Organizational Culture as the Driver of Dense Intra-organizational Networks

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Abstract

Shared norms and values are essential for connecting individuals in social networks as well as triggering exchange of information and joint cooperation. Trust, proximity and reciprocity are also relevant to having a positive outcome within social networks as they are linked to Social Capital, competitiveness of organizations, advantages of the economies of scales and scope as well as decrease in transaction-costs. Organizational culture impacts on most aspects of organizational life, especially when it comes to people and their relationships. Even though it is widely acknowledged that culture plays an important role in social network building and the qualities