validity of the tertius iungens. In his analyses, the phi matrix showed minimal interscale

correlation and “the highest observed inter-item correlation was 0.52, between the tertius iungens and proactive personality scales, in effect accounting for only 25 percent of shared variance”. Rather than personality trait, more important is the context and its effects on the behavior. Obstfeld’s study (2005) found that the people functioning in cohesive networks were more likely to participate in innovation activities, which are typically supported by the contextual elements such as trust, reciprocity and reputational incentives.

Due to these findings I suggest that:

Hypothesis 1: Proactive personality supports Tertius Iungens Orientation.

4. The Effect of POS on TIO

Perceived organizational support (POS) has been defined as an employee's perception concerning the degree to which an organization values her/his contributions and how much it cares about her/his well being (Eisenberger et al. 1986). Employees tend to believe that there is more to their job than just the salary that they receive, but these expectations are nonexplicit and relationship-derived. Employee's unilateral belief that her/his contributions create certain obligations to the organization is the foundation for the development of a psychological contract. (Rousseau 1989) Organizational support is also a characteristic of higher-level trust between the organization and its employees (Eisenberger et al. 1986). Trust is also an important element of mutual cooperation (Ghoshal & Bartlett 1994) and a psychological condition that facilitates or results from different micro- and macro-level actions. Rather than seeing trust as a static quality, researchers have pointed that it can develop, decline or even resurface over time. (Rousseau et al. 1998)

4.1. Social Exchange Theory

According to the Social Exchange theory, people calculate the value of a particular relationship by the costs and rewards it provides (Monge & Contractor 2003). Certain factors promote employee's belief regarding the existence of a social contract with the organization. The more overt and explicit promise is made, the stronger the belief will be. Especially if the promise precedes employee's contribution, belief and the motivating function of a psychological contract are further enhanced. When employee receives consistent and stable requests with steady promises, an unambiguous perception of obligations is generated. Thus, consistency is an important issue in the development of a psychological contract. Mutual predictability makes reciprocal exchange possible and provides the basis for trust, which is an essential element of a psychological contract. When employee's trust is damaged and his/her expectations have not been met, relationship needs to be restored. (Rousseau 1989)

As the formation of a psychological contract needs the actions and reactions of two parties, implied contracts can emerge from silence or passive behavior. While psychological contracts develop between individual and the organization, implied contracts are patterns of obligations that are

mutually expected and accepted part of social structure - even if they are not generally felt fair or standard way of doing things. Although the social consensus is built on the past patterns of exchange, the relationship has a dynamic nature. The scope and breadth of the contract depend on the relationship's time frame and on the degree that the parties are involved. Duration of the relationship increases opportunities for interaction and exchange, while involvement degree (eg. full-time/part-time) has an effect on reciprocal expectations and needs. (Rousseau 1989)

Implied contracts have an obvious effect on the psychological contracts. Social consensus, which is the basis of implied contracts, leads to a certain way of perceiving a psychological contract. As individuals have different level of involvements and various time frames, their psychological contracts differ from one another. Thus, perceived consensus among the nature of psychological contracts support collective climate (Joyce & Slocum 1984). Agreement between employees regarding the terms of the contract strengthens the relationship between them and the organization and therefore facilitates the further creation of implied contracts. (Rousseau 1989)

The research conducted by Herriot et al. (1997) suggests that organizations and employees have different views regarding the organization's obligations to the employees. Managers, acting as representatives of the company, emphasize the provision of less tangible incentives, while employees value generally the basic transaction of time and work for money and security. The concept of transactional and relational contracts suggests that different obligations might be connected with different forms of contracts (MacNeil 1985). Transactional contracts involve specific, monetary and tangible exchanges between parties, while relational contracts involve open-ended agreements with tangible and intangible exchanges.

If organization focuses on factors that employees do not value, there is a risk of a misconstruction of exchange relationship. When examined through social exchange theory, this might cause distress and feeling of unfairness among employees. While assessing the ratio of their inputs and outcomes, employees compare this ratio to those received by others. Because of the strong "norm of equity", the ratio is expected to be equal compared to others. If that is not the case, the inequity causes distress, which eventually steers employee to restore the equity. Restoration techniques vary between distorting inputs or outcomes and terminating the whole relationship. (Huseman et al. 1987)

Social exchange theory helps to understand the psychological contract that develops between individual and the organization. Organizational support functions as a rewarding outcome of a reciprocal relationship (Monge & Contractor 2003) and that eventually generates positive behavior among the employees (Eisenberger et al. 1986).

4.2. Organizational support

Johns (2006) defines organizational context as situational opportunities and constraints that have an effect on the meaning of organizational behavior and functional relationships between variables. And because of these opportunities for, and constraints against, organizational context can be represented as a tension system or similarly as a force field (Lewin 1951), where situations vary in their capacity to abet or constrain human agency. In some organizations, people are willing to do more than is expected from them. Thus, it is certainly important to consider what is this force that facilitates that type of behavior? Employee's perception of organizational support ranges from emotion-relational items such as caring, to aspects that are closer to the work itself. These might relate to working conditions and for example assistance with job performance (Eisenberger et al. 1986).

Ghoshal and Bartlett (1994) identified four critical dimensions of context that mattered the most: discipline, stretch, trust and support. In this thesis the focus will be especially on the element of perceived support, which is a critical facilitator of mutual cooperation. Additionally, an organization that provides a personally non-threatening and supportive climate benefits from the higher probability that employees take the risk of proposing a new idea (West, 1990, 312).

This multileveled perceived support is created and enforced by a variety of macro- and micro-level actions, especially taken by the managers of the company. The most important matters affecting the feeling of perceived support are greater availability of resources, increased autonomy and the received help and guidance. This facilitates micro-level initiatives and entrepreneurship, which eventually generates the culture of voluntary and mutual cooperation. (Ghoshal & Bartlett 1994)

Eisenberger et al. (2002) present that organizational support theory "supposes that to meet socioemotional needs and to determine the organization's readiness to reward increased work effort, employees develop global beliefs concerning the extent to which the organization values their contributions and cares about their well-being (perceived organizational support, or POS)". As for Rousseau (1989), she has described POS as an outcome of an employee's exchange relationship with his/her organization and fulfillment of the belief regarding the terms and conditions of this psychological contract. Fulfillment of these expectations functions as a signal to the employees that organization is committed to them, it values their contributions and is willing to continue with the relationship (Rhoades & Eisenberger 2002).

POS generates a higher performance level, positive attitude towards the organization among employees and mutual need to reciprocate. Many studies (Eisenberger et al. 1990, Guzzo & Noonan 1994, Wayne et al. 1997) have found a clear link between POS and organizational commitment (Stamper & Johlke 2003), which can be seen as the trade of effort and loyalty for material benefits and social rewards. This view suggests the possible merit of treating affective and calculative involvements within the context of a social exchange. (Eisenberger et al. 2002)

The calculative perception is that employee's performance would increase if he/she can expect and trust that the employer rewards his/her efforts. According to Eisenberger et al. (1990) there are two kinds of performance-reward expectation types. One consists of elements that are strongly career-related, such as wage and promotions. The other stresses the social aspects, like approval, recognition and influence. These findings are on the same line with the ones that Ghoshal and Bartlett (1994) have suggested: Higher commitment to the organization's targets increases employee's performance that goes beyond the call of duty without any immediate expectations for reward. This facilitates collaboration, individual level innovation and spontaneous problem solving, having similarly a major influence on the competitive abilities of an organization. (Eisenberger et al. 1990)

It is important to acknowledge that the psychological safety is therefore not only a team-level, but an organizational-level construct as well (Baer & Frese 2003). Referring to the study conducted by Baer and Frese (2003), "strong climates for initiative and psychological safety were associated with a positive relation between process innovativeness and profitability, whereas low levels of climates for initiative and psychological safety were associated with a negative relation between process innovativeness and return on assets". This statement supports the previously mentioned advantages of supportive climate and context that enables collaboration within organization, as well as among network parties. The results of a study conducted by Coyle-Shapiro and Conway (2005) suggest that POS may reduce employee's perceptions of employer obligations as the nature of the relationship changes and the obligations recede into the background. This has an effect on the monitoring activity of employees and on their expectations regarding the letter of the contract.

Most importantly, POS has a positive effect on the collectiveness and cohesiveness of an organization. It has reciprocal behavior such as forgiveness, mutual concern, willingness to help and a culture that approves opinion sharing. (Eisenberger et al. 1986) As employees feel more emotionally attached and identified to their organization, it is also typical that they feel responsibility for helping their company to succeed. This relates to organizational identification that is facilitated by organizational support (Celik & Findik 2012) Organizational identification creates positive outcomes for work

attitudes and performance. It also increases satisfaction, as well as supports individual decision-making and employee interaction. (Scott et al. 1998) Organizational identification is self-definitional and implies psychological oneness with the organization (Knippenberg & Sleebos 2006). Because POS facilitates extra-role performance and increases organizational commitment as well (Celik & Findik 2012), it could be considered that POS also engages individual in altruistic bridge-building and closing the gaps in the network structure. This suggested point of view is studied in the Hypothesis 2 (Chapter 4.3).

4.3. Hypothesis 2: Relationship between Perceived Organizational Support and Tertius Iungens Orientation

In contrast to TIO, the brokerage theory (TGO) presented by Burt (1992, 2004) has an egocentric nature and focuses on the exploitation of one's positional benefits. It is criticized for not being able to promote the benefits of collaboration and cooperation (Obstfeld 2005). From this point of view it is necessary to move the focus away from structures and take a closer look at the individual and his/her relationship with the social context. This is especially important because modern organizations are less hierarchical than before and employee control is increasingly trust based. The organizational trust facilitates cohesive and collaborative culture among its members, where collective interest and the importance of efficient social exchange are emphasized. (Jones et al. 1997; Miles et al. 2000) For example, the findings of Eisenberger et al. (1990), Uzzi and Spiro (2005), Xiao and Tsui (2007) and Fleming et al. (2007) all support the assumption that in the context of mutual obligations and cohesive social structure, the individuals are able to achieve performance benefits and higher innovativeness.

While POS is empirically presented to interact positively with the commitment of the employees, it generates a suggestion that POS could also have a positive impact on building long-term cooperation inside the network. As Eisenberger et al (1986) have presented POS has a positive effect on the collectiveness and cohesiveness of an organization and it strengthens reciprocal behavior such as forgiveness, mutual concern and opinion sharing. If we choose to follow the transactional concept of social exchange (Eisenberger et al. 1990), the main element behind individual's behavior and performance is the expected benefits in one form or another.

After connecting two unfamiliar parties and by giving up his/her agent position, individual moves into a situation, where he/she receives only a presumptive promise of future benefits from the connected

parties. The parties who receive instant benefits are assumed to feel a sense of duty and expected to be willing to pay back to the bridge-builder in the future. This composition of social exchange relationship (Eisenberger et al. 2002), where individual has build a network of debtors - people sharing mutual obligations (Coleman 1988) - might develop long-lasting competitive advantage in terms of privileged position in the exchange relationships of social capital. This exclusive position is strongly supported by trust between the parties (Rousseau et al. 1998), which is originally built on individual's positional choice to neglect the exploitation of short-term position benefits (Burt 2000).

Due to the individual's unwillingness to exploit the immediate positional benefits, TIO cannot be explained from short-term perspective. Rather while exploring the gap closing activity, it is important to emphasize the necessity of individual's high commitment, the expectations of long-term benefits and the developed assumption of reciprocal and supportive relationship with the organization (Coleman 1988, Eisenberger et al. 1990, Fleming et al. 2007). If these reciprocal expectations are repeatedly fulfilled, it supports the continuation of his/her gap closing activity and therefore individual achieves advantageous position regarding to social capital, such as good reputation inside the network. While social capital benefits can also be received in the form of better access to and timing of information flow and more trustworthy referrals (Burt 1995, 12-13.), gap closer's position offers opportunities for innovation and spontaneous problem solving with better prospects of succeeding (Eisenberger et al. 1990, Obstfeld 2005).

In the organizational context, it is obviously important to understand the elements and forces of the environment and the relationship between the organization and the individuals within. The power relationships between internal and external stakeholders steer individual's choices and behavior planning in the direction of short-term or long-term benefits. Individual stresses short-term targets more than longer ones, if he/she feels insecure about his/her future. Generally, employees will respond with reciprocal behavior, if organization invests in them. (Tsui et al. 1997) Supportive environment does not expect instant gains and offers opportunities of autonomic behavior for individuals (Ghoshal & Bartlett 1994). This support relationship strengthens the tie between parties and facilitates mutual cooperation, which generates reciprocal sense of duty (Granovetter 1973, Xiao & Tsui 2007). As already mentioned above, this again moves individual's target frame towards long-term benefits and makes gap closing realizable in terms of securing and supporting one's own position inside the organization. Also, according to Xiao and Tsui (2007) high-commitment organizations create an enabling cultural base for bridge building and closing structural gaps without individualistic motives. Therefore I suggest:

Hypothesis 2: Perceived organizational support enables and enforces Tertius Iungens Orientation.

5. The Role of Functional area

The main purpose of having different functional areas is to ensure that all important business activities of the organization are carried out efficiently. In addition, these different areas are responsible for supporting function-specific goals and objectives. For example functions such as sales and marketing are involved in achieving targets linked to developing new markets or increasing sales (Crosby et al. 1990). These two functions also work as external agents on behalf of the organization. Due to this role as a link between external demands and internal functions, people working in these functions are more aware of internal as well as external environmental conditions (Ruekert & Walker 1987).

Similarly, these externally oriented functions are accountable for both internal as well as external groups. This accountability has an effect on one's behavior and directs it to the way that enables them to gain approval and status from counterparties. (Pruitt & Carnevale 1993) Due to this accountability, people functioning in the role of an agent are typically inclined towards cooperative approaches. Leung (1988) and his study found that cooperative efforts such as bargaining and mediation are very often used to solve conflicts during negotiations. This cooperative job context strengthens the collective elements of one's role and behavior. Wagner and Moch (1986) have also presented, that collectivism is strongly related to teamwork abilities. And as sales function is externally oriented (Gummeson 2002), the ability to cooperate with different stakeholders is a key feature especially for people in sales tasks.

In addition, sales function profits from cohesive networks. According to Yu et al. (2011), the transfer speed of marketing knowledge has a positive effect on the initiation of sales. That effect enhances within cohesive alliance networks especially in the long term, because "trust among partners is developed over time". This motivates sales people to build strong ties with network parties and support the faster and better information access. That is the reason why this thesis focuses on sales function and its relationship with TIO (Hypothesis 5.).

5.1. Sales Function

As mentioned before, sales function has a primary focus on developing new markets and creating economic growth. Therefore salespeople are very dependent on having good personal relationships with their customers and thus, they are working as relationship managers. Relationship quality is typically defined through factors such as trust and satisfaction, which determine many future sales opportunities. (Crosby et al. 1990) Trust is generated on the expectations of future costs and benefits. When the behavior of others is more predictable, the developed high trustworthiness among network members, such as customers, makes the costs of controlling and monitoring one's social environment lower. As mutual trust and strong norms offer direction for one's behavior, they promote the relations and support the development of social capital such as trust. (Lin 1999)

Sales person can develop a strong buyer-seller bond with cooperative intentions and mutual disclosure. Selling has a transactional nature and successful exchange episodes support the relationship, which is good for the long-term outlook. Customers typically prefer long-term relationships, because they also reduce transaction costs and uncertainty. This makes the exchange relationship more predictable and efficient. If seller is engaging in disclosure behavior of oneself, without reciprocal intentions, it may create distrust between the seller and the buyer. Competitive intentions are typical reasons for problems in the relationship and especially the main cause of customer dissatisfaction. (Crosby et al. 1990)

Selling activity is a quantitative measure and a typical way of to represent sales effectiveness. If sales person has cooperative intentions, sales activity builds trust and maintains the relationship. On the other hand, sales activity that is restricted to only critical moments (e.g. buying decisions where seller benefits the most) and is not based on any previous follow-ups and proactive willingness to stay in touch with the customer may even be harmful in terms of trust building. Customers and sales people may also expect the other party to support one's goals. Especially in a functioning and trustworthy relationship this is a sign of attitude similarity. (Crosby et al. 1990) Individual needs to recognize the unique way of counter party behavior and thinking, which is typically difficult for persons who do not have previous "hands-on" experience from multiple organizational environments and diverse groups (Burt 2004).

Salesperson has a critical role in developing trust between organization and external stakeholders such as customers. Their professional knowledge is closely related to what is needed to build trust

and what are the outcomes. Salesperson him-/herself is not the only issue in building trust between parties. Actually the firm that salesperson represents has a larger effect on weather customer trusts the salesperson or not. (Swan et al. 1999)

5.2. Sales & Networks

Networks are important information channels for sales function and therefore sales people benefit from stronger ties and cohesive structure. As Yu et al. (2011) presented, networks and their ability to provide market information have tendency to affect sales positively. Networking has been seen as a vital element of sales practice. (Seevers et al. 2007) Üstüner and Godes (2006) have presented certain networks that are important to salespeople and especially to their performance: prospect networks (potential clients), customer networks (current clients), and marketplace networks (other external work contacts).

Networks have diverse types of ties between members. Typically new client relationships have weak ties with sales, but when they become more mature, the tie strengthens and lowers transaction costs. Thus, salesperson functions as a boundary spanner and transforms knowledge between communities. (Dunfee et al. 1999) As sales function is one of the most externally oriented parts of the organization, it needs to focus on collaboration and joint value-creation. That is why sales function should see customers as partners and understand the mechanism of integrative sales strategy that strengthens the ties between network members. (Gummeson 2002)

5.3. Hypothesis 5: Relationship between Sales and Tertius Iungens Orientation

TIO is a representative type of brokerage and it is an example of boundary-spanning (Fernandez & Gould 1994), which is also a role that most sales people hold (Dunfee et al. 1999). Sales function is externally oriented and collaboration driven. While sales approach to maximize the joint value-creation, they need to see customers as partners. Integrative goals and social embeddedness (Granovetter 1985) emphasize the unique relationship that sales have with their customers. (Gummeson 2002)

As Burt sees brokerage from the competitive and exploitative (TGO) point of view, sales need to collaborate and explore emerging opportunities to create shared value. TIO stresses collaborative partnership, which needs a certain level of underlying trustworthiness to be productive. Customers prefer long-term relationships that reduce transaction costs (Crosby et al. 1990) and as TGO increases the danger for unethical and exploitative sales behavior (Seevers et al 2007), it is not facilitating long-term relationships. Xiao and Tsui (2007) have highlighted the egocentric nature of brokerage. It preassembly starts from the premises of the broker and prioritizes mainly individual's goals. It also focuses on fulfilling broker's interests, rather than building reciprocal, trustworthy relationships.

Sales function is accountable for internal as well as external stakeholders. This affects one's behavior and makes social approval and status highly emphasized. (Pruitt & Carnevale 1993) People working in a positional role of an agent are typically inclined towards cooperative approaches (Leung 1988). Many studies have shown that trust facilitates sales success and long-term cooperation in buyer-seller relationships (e.g. Schurr & Ozanne 1985, Morgan & Hunt 1994, Swan et al. 1999) and therefore it should be expected that sales persons have higher TIO than people in other task types. As this is the case, I suggest that:

Hypothesis 5: Tertius Iungens Orientation is stronger among the people working at sales function than among employees working in other functions.

6. Organizational Openness and Experimentation

Organizational openness and experimentation are important elements of generative organizational learning capability (Argyris 1962) and they are especially linked to the organization's capacity to act ahead of changes. (Jerez-Gômez et al. 2005) Organizational learning is a critical source of heterogeneous knowledge and therefore a basis for a possible competitive advantage (Grant 1996). If organization wants this capacity to be a core asset and a value of its culture, company must be open to new ideas and facilitate collective experiment. (Slocum et al. 1994) Openness to new ideas and experimentation activities are interactively connected to one another and they facilitate effectively organizational preparedness to manage organizational changes. As Argyris (1962) suggests, "an organizational climate that fosters interpersonal openness, experimentation, trust, and risk-taking behavior is conducive to such structural changes".

Especially if the nature of marketplace is rapidly changing and immature, organization needs to open up to an examination of its own experience. (McGill & Slocum 1993) While openness to new ideas facilitates experimentation, it helps the company to tackle its current and future problems with innovative and flexible solutions. (Garvin 1993) Organizations that are able to capitalize the advantages of openness and experimentation can "reach a shared interpretation of the information, which enables them to act swiftly and decisively to exploit opportunities and defuse problems" (Slater & Narver 1995). Therefore a company that wants to achieve an innovative climate and facilitate experimental behavior needs a culture that supports creativity and risk-taking. (Slocum et al. 1994)

6.1. Organizational openness

The climate of openness relates to many organizational functions. More generally openness is related to the organizational ability to welcome new ideas and perspectives emerging from internal as well as external stakeholders, which allows individual knowledge to be repeatedly spread, updated and improved (Slocum et al., 1994; Sinkula, 1994). McGill et al. (1992) emphasize the importance of not having an egocentric attitude, which diminishes the values, beliefs and experiences of others. Contrary to the culture of openness, adaptive organizations enforce

conformity, highlight routines as well as risk-avoidance, which eventually block all diverse opinions and diminish the experimental behavior. This increases the difficulties of redirecting and regeneration of organization's strategy, making it possible to achieve only narrow changes.

A collective accessibility of information facilitates open communication inside organization, which helps to transfer knowledge and diverse information efficiently. Because information flow is typically related to unplanned interactions among people, most learning is informal by its nature. Sharing of problems or ideas promotes acceptance of debate and constructive conflict. This organizational ability supports and legitimates the generation of cohesive and mutual understanding, even regarding intersecting issues. One crucial aspect is the sharing of errors, which helps the whole community to learn from mistakes of others. When company treats unfortunate and negative incidents as researchable events, it enables analytical approach to problems and helps to eliminate these events from happening in the future. (Nevis et al. 1995)

Openness to failures is a critical matter for the ability to learn from the past experience. When organizational climate is supportive, people are willing to share mistakes and failures. This develops valuable organizational knowledge that should be made accessible for the employees. It is all about a certain mind-set that acknowledges the value of productive failure. The acceptance of failures and willingness to learn from them strengthens the general understanding and leads to a wider insight on the issues at hand. Sometimes they might challenge the current way of seeing things, which also emphasizes the organizational ability to manage uncertainty. (Garvin 1994)

Many studies present organizational culture as a key element for managing innovations. According to Jassawalla and Sashittal (2002) an innovation-supportive culture can be described as firm's ''social and cognitive environment, the shared view of reality, and the collective belief and value systems reflected in a consistent pattern of behaviors among participants''. They also conducted a study, that revealed that fostering teamwork and promoting risk-taking and creative actions seemed to be directly linked to effective new-product development.

Jassawalla and Sashittal (2002) have crafted a three-step concept regarding the linkage between culture and innovation. Firstly, effective new-product development processes help organization to achieve its targets, which means organizational settings where people excel one's targets and budgets. Secondly, there are several elements in the psychosocial environment that increase the likeliness of innovation-supportive culture. These are elements such as values, beliefs and assumptions that favor collaboration, creativity and risk-taking. As a third step they identified cultural artifacts, such as vocabularies, stories, rituals and physical symbols, interactively shape and have influence on the values, beliefs and behaviors of the individuals. Stories, as well as other

artifacts, build shared responsibilities, which eventually creates shared understanding among community members and help them to seek and adapt new ways of thinking. The hidden values and implied moral of these stories typically highlight the importance of openness, decentralized involvement in decision-making and intense information sharing.

Organizational openness is closely related to the interaction and relationships between multiple subcultures, emerging values and current cultures, implicit and explicit knowledge. This complexity emphasizes the need for leadership focus on change as a day-to-day element of organizational management. But it should be acknowledged that organizational culture and its transformation does not rely only on the leadership or top management. Culture is also influenced by the willingness and the capacity of employees to manage their anxiety about change, mutual trust, discard old and adopt new value and belief systems, and learn new behaviors. (Floyd & Lane 2000) Transformation and embedding of information is possible at the grass-root level without the engagement and encouragement of top management, but strong and supportive leadership offers important legitimacy and resources for product-innovation activities. (Jassawalla & Sashittal 2002)

Most useful insights may come from outside one's closest environment. New and novel perspectives may facilitate room for ideas that break the routines and old ways of seeing things. This catalyzes creativity, challenges old norms and therefore is critical for the business and its development. The greatest way to benefit from outside information is to study practices while they are done and empower line managers or even employees to take part in this benchmarking process that compares old and new information. This benchmarking is a truly a disciplined process with many steps. Process starts from identifying the best practices, then studying one's own and current ways of doing things and eventually moving from this analysis-level towards actual, recommended practice. (Jassawalla & Sashittal 2002)

Additionally to this benchmarking activity, company can benefit from outside knowledge and perspective in other ways as well. Cooperation with stakeholders, such as customers, may open a constructive conversation relationship that generates beneficial information and valuable feedback. (Garvin 1994) Laursen and Salter (2006) have presented organizational openness and external search strategies that work through the components of breadth and depth. They claim that the deeper and wider is the organization's search strategy, the more innovative the organization will be. From this perspective innovations emerge from "teams and coalitions based on 'swift trust', nested in communities of practice and embedded in a dense network of interactions". (Chesbrough 2003)

As a more extreme example of openness, Henry Chesbrough (2003) has presented the model of open innovation, which is related to organization's ability to draw knowledge and expertise from diverse

external sources. Redefining organization's boundaries between itself and the environment makes organization more embedded in surrounding networks of multiple actors. This helps to commercialize knowledge and create new pathways to market. External network helps organization to avoid missing the emerging opportunities that originally would fall outside its current business or those that would need some knowledge beyond internal capabilities. This means external knowledge is integrated into organization's competitive strategy.

The concept of open innovation is supported by the views of evolutionary economists. They highlight the importance of search, which helps organizations to find new sources of diverse information and allows them to create new combinations of technologies and knowledge. Depending on the industrial level of technological change and amount of emerging opportunities, organizations may need to invest extensively in search practices to gain access to critical knowledge before their competitors. (Nelson & Winter 1982)

Open innovation is a model where ideas and development initiatives are community-driven. Collective invention and coordination creates advantage through the diversity of resource pool and similarly spreads the created value across the ecosystem. Critical part of value coordination is the underlying architecture that connects pieces of knowledge together. Knowledge might be integrated in the system as a whole or just in one member of the collective. (Chesbrough & Appleyard 2007)

According to Chesbrough and Appleyard (2007), the most important issue for the open-oriented organizations is "how to attract the participation of a broad community of contributors, and then how to sustain their participation over time". Therefore the competition for contributors and the coordination of the project are similarly critical for the success of open innovation. To achieve and sustain engaged community of innovators, the fundamental meaning of the project is emphasized. Project must typically strive for a larger goal that is favored among the collective and generates broad value. Companies must feel that they profit from the open initiatives and invested resources, otherwise it is very difficult to even recruit them and avoid the eventual alienation of single members. (Garvin 1994)

External information may stay ineffectively capitalized if the environment is not receptive. Defensive managers restrain the active efforts of employees or stakeholders, which eventually leads to passive behavioral culture. Therefore openness to criticism and bad news is needed and constructive opinions that challenge the status quo should be valued through the whole organization. (Garvin 1994)

Miller et al. (1994) have conceptualized openness to an organizational change to consist of few foundational elements that are involving willingness to support the change and positive affect about the potential consequences of the change. According to Miller et al. (1994), openness to changes is a "necessary, initial condition for successful planned change", because it facilitates the employee readiness for organizational change. Additional to employee readiness, other benefits of openness are increased readiness to broad cooperation, which may decrease “change resistance behaviors such as quarreling and hostility, deliberate restriction of production, and lack of cooperation with management”. The importance of cooperation is especially high in the area of innovations and for example Shan et al. (1994) have found a clear link between cooperation and innovative output of organizations.

6.2. Experimentation

As well as the climate of openness, the organizational experimentation enhances the ability of employees to behave initiatively. Climate where it is safe to test one’s ideas or to tell one’s true opinions complements the adoption and implementation of innovations, thus functions as a critical contingency in enhancing innovativeness. Promoting an enterprising ability and readiness to take controlled risks are supportive elements of achieving experimental culture. A company encouraging employees to engage in initiative behavior is more successful in terms of firm goal achievement and return on assets. (Baer & Frese 2003, Slocum et al. 1994) Similar to this observation and related to the safe environment for experimentation, the study results of Scott & Bruce (1994) stressed positive relationship between the dimensions of the perceived, supportive climate for innovation and the innovative behavior of individuals.

Experimentation takes typically two different forms, which are ongoing programs and one-of-a-kind projects. While problem solving concentrates on current issues, experimentation is focusing on opportunities and tries to expand the horizon. Ongoing programs produce incremental gains in knowledge and are common in the lowest organizational level. They consist of continuing series of experimentation and are targeted to improve different sections of a product or service gradually. This offers steady flow of new ideas from in- or outside the organization. To be successful, these ongoing programs need a supportive incentive system. Employees need to feel that risks are worth taking and the potential benefits are larger than costs. Especially relating to the implementation phase, organization needs educated and trained managers or specialists, who are able to perform

and evaluate this experimentation behavior as well as its end products. Different statistical methods are beneficial to increase the efficiency of experimentation and many creativity techniques, like role-playing or storyboards, help to gather and process ideas. (Garvin 1994)

Demonstration projects are larger and more complex than the ongoing, floor-level programs. One-of-a-kind projects approach to adopt new principles on a larger scale and therefore are more transitional by nature. Learning happens during action and it requires sensitivity from managers to make needed corrections on the run. Due to their large scale and future orientation, demonstration projects need committed teams and team members that have strong and interactive relationship with senior management. The role of senior managers is to offer legitimacy for the project and enable resources that are critical for its success. Diversity of knowledge base and professional background is an advantage for the project team, while they need to impact the whole organization. Explicit learning strategies help organization to transform knowledge into practice during the process that can be described as a move from superficial knowledge to deep understanding. Like Garvin (1994) describes, "the distinction is between knowing how things are done and knowing why they occur". (Garvin 1994)

The study results presented by Nohria and Gulati (1996) stress that the amount of experimentation increases as organizations confront competition and dynamic environments. To enable continuous experimentation, organization needs to have management processes that are designed for and committed to speed and responsiveness. While managers continuously scan the environment for emerging opportunities to develop new products, company needs to be able to push these innovations to the market before their competitors. In an experimental organization, the manager duties include developing an open-minded climate among workers and encouraging them to experiment. Part of this approach is accepting the possible failures, while all the experiments do not succeed. Sometimes the failed experiment offers valuable information that opens new possibilities in different product areas. (Slocum et al. 1994)

In a complex and changing environment companies should develop their strategies through bottom-up intrapreneurship. The role of top management is especially highlighted and their task is to encourage experimentation and nurture the development of most potential ideas. (Hart 1992)

6.3. Hypothesis 3: The Moderating Effect of Organizational Openness on Individual's Proactive personality and Tertius Iungens Orientation Relationship

Fleming et al. (2007) stressed that researchers should focus more on individual or contextual influences and try to develop more social-psychological concentrated approach that emphasizes the interaction of person and social context. Therefore it is relevant to consider, what is the mechanism that supports this certain altruistic and collective proactive behavior, where individual does not strive for capitalizing direct benefits and is willing to sacrifice his/her own agent position for the sake of organization's benefits?

As Crant (2000) has presented, contextual factors have an important effect on the proactive behavior and its existence. Parker et al. (2006) have conceptualized perceived work environment - consisting of job autonomy, co-worker trust and supportive supervision - to be motivating factor of proactive behavior. Job autonomy and supportive supervision are elements that are typical for organizational culture where openness is emphasized. The study findings of Parker et al. (2006) suggest that rather being related to the job supervisory, proactive behavior is more dependent on matters such as organizational culture and individual differences. In addition, Ashford et al. (1998) have argued that if individuals are unsure about the consequences of their proactive behavior, they are less likely to engage in such activities as issue selling due to the danger of harming their personal image and reputation. Employees tend to weigh the anticipated cost and benefits when directing their behavior. They consider the expected risks and benefits from the point of view of their own situation, but as well from the perspective of those they are interdependent. (Vroom 1964, Rusbult et al. 1988, Withey & Cooper 1989)

According to the findings of Ashford et al. (1998) top management's openness encourages and supports proactive behavior of individuals because they feel less insecure of taking risks that might harm their personal image. While openness of the top management enables taking charge behavior, it also promotes individual innovation. Perceived climate for innovation is more likely in the cultural context that embraces independence and innovative, unusual responses.

Therefore it is suggested that the expected positive relationship between proactive personality and TIO is stronger if organizational context is open and willing to experiment. Compared to the cultural contexts that are closed, studies present (Crant 2000; Parker et al. 2006) that people are more willing

to show personal initiative and support collective interests. Thus, this type of organizational setting should strengthen the observed effect of proactive personality on TIO.

Hypothesis 3: Organizational openness and experimentation strengthens the relationship between proactive personality and Tertius Iungens Orientation

6.4. Hypothesis 4: The Moderating Effect of Organizational Openness on Perceived Organizational Support and Tertius Iungens Orientation Relationship

Organizational culture is influenced by the willingness and the capacity of employees to manage their anxiety about change, mutual trust, discard old and adopt new value and belief systems, and learn new behaviors. As an important element of organizational culture, organizational openness is closely related to the interaction and relationships between multiple subcultures, emerging values and current cultures, implicit and explicit knowledge. (Floyd & Lane 2000)

Jassawalla and Sashittal (2002) have created a three-step concept of the culture-innovation linkage. First pillar is organizational setting where people excel one's targets and budgets. Second, there are several other cultural elements such as values, beliefs and assumptions, which favor collaboration, creativity and risk-taking that increase the likelihood of innovation-supportive culture. Third, certain cultural artifacts, such as vocabularies, stories, rituals and physical symbols, interactively shape and have influence on the values, beliefs and behaviors of the individuals. These pillars of the culture-innovation linkage highlight the importance of openness, decentralized involvement in decision-making and intense information sharing.

Many studies (Eisenberger et al. 1990, Guzzo & Noonan 1994, Wayne et al. 1997) have found a clear link between POS and organizational commitment (Stamper & Johlke 2003). Baer and Frese (2003) have presented that "strong climates for initiative and psychological safety were associated with a positive relation between process innovativeness and profitability, whereas low levels of climates for initiative and psychological safety were associated with a negative relation between process innovativeness and return on assets". According to these findings, higher commitment level increases the likelihood that employee's performance goes beyond the call of duty.

Spontaneous, beyond call of duty behavior requires social context that is supportive. When organizational climate is supportive, people are willing to share also negative matters, such as their

mistakes and failures. This collaborative openness is a critical matter for the ability to learn from the past experience. (Garvin 1994) This facilitates innovation and spontaneous problem solving at the individual-level, having similarly a major influence on organization's success. (Eisenberger et al. 1990)

While TIO is generally facilitated by trust, reciprocity and reputational incentives (Obstfeld 2005), the element of organizational openness is essential. If supportive culture is a prerequisite for collaboration – as it offers important legitimacy and resources for product-innovation activities (Jassawalla & Sashittal 2002) - organizational openness makes social exchange even more efficient and transparent. Trust, which is an outcome of openness, has a decreasing effect on the threat and suspicion of opportunistic behavior (Gulati & Singh 1998) and enables cooperative behavior (Gambetta 1988), promotes network relations (Miles & Snow 1992), decreases transaction costs and facilitates the formulation of ad hoc work groups. (Meyerson et al. 1996). If organization is not able to offer supportive environment to its employees, it may not profit from reciprocal behavior of its employees.

As mentioned earlier, organizational openness promotes elements - such as trust - that are important for supportive culture. If organizational culture is closed, it might cause suspicion and promote opportunistic exploitation. As TIO requires collaborative climate (Obstfeld 2005), suspicion and exploitation of individual benefits are issues that have a negative effect on employees' willingness to cooperate (Gambetta 1988). Therefore it is suggested that organizations with open culture may benefit from stronger positive relationship between POS and TIO. On the other hand, closed cultures could face negative effects due to the expected opportunistic behavior and suspicion between parties, which decreases the efficiency of social exchange (Monge & Contractor 2003).

These findings offer supportive premises for the fourth hypothesis:

Hypothesis 4: Organizational openness and experimentation strengthens the relationship between perceived organizational openness and Tertius Iungens Orientation

6.5. Hypothesis 6: The Moderating Effect of Organizational Openness and Experimentation on Sales Function and Tertius Iungens Orientation Relationship

Openness to external ideas and failures is a critical matter for the ability to learn from the past experience. If company is willing to share mistakes and failures as well as learn from external

partners, it facilitates the creation of valuable organizational knowledge. It is all about a certain mind-set that acknowledges the value of productive failure. Sometimes they might challenge the current way of seeing things, which also emphasizes the organizational ability to manage uncertainty. (Garvin 1994)

Because sales function is externally oriented, it concentrates on collaboration and joint value-creation. Collaboration needs strong ties between parties to be productive and the quality of the relationship is typically defined through factors such as trust and satisfaction (Crosby et al. 1990). Strength of a tie is a combination of duration, emotional intensity and intimacy as well as reciprocal services. The stronger the tie is, the more similar and closer the parties usually are (Granovetter 1973) and that is why sales see customers as partners. As sales target to create shared value, the relationship between buyer and seller needs to be reciprocal. (Gummeson 2002)

Reciprocal relationship needs organizational openness to welcome new ideas and perspectives emerging from internal as well as external stakeholders such as customers (Slocum et al., 1994). Employees need to be able show personal initiative, if companies expect to commercialize external ideas. (Baer & Frese 2003) Especially from the point of view of sales, the processing of customer feedback is an ongoing task. It includes series of experimentation and targets that aim to gradual improvements of different sections of products or service. (Garvin 1994)

While organizational openness and experimentation enable salespeople to use the received feedback as a developing tool of one's work, it facilitates better service and gradually builds a stronger connection between the seller and the buyer. Ability to response to the wishes presented by the customers increases the reciprocity of the relationship and builds trustworthiness. On the other hand, if the culture is closed and the opportunities for information sharing or personal initiative are rare, sales people are not as motivated to collaborate. Due to the positive effects that openness has on social exchange, I therefore assume that:

Hypothesis 6: Organizational openness and experimentation enhances the positive association between sales jobs and tertius iungens orientation

7. Research Methods

7.1. Data collection

The data used in this study was gathered via web-based questionnaire that was conducted during a research project called InnoNets II. This project was organized by the Marketing Department of Aalto University School of Business and it covered different companies from diverse set of industries. Survey targeted two different hierarchical levels, which were middle management and employee level. In this project the minimum size of accepted organizations were set to be 25 persons, due to the expectation of getting at least five managerial respondents and five subordinate respondents from each manager. A non-probability sampling technique, also know as snowball sampling, was used in the selection of respondents from these two levels.

The research team contacted the top management of different companies and asked for a permission to conduct the survey. If the top management team or its single member allowed us to proceed with the process, the contact details of participating middle managers were given to the research team. The middle managers that were nominated were contacted and asked to choose at least five of their subordinates to participate in the survey. After the participating members of the organization in question were chosen, the research team sent the invitations to the web-based questionnaire for each individual. The greatest advantage of this snowballing technique was the opportunity to find true and existing manager-employee relationships from the organizations.

The survey was tested before actual implementation. Pilot testing occurred among the members of the research team and also with the help of other employees and students of the Marketing Department at Aalto University School of Business. Based on the received feedback and comments some lingual changes were made and also some enhancements on the layout were done. In addition, the test responses were analyzed to eliminate questions that were unnecessary and irrelevant. Also the Cronbach's alpha coefficient was calculated for each questionnaire dimension. After the improvements and corrections, the survey was conducted during a time period between October 2010 and May 2012. The nominated persons were reminded multiple times via e-mail, if they did not react after the original survey invitation.

7.2. Data

The research data was collected from 34 different companies. Total of 191 supervisors and 1004 subordinates responded the survey. Because some assigned supervisors or employees did not complete the questionnaire, there are certain differences between the amount of supervisors and groups. Table 1 offers more detailed information about the organizations.

	Number of firms	Employees	Supervisors
Construction	2	28	8
Education	1	62	5
Engineering	5	165	39
Finance	4	72	19
Food industry	1	37	6
Forest industry	2	39	10
Furniture	1	25	6
IT	7	189	32
Management consulting	1	21	3
Marine industry	1	13	4
Metal industry	3	86	23
Other manufacturing	1	6	1
Social services	3	236	29
Staffing & Recruiting	1	17	4
Wholesale	1	8	2
Total	34	1004	191

TABLE 1. Respondents by industry

Most of the respondents were working at the social services, IT and engineering industries. The industries of the respondents were very different from one another and altogether the survey included responses from 15 different industries. The following figures 6 and 7 offer information regarding proportional distribution of the industries.

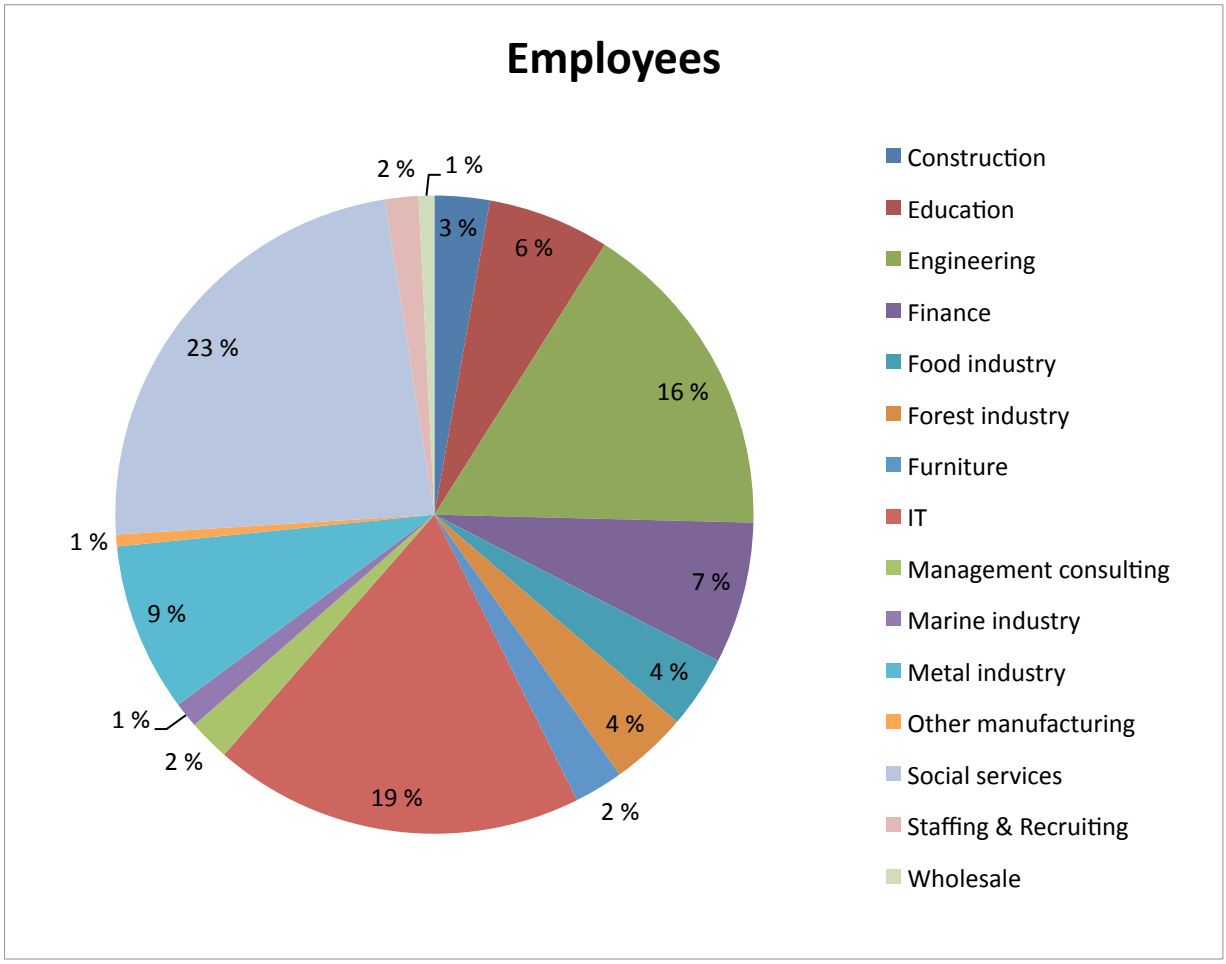

FIGURE 6. Percentual industrial division of the employee level respondents

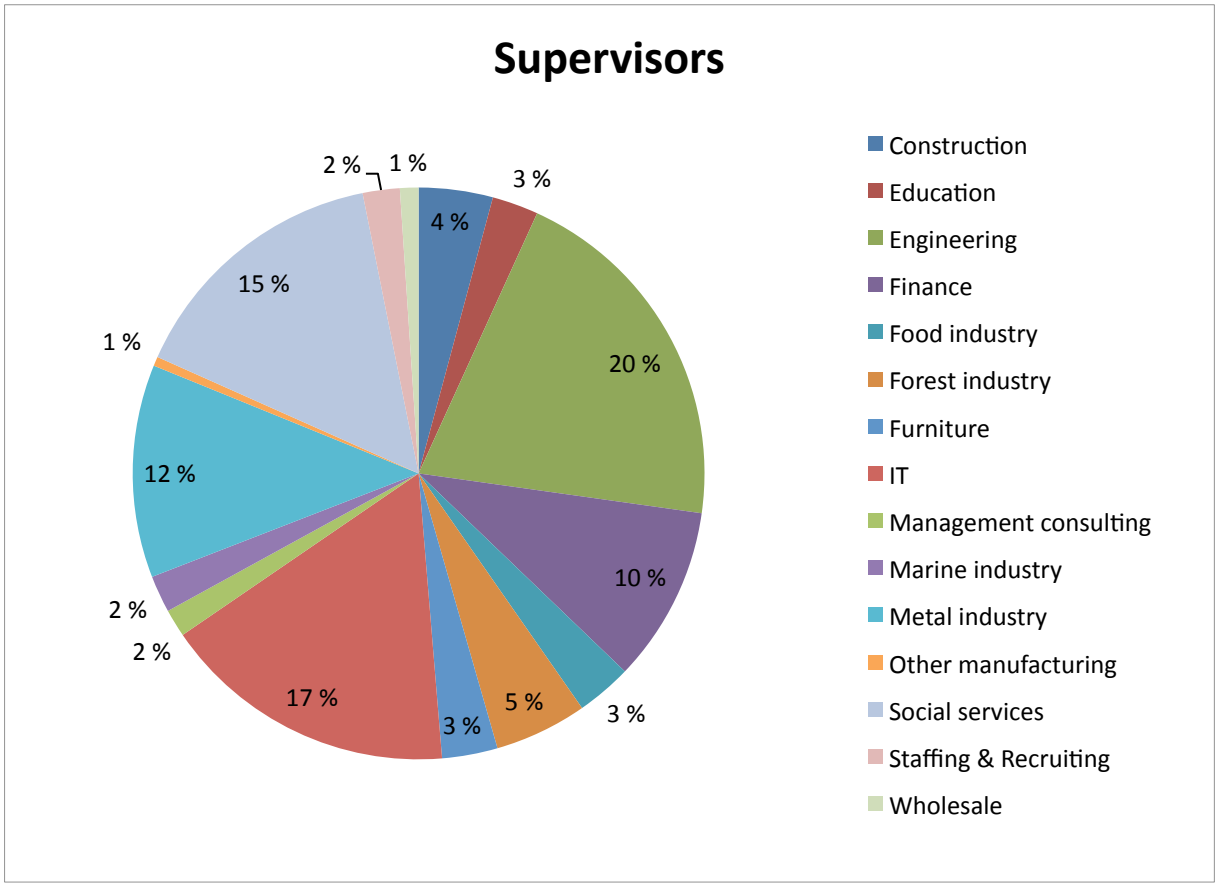

FIGURE 7. Percentual industrial division of the managerial level respondents

The data was gathered from two different levels. The Level-1 represents the employees and the level-2 the supervisors. While this study analyses also the relationships between these two levels, the data was sorted by the level-2 IDs that were given to each supervisor. Afterwards the employees were linked to their supervisor's ID and thus a visible supervisor-employee relationship was generated.

While some respondents did not answer every question, there were some missing values on the data. To handle this missing data, multiple imputation method was used. Imputation estimates and substitutes the missing values of the sample. (Marwala 2009) LISREL software helped to estimate and patch the missing data for the variables, which eventually enabled the acceptance of the data without any rejections.

7.3. Measures

The items of the questionnaire were based on previous research and that makes them already validated. In most companies the survey was conducted in Finnish, but in two of them the preferred language was English due to their multinational organization. In the Finnish version of the questionnaire, the questions based on the previous research, were translated from English.

Items included in this research questionnaire were answered using a 5-point Likert scale, including the steps of strong disagreement (1), disagreement (2), uncertainty (3), agreement (4) and strong agreement (5). All items are presented on the Appendix 1.

7.3.1. Independent variables

Proactive personality (PRO). To measure employee's proactive personality, I used the scale presented by Bateman and Crant (1993). This measure consisted of eight items that were 1) I am constantly on the lookout for new ways to improve my life, 2) Wherever I have been, I have been a powerful force for constructive change, 3) Nothing is more exciting than seeing my ideas turn into reality, 4) If I see something I don't like, I fix it, 5) I love being a champion for my ideas, even against others' opposition 6) I excel at identifying opportunities, 7) I am always looking for better ways to do things and 8) I can spot a good opportunity long before others can

Perceived organizational support (POS). To measure the employee's level of perceived organizational support, I used a six-item scale presented by Coyle-Shapiro and Conway (2005). The measure included the following items: 1) My employer cares about my well-being, 2) My employer values my contributions to its well being, 3) My employer cares about my opinions, 4) My employer considers my goals and values, 5) My employer cares about my general satisfaction at work and 6) My employer is willing to help me when I need a special favor.

7.3.1. Moderating variable

Organizational openness and experimentation (OPEN). I used a five-point scale to measure the organization's openness and ability to welcome new ideas and perspectives. The scale was presented

by Jerez-Gômez et al. (2005) and consists of the following items: 1) The firm promotes innovation and experimentation as a way of improving the work processes, 2) This firm follows up what other firms in the industry are doing, adopting those practices and techniques it believes to be useful and interesting, 3), Experiences and ideas provided by external sources (advisors, customers, training firms...) are considered a useful instrument for this firm's learning, 4) Part of this firm's culture is that employees can express their opinions and make suggestions regarding the procedures and methods in place for carrying out tasks and 5) The firm has a culture that tolerates failure in the development of new things.

7.3.2. Dependent variable

An individual's strategic, behavioral orientation towards connecting people (*TIO*) is the dependent variable of this study. TIO was presented by Obstfeld (2005) and as he describes, "the emphasis here on combination, and in particular the joining of people, contrasts with the strategic separation among parties emphasized in Simmel's (1950) concept of the tertius gaudens". Simmel emphasized the positional benefit that one might have between two disconnected parties, which highlights the active separation of the two parties. In contrast to this, TIO focuses on ego's gap closing activities. The third party acts as a mediator and tries to create group unity. The term strategic orientation refers to preferred means for approaching problems located in the social context. Orientation by itself is a combination of a specific attitude toward something and a more general trait of personality. TIO emphasizes one's activities in creating and facilitating ties between people in one's social network. (Obstfeld 2005)

In this study the measure of TIO consisted of five items that were 1) I introduce people to each other who might have a common strategic work interest, 2) I will try to describe an issue in a way that will appeal to a diverse set of interests, 3) I see opportunities for collaboration between people, 4) I introduce two people when I think they might benefit from becoming acquainted, 5) I forge connections between different people dealing with a particular issue.

7.3.3. Control variables

Following personal attributes were selected as control variables of this research: gender, age, education level, years of service within the current company, task type and the experience in current

type of task (in years). Gender was defined as a dummy variable where 0 presented male and 1 was for female. Education level was split into four different categories from 1 to 4. These levels were high school, B.Sc., M.Sc. and postgraduate. In this thesis, two task areas were selected as control variables, which were sales and R&D. This is because their role as externally oriented organization functions.

7.4. Validity and reliability

If the observed values are not representative for the true values, a measurement error and certain imprecision may occur. Therefore validation of the questions of the survey is important. In this survey all the questions were based on previous research and other researchers have already validated them. The questions were originally written in English and while this survey was held both in English and in Finnish, the questions of the other version were translated in Finnish before sending it to the respondents. Translation was done to achieve lower level of misunderstandings and confusions. Before its actual and final execution, the survey was tested with a small test group to ensure the validity of the survey and its questions. (Alreck & Settle, 1985, p. 64)

The reliability test focuses on the ability to get the same data values from several measurements in a similar manner. Reliability relates to the manners of how it is measured as validity relates to what should be measured. (Alreck & Settle, 1985, 64.) The Cronbach's alpha is a typical and commonly used measure for reliability (Hair et al. 1998, 88.) and therefore it was also used in this study. Cronbach's alpha varies from 0 to 1 and according to Cortina (1993) the values greater than 0,7 are considered acceptable. In this study each scale, except Organizational openness and experimentation, received Cronbach's alpha value greater than 0,7. In addition, Hair et al. (1998) have recommended that values between 0,6 and 0,7 represent the lower limit of acceptability. Therefore each of the scales can be held reliable.

Variable	Cronbach's Alpha
Tertius iungens orientation	0,85
Perceived organizational support	0,93
Proactive personality	0,82
Organizational openness and experimentation	0,64

TABLE 2. Variables and their Cronbach's alphas

It should be noticed that an error could occur on different steps of the research process. Response error occurs when respondents do not reveal their true opinions on a subject. This may happen if

they misunderstand the question, do not know or are not willing to tell their true opinions or when respondents try to present them in a favorable light. This response error typically happens when respondents are unfamiliar with the situation. (Sudman & Bradburn 1982) In some cases the researcher may analyze the answer falsely, which causes inaccuracy. While this study was conducted via web-based survey, analyzing errors are not relevant in this case.

7.5. Methods of Statistical Analysis

This section describes the statistical analysis methods used in this study. Because this thesis focuses on relationships among variables of different hierarchical levels, the hierarchical linear modeling (HLM) (Raudenbush et al., 2004) is used in the analysis. As Hoffman (1997) describes, HLM provides a mechanism "for investigating and drawing conclusions regarding the influence of phenomena at different levels of analysis". HLM is specifically designed to overcome the weaknesses of the traditional choices between disaggregated and aggregated approaches. According to Hoffman (1997) the disaggregated model "violates statistical assumptions and assesses the impact of higher level units based on the number of lower level units" and on the other hand the aggregated model discards potentially meaningful lower level variance.

HLM recognizes the issue that the members of a specific group may be more homogeneous than members in other groups. Therefore observations might not be independent and HLM recognizes the partial interdependence of individuals within the group. HLM makes it possible to investigate both lower and higher level unit variance in the outcome measure and similarly maintains the appropriate level of analysis for the independent variables. Due to this it is possible to model individual and group level variance in individual outcomes and simultaneously to utilize individual and group predictors at their own levels. Therefore one can investigate the influence of group on individual level outcomes. (Hoffman 1997)

HLM adopts this two level approach to cross-level investigations. In this thesis, the employees are referred as Level-1, the lower level units, and managers as Level-2, the higher level. The first model, Level-1, is estimated for each separate group. The regression based model is following:

Level- 1: $Y_{ij} = \beta_{0i} + \beta_{1j}X_{ij} + r_{ij}$ (1)

Yij is the outcome measure for employee i in organization j, X_{ij} is the value on the predictor for employee i in organization j, β_{0i} and $\beta_{1j}X_{ij}$ are intercepts and slopes estimated for each group separately and r_{ij} is the residual. (Hoffman 1997)

The higher, Level-2 analysis uses the intercepts and slopes from the level-1 analysis as dependent variables. A typical level-2 model may take the following form:

Level-2: $\beta_{0j} = \gamma_{00} + \gamma_{01}G_j + U_{0j}$ (2)

$\beta_{1j} = \gamma_{10} + \gamma_{11}G_j + U_{1j}$ (3)

G_j is a group level variable, γ_{00} and γ_{10} are the second stage intercept terms, γ_{01} and γ_{11} are the slopes relating G_j to the intercept and slope terms from the Level-1 equation, and U_{0j} and U_{1j} are the Level-2 residuals. The pattern of variance in the Level-1 intercepts and slopes determine which Level-2 models would be required. For example when given that β_{1j} is identical for all groups and there is no slope variance, the inclusion of G_j in equation 3 would not be meaningful. As well in situations where there is no intercept variance, the inclusion of G_j in equation 2 would not be meaningful because there is no variance in β_{0j} across groups. (Hoffman 1997)

While estimating the Level-1 and Level-2 models, a distinction should be made between fixed effects, random coefficients, and variance components. Fixed effects are parameter estimates that do not vary across groups. Examples of these are the γ's from equations 2 and 3. Alternatively, random coefficients are parameter estimates that are allowed to vary across groups such as the Level-1 regression coefficients β_{0j} and β_{1j}. In addition to these Level-1 and Level-2 regression coefficients, HLM includes also estimates of the variance component. These components are: (1) the variance in the Level-1 residual, (2) the variance in the Level-2 residuals, and (3) the covariance of the Level-2 residuals. (Hoffman 1997)

First the data was coded using PASW/SPSS software. Then the two raw data files (Level-1 and Level-2) were sorted by the Level-2 ID (i.e. employees were sorted by their supervisor's ID). Eventually the variable re-specifications and the correlation analysis were also made using the PASW/SPSS software.

Centering

As the meaning of the slope and intercept parameters might need some clarifying, the next paragraphs concentrate on explaining these concepts. The slope represents the expected increase in the outcome variable, which in this case is TIO, for a unit-increase in the predictor (proactive

personality and perceived organizational support). As for the intercept parameter, it represents the predicted level of TIO for an employee with zero proactive personality or perceived organizational support. While is it very challenging to define a certain zero-level for proactive personality or perceived organizational support, it is meaningful to rescale the Level-1 predictors in different ways and make the intercept more predicable. This process is called centering.

Centering is an important part of cross-level data analysis, because it describes the rescaling of the Level-1 predictors. There are three options how to carry out the centering. These are (1) raw metric approaches where no centering takes place, (2) grand mean centering where the grand mean is subtracted from each individual's score on the predictor and (3) group mean centering where the group mean is subtracted from each individual's score on the predictor. When the grand mean centering method is used, the intercept represents the expected level of the outcome for a person with an average level on the predictor. In this thesis, it would be the expected TIO for a person with an average proactive personality and perceived organizational support.

8. Results and Analysis

The following sections present the results and findings of the conducted study. First, the correlations, standard deviations and means are presented and analyzed (TABLE 3). After this the hypotheses are tested using hierarchical linear modeling.

8.1. Correlations

Table 3 includes all the variables that were studied. (TIO) is the dependent variable, while perceived organizational support (POS) and proactive personality (PRO) are independent variables.

As table 3 presents, proactive people are more inclined to TIO and there is a strong correlation between these two variables ($r=0,529$, $p<0,01$). It also seems that there is a positive connection with the individual's age and TIO ($r=0,13$, $p<0,01$). Table 3 also indicates that people working in sales function have higher tendency towards building connections between unfamiliar parties ($r=0,12$, $p<0,01$). Similarly, a positive relationship between perceived organizational support and TIO ($r=0,14$, $p<0,01$) is found. In addition, the findings suggest that the relationship between Sex and TIO ($r=-0,039$) is not notable, while education level ($r=0,095$, $p<0,01$) and firm years ($r=0,085$, $p<0,05$) have weak relationships with TIO.

The correlation analysis suggests that age, sales task, perceived organizational support, education level, firm years and proactive personality have a positive relationship with TIO. These findings support the hypotheses 1,2 and 5 of this thesis: 1) Relationship between proactive personality and tertius iungens orientation, 2) Relationship between perceived organizational support and tertius iungens orientation, 5) Relationship between sales function and tertius iungens Orientation.

Statistic summary and correlations[a]

	Variable	Mean	s. d.	1	2	3	4	5	6	7
1	TIO	3,78	0,63							
2	Sex[b]	0,55	0,50	-,039						
3	Age	41,24	10,53	,130**	,003					
4	Edu. Level[c]	1,91	0,94	,095**	-,271**	-,119**				
5	Firm years	7,68	5,74	,085**	-,111**	,616**	-,110**			
6	Sales	0,12	0,32	,146**	-,102**	,070*	-,062*	,038		
7	POS	3,91	0,69	,140**	-,128**	-,003	,148**	-,026	-,062	
8	PROACT	3,65	0,51	,529**	-,102**	,005	,142**	-,022	,080*	,174**

[a] n = 1004, Internal consistency reliability (alpha) estimates are on the diagonal

[b] 1=female, 0= male

[c] 1 = Highschool-level, 2 = Bachelors -level, 3 = Masters -level, 4 = Post graduate (scientific Licenciate or Docoral degree)

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

TABLE 3. Statistic summary and correlations

8.2. Hypotheses testing using HLM

In this section I will test the presented hypotheses and introduce the results of Hierarchical linear modeling analysis. To conduct cross-level analyses, certain prerequisites must be satisfied. Firstly there must be a systematic within- and between-group variance in the dependent variable. This condition is necessary because the dependent variable (TIO) is hypothesized to relate to both individual level variables (perceived organizational support, proactive personality, sales) and a higher group level variable (organizational openness). This is assessed in HLM using a one-way analysis of variance. (Nezlek 2011, 53.)

Within-groups variance is the sum of all the squared differences between each individual data point and the mean for that group. Then again the between-group variance is the sum of all the squared differences between the means for each condition and the grand mean, multiplied by the number of observations per group. (Hoffman 1997) In this study the between-group variance in TIO (τ_{00}) was 0,01485, while the variance between individuals under the same supervisor (σ_2) was 0,26481.

Intraclass correlation coefficient (ICC=τ_{00}/(τ_{00}+σ_2)) represents the percent of the total variance in the dependent variable between groups (Bryk & Raudenbush 1992). The ICC indicates the amount of variance that could potentially be explained by the Level-2 predictor. If the ICC ratio is low, it means the groups (Level-2) do not vary significantly. (Nezlek 2011, 53.) As between-group variance (τ_{00}) was

0,01485 and variance between individuals under the same supervisor (σ^2) was 0,26481, the ICC-ratio in this case is 0,053. ICC ranges from 0 to 1 (0% to 100%) and as higher values represent stronger clustering effects, it seems that the individuals within the same group do not vary very strongly from those in other groups. This result suggests that firm-level explains 5,3 % of the variance of TIO.

HLM also estimates the level-1 residual variance. In the one-way analysis of variance, σ^2 was equal to the within group variance in TIO (σ_2= 0,26481). While the level-1 predictor is added to the equation, σ^2 is now equal to the level-1 residual variance. (Hofmann 1997) Comparison of these two σ^2 values offers an estimation of the level-1 variance in TIO accounted for by proactive personality, perceived organizational support and Sales task ($R^2_{TIO} = (\sigma^2_{oneway\ ANOVA} - \sigma^2_{level\text{-}1\ predictor}) / \sigma^2_{oneway\ ANOVA}$) The R^2_{TIO} for level-1 model is 0,286967. As this figure suggests, proactive personality, perceived organizational support and sales task explain a rather large share of TIO's variance but not entirely. R^2_{TIO} for level-2 predictor is not calculated as organizational openness and experimentation has only a moderating role in TIO.

HLM results present that age, sales function (Hypothesis 5), POS (Hypothesis 2) and PRO (Hypothesis 1) have significant and positive relationships with TIO (TABLE 4.). According to the results regarding OPEN's moderating effects, it seems that OPEN truly has the suggested positive moderating effect on the relationship between Sales function and TIO (Hypothesis 6). On the other hand, results indicate that OPEN does not have a significant moderating effect on the other relationships that were studied (PRO and TIO, Hypothesis 3; POS and TIO, Hypothesis 4).

Therefore HLM results support the suggested hypotheses 1, 2, 5 and 6. Table 4 presents a summary of the studied effects.

Hierarchical linear modeling (HLM)					
Variable	**Moderating effect**	**Coefficient**	**Standard Error**	**T-ratio**	**P-value**
Sex		0,032	0,039	0,809	0,419
Age		0,005	0,002	2,845	0,005*
Edu. Level		0,036	0,021	1,676	0,094
Firm years		0,003	0,003	0,763	0,445
Sales function		0,204	0,058	3,466	0,001*
	OPEN	*0,548*	*0,262*	*2,091*	*0,036**
POS		0,081	0,025	3,227	0,002*
	OPEN	*0,004*	*0,104*	*0,041*	*0,968*
PROACT		0,615	0,034	18,066	0,000*
	OPEN	*0,047*	*0,134*	*0,356*	*0,721*
OPEN		0,017	0,102	0,165	0,871
* p < 0,05 significant					

TABLE 4. Hierarchical linear modeling (HLM) results for TIO

9. Summary and conclusion

This thesis focused on explaining individual's (TIO). One goal was also to explain certain important matters that may have a positive and facilitating effect on it. Six hypotheses were presented that were built on the premises of previous research. As Obstfeld (2005) has suggested, people who are more Tertius iungens oriented are typically also more active in innovation efforts. Innovations and explorative efforts are essential elements in creating competitive advantage for modern organizations and therefore it is important to develop a clearer picture of TIO. The data for this thesis was gathered from two different organizational levels and analyzed using HLM technique. That is why it was possible to study both the individual as well as the contextual matters. This multilevel approach helps to understand the dynamics between TIO and the facilitating elements regarding one's personality, individual perception and functional taks. Figure 8 presents the results of the six tested hypotheses.

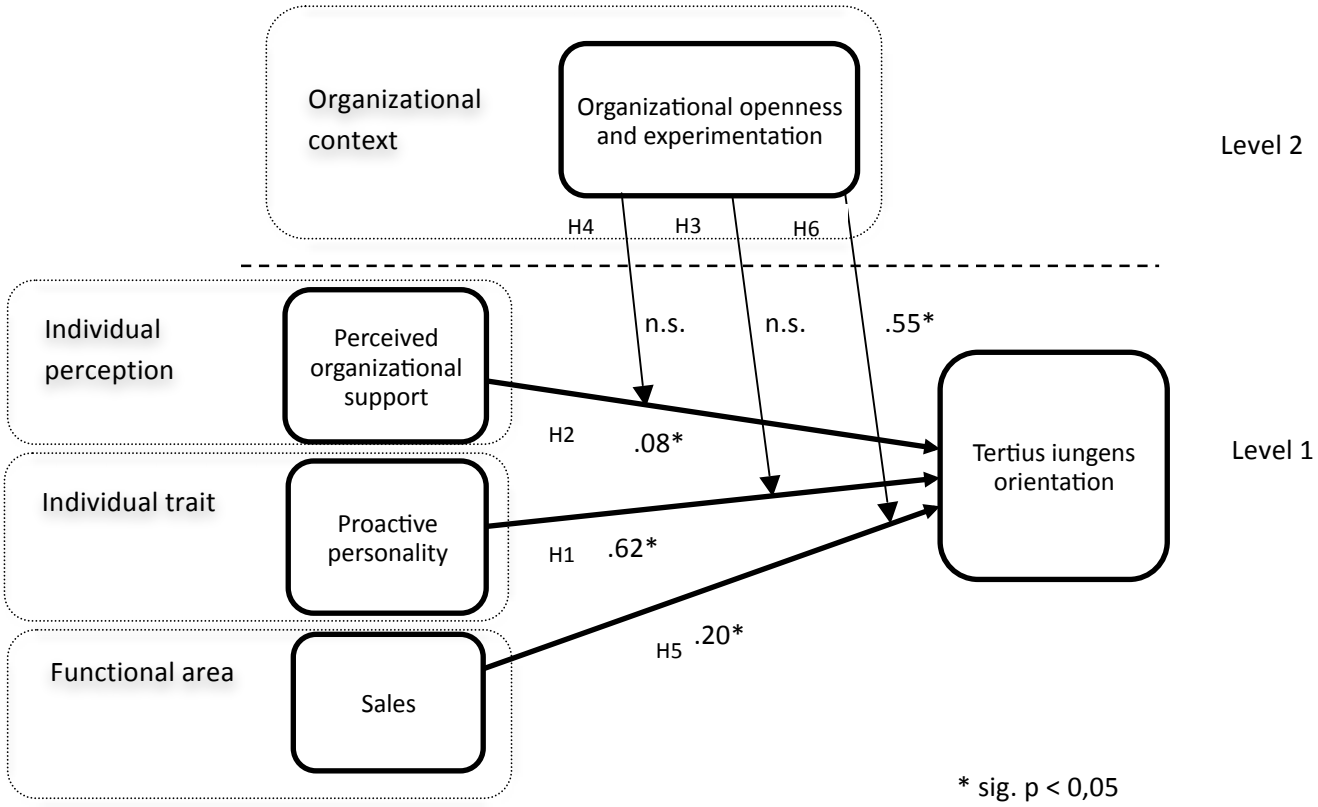

FIGURE 8. The final results of the hypotheses tests

9.1. Discussion

As suggested, proactive personality, perceived organizational support and sales task have positive relationships with TIO. Unexpectedly the moderating effect of OPEN on the POS - TIO as well as PRO - TIO relationships was not significant. Still, a positive moderating effect was found on the relationship between sales function and TIO. This means that organizational context has a facilitating role in the networking behavior orientation of sales people. Next, I will discuss about the findings and present the conclusions that can be generated from the study results.

Conclusion 1. Individuals with higher level of proactive personality demonstrate higher levels of TIO than individuals with lower level of proactive personality

As hypothesis 1 presented, proactive people are expected to be more active in terms of TIO. Previous research has supported this claim and as it was presumed, the study results of this thesis there is a positive connection. As proactive employees are seen as individuals who are committed, independent contributors with initiative and a sense of responsibility (Cambell 2000), it is understandable that they are more likely to participate in collaborative behavior, such as building bridges between unconnected parties. Bateman and Grant (1993) described that proactive individuals have a disposition toward taking action and to influence one's environment. As networking and bridge building is rarely a task that is officially given to employees, they need to feel responsibility to show initiative and participate in the positive change of their environment. Therefore it is quite obvious that there is a strong connection between TIO and proactive personality, which is an assumption that is clearly supported also in the results of this study.

As organizational resources are scarce, it is crucial that individuals show personal initiative and participate in creating positive change. This underlying potential needs to be acknowledged, while the efficient use of resources is naturally a crucial element in business. The strategy model presented by Kotter (2012) included two "operating systems", in which the other system was voluntarily organized by the employees. This emphasizes the role of knowledge transfer but more importantly the individual networking as a facilitator of organizational change and development. The results of this thesis promote the idea that proactive personality is an essential facilitator - or even a prerequisite - of networking behavior with collective and voluntary nature.

Conlcusion 2: POS has a positive relationship with TIO

Perceived organizational support (POS) is strongly related to mutual trust between individual and organization that is a result of successful social exchange relationship (Eisenberger et al. 2002). The context of supportive environment does not focus only on instant gains and offers opportunities of autonomic behavior for individuals (Ghoshal & Bartlett 1994). As TIO is networking behavior, in which individual neglects the exploitation of short-term position benefits (Burt 2000), it is important that environment supports also the long-term goals and development. Therefore it was expected that POS should have a positive relationship with TIO. This presumption was supported by the results of this thesis and it seems that mutual obligations facilitate collaborative networking among employees.

Social exchange theory suggests that received support is a certain kind of reward from the employee's perspective (Monge & Contractor 2003). From this transactional point of view it is clear that the received benefits create mutual obligations, which eventually facilitate collective behavior. Traditionally many organizations have analyzed the exchange relationship between organization and its employees only in terms of explicit benefits and rewards. The social aspect of exchange relationships broadens the view and generates new possibilities to support collective behavior and facilitate the rise of truly shared long-term goals.

Conlcusion 3: OPEN does not facilitate a stronger relationship between PRO and TIO

As hypothesis 3 proposed, a positive moderating effect of organizational openness and experimentation was expected on the relationship between proactive personality and TIO. While proactive personality and TIO have a strong and positive connection, it seems that this contextual factor does not have significant impact on the networking behavior of individuals. This suggests that TIO would be more closely related on the individual matters than on the group-level. This means that it does not matter if the organization is open and willing to experiment or not, rather it is more meaningful to focus on the individuals and the preparedness of their personalities for connecting unfamiliar parties.

Against the expectations, organizational issue such as OPEN seem not as relevant regarding the collective form of networking behavior. This could suggest that collectiveness is related to one's values and personal experience as well as perception. OPEN might offer benefits in many other forms

that are not studied in this thesis. But in case of TIO it is more important to focus on the individual and elements that promote one's readiness to voluntarily support collective interests. As it was mentioned in the Conclusion 1, it seems that at least personality issue is a very valuable matter.

Conclusion 4: OPEN does not have a positive moderating effect on the POS and TIO relationship

Perceived organizational support and TIO had a positive relationship and it was expected that organizational openness would have positive moderating effect on this relationship. This expectation was done due to the findings of previous research. As Baer and Frese (2003) presented, the climates that offer psychological safety would be associated with a positive relation between process innovativeness and profitability. Because openness builds trust among members of the community, it was unexpected that organizational openness does not have a strengthening effect on the relationship between perceived organizational support and TIO.

As previous Conclusion 3 presented, TIO is more related and dependent on the individual factors rather than on the contextual issues. Maybe this relates to issues such as personal ties, which could explain the importance of social exchange theory. It might be difficult for an individual to form personal-level obligations with implicit issues such as organizational culture. Rather, it could be easier to process and recognize the shared mutual obligations with supervisor, colleagues or stakeholders. Regarding POS's relationship with TIO, the case might actually be that the exchange happens in form of implicit matters - such as support - but the exchange partners need to be explicit in one form or another.

Conclusion 5: People working in the sales function have stronger TIO

As sales function is the most externally oriented part of the organization (Gummeson 2002), it was presumed that the TIO would be stronger among people who are working at the sales function. The findings support this claim and it seems that people who are familiar with external and multiple stakeholders are more likely to find opportunities for bridge building and connecting unfamiliar parties. Sales people seem to be more strategically oriented regarding their behavior and they try to find new opportunities for value creation. Sales function is typically an area where people are actively browsing for emerging opportunities, which obviously facilitates opportunities for strategic networking.

Social exchange theory could also explain the sales people's behavioral incline towards TIO. As sales function benefits from cooperation and cohesive networks (Swan et al. 1999), sales people might be more willing in supporting the development of stronger ties with different parties. This would mean more collective approach in one's behavioral orientation, as sales person understands and is more familiar with the reciprocal nature of social exchange. They are more experienced in viewing relationships from the transactional perspective, which could offer them unique capabilities regarding network management and development.

Conclusion 6: OPEN has a positive moderating effect on the sales function – TIO relationship

As it was suggested in the hypothesis 6, organizational openness had a positive effect on the relationship between Sales and TIO. As already mentioned, other studied moderating effects of organizational openness have note been significant, which means that sales people might be more context sensitive. While sales are approaching to maximize the joint value-creation, they are oriented to see customers as partners. Similarily sales people's integrative goals and social embeddedness also inside their own organization (Granovetter 1985) emphasize the unique relationship that sales have with stakeholders. (Gummeson 2002) This would suggest that while people in other type of tasks might not be strongly dependent on the context, the organizational culture and matters relating to it might have a significant influence on the productivity of sales people – especially regarding networking behavior.

Regarding the suggestion presented in the previous Conclusion 5, sales people might be able to understand culture in more explicit terms than others. As their job description includes more political aspects due to the higher amount of stakeholders, they might set more value on organizational culture. Culture is a context that facilitates - or prevents - many processes that could eventually be crucial for sales person's success. This could explain why sales people are more sensitive to cultural issues and why OPEN had a positive effect on the relationship between Sales function and TIO.

Summary

In the era of knowledge intensive work, networks and their role in organizations have been emphasized. As networks function as information channels and offer accessibility to a diverse knowledge, they similarly enable novel combinations of ideas. Most challenging part in this structural

setting is to understand how the different parts of knowledge, such as implicit and explicit, are eventually combined as new innovations and what influences the process.

Regarding innovativeness, Obstlefd (2005) and his study results have highlighted the role of individuals and their activity as bridge builders between unconnected parties (TIO). But he did not explain the factors that facilitated this behavior and therefore this thesis approaches to offer new information regarding the predictors of TIO.

Organizations might create supportive context that promotes voluntary networking. Previously it has been rather difficult to express explicit benefits of organizational support, especially in the economical and transactional sense. According to the social exchange theory, organizational support functions as a reward that facilitates extra-role behavior such as TIO. This finding helps to understand the connection of implicit organizational elements, for example employee well-being, with explicit and economic key figures that traditionally drive business decision. POS generates safer and supportive work environment but it similarly facilitates TIO and therefore promotes organization's innovativeness as well. This is relatively important finding and helps to understand the meaning of individual perception and the true value of psychological elements, such as trust, mutual obligation and social exchange.

One interesting finding relates to employee's functional area. Sales people seem to be more inclined toward TIO and this generates implications regarding their task areas. As an externally oriented function, it is possible to benefit from the stronger TIO of sales people in forms of market intelligence and knowledge. This broadens the role of sales function as it traditionally has been seen valuable only due to its role in generating new sales and creating new customer relationships. Sales function could potentially be seen as a valuable "knowledge tank" that efficiently integrates internal as well as external knowledge. If this cooperative role and special task area is promoted, it is likely that sales people would be more active in expressing their ideas and creating more reciprocal relationships with their customers. This could decrease transaction costs related to the external relationships and generate higher profits and offer more predictable future.

Most importantly these findings help to understand the dynamic nature of TIO and similarly offer insights regarding its potential relationship with organizational ambidexterity. Organizational ambidexterity means organization's strategic ability to be simultaneously innovative and efficient. (Duncan 1976) If Kotter's (2012) model of "two operating systems" (Figure 2.) makes the potential benefits of TIO more explicit, the conclusions of this study add value to Kotter's model as well. The conclusions explain what eventually facilitates this strategically oriented networking behavior. Conclusions of this thesis create also a more dynamic picture of the reciprocal nature of TIO. If

organizations are able to facilitate TIO, they might benefit from higher level of innovativeness and achieve strategic agility. Conclusions help management to recognize the elements that are essential for TIO to exist. Due to TIO's voluntary nature, organizations cannot design any specific operative structures that would generate true, strategically oriented and unprompted networking among employees. Rather, they should focus especially on certain employee level issues that support proactive behavior and collaborative context, as it is mentioned in the conclusions above.

9.2. Managerial implications

The findings of this study offer certain important managerial implications. These six conclusions mentioned above offer valuable information regarding organization's innovation strategy especially in the area of knowledge networks and social capital. TIO is suggested to have a strong relationship with individual's innovativeness (Obstfeld 2005) and therefore a more thorough understanding of this behavior type is essential.

Firstly, it is relevant to understand the importance of proactive personality and the underlying value of it. People who are willing to show initiative and create positive change might not be the easiest employees to manage due to their tendency to challenge the status quo, but they are very valuable for the organization and its development in the long run. Especially regarding value networks and knowledge transfer, proactive people have an essential role in it. Often, they see more emerging opportunities and are willing to build bridges between parties on behalf of their community. As it was presented, organizational culture of openness does not have a significant role in TIO, which moves the focus from the organizational issues towards the preparedness and aptitude of an individual.

The conclusions mentioned above help organizations to facilitate TIO especially at the individual level and apply them in different managerial solutions. For example when organizations are recruiting new employees, they could appreciate proactive personality higher than before. Proactivity is a measureable personality trait and thus a form of information that can be utilized during the recruiting process. This emphasizes the importance of recruiting as an element that relates to organization's strategic capabilities. If individual's activity in building knowledge-bridges has such a strong connection to one's level of PRO, it is clear that organizations should recognize this while designing processes regarding recruiting and talent management. This issue is a matter of long-term competitiveness and has effects on the capacity to deliver future value.

Similarly, organizations can openly express their appreciation regarding proactive behavior among current employees and thereby engage members of their community in showing personal initiative. Therefore it is suggested that organizations may significantly benefit from having employees with certain personality traits, which in this case is PRO. Especially in the light of innovation abilities and activity level, proactive employees are core assets for organizations.

As mentioned in the first parts of this thesis, the role of trust was also speculated to have a meaningful role in TIO. Conclusion 2 presented that perceived organizational support had a positive impact on the TIO. This supports the concept of social exchange and the idea that mutual trust between individual and the representative of the organization – in this case the closest supervisor – is a facilitating factor and supports people's willingness to connect unfamiliar parties for the common good. The importance of this individual level tie is more important than contextual factor such as organizational openness and experimentation. Therefore it is important that managers understand the development of psychological contract and they should try to create a functional social exchange relationship (Eisenberger et al. 2002) with the employees. This means a sense of reciprocal and mutual obligations, which could support employee's perception that organization values her/his contributions and cares about her/his wellbeing. Supportive managerial elements function as a reward from the employee's perspective and steer individual's choices as well as behavior planning in the direction of collective benefits, such as TIO.

In addition, this study found out that the level of TIO among sales people was positively influenced by the organizational openness. This finding proposes that sales management should focus on creating an open culture and promote employees' willingness to exchange ideas, as they could be even more active in building knowledge bridges between different parties. Because of the continuous cooperation with external stakeholders, such as customers, sales people are able to gather diverse information from the market, which is an enormous competitive advantage from the point of view of innovativeness. Rather than just exploiting the current opportunities, sales function could support the organization with explorative efforts that are more long-term oriented.

9.3. Limitations and directions for future research

Certain limitations of this study should be noticed. All the participating companies participated voluntarily on this study, while simultaneously many companies that were invited declined to participate. This might suggest that the research area is more important to some companies and

therefore the studied issues might be on better than average level in these organizations or at least they are willing to develop them.

Some error could occur if participants have misunderstood the question or if they do not know what to answer. This might happen if participants were unfamiliar with the terms of the questionnaire. Similarly, they could try to present them in a favorable light. It should also be noticed that some people declined to participate on this questionnaire. Still, the response rate was at acceptable level and trustworthy analysis could be carried out successfully.

Most of the participants were working in Finland and were Finnish citizens, although their companies had both domestic and foreign roots. Compared to this thesis, demographically diverse research data would offer more thorough and not as biased information regarding the issues studied. It is obvious that the working culture of organizations in other countries might differ from the Finnish located companies. As some countries have more individualistic or collective cultures than others, this could have an effect on the behavioral orientation of the employees. In collective cultures social exchange relationship and individual perception, such as POS, might not have such a strong relationship with TIO. If support functions as a certain reward for an employee, it is possible that it is connected with the individualistic culture. But this is an issue that future studies can investigate more thoroughly.

In the light of this thesis it seems that TIO is quite strongly related to individual, rather than organizational elements. Contrary to the expectations, it was concluded that the contextual element of organizational openness and experimentation did not have a positive moderating effect on the relationships that were studied. This was quite surprising, because according to previous research the organizational openness should create a context that supports the development of trust and collaboration. For example POS generates trust and it seems to have a positive facilitating effect on TIO, organizational openness did still not have a positive moderating influence on that relationship. It is suggested that future research would consider some in-depth analysis on this issue in general. It would also be beneficial to analyze the differences between task types even further. As this thesis found out, sales function seems to differ from other task types. It would be meaningful to understand the differences between people working in different tasks and how these influence on their networking orientation, especially from the managerial point of view.

Parker et al. (2006) suggested that proactive behavior is highly dependent not only on individual differences but also on matters such as organizational culture. Therefore it could have been interesting to study if there was a positive connection between organizational openness and proactive personality in this research data as well.

Although Obstfeld (2005) has suggested the connection between TIO and individual innovativeness, future research could focus on this issue. Innovativeness is a popular issue, but previous research has mainly focused on the organizational-level rather than on the individual activities. Therefore TIO could strengthen the understanding of innovation efforts at the individual-level, which could help communities to develop their innovation strategies.

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11. Appendix 1: Dependent and independent variables of the study

Tertius iungens orientation (TIO)

I introduce people to each other who might have a common strategic work interest

I will try to describe an issue in a way that will appeal to a diverse set of interests

I see opportunities for collaboration between people

I introduce two people when I think they might benefit from becoming acquainted

I forge connections between different people dealing with a particular issue

Proactive personality (PRO)

I am constantly on the lookout for new ways to improve my life

Wherever I have been, I have been a powerful force for constructive change

Nothing is more exciting than seeing my ideas turn into reality

If I see something I don't like, I fix it

I love being a champion for my ideas, even against others' opposition

I excel at identifying opportunities

I am always looking for better ways to do things

I can spot a good opportunity long before others can

Perceived organizational support (POS)

My employer cares about my well-being

My employer values my contributions to its well being

My employer cares about my opinions

My employer considers my goals and values

My employer cares about my general satisfaction at work

My employer is willing to help me when I need a special favor

Openness and experimentation (OPEN)

The firm promotes innovation and experimentation as a way of improving the work processes

This firm follows up what other firms in the industry are doing, adopting those practices and techniques it believes to be useful and interesting

Experiences and ideas provided by external sources (advisors, customers, training firms...) are considered a useful instrument for this firm’s learning

Part of this firm’s culture is that employees can express their opinions and make suggestions regarding the procedures and methods in place for carrying out tasks

The firm has a culture that tolerates failure in the development of new things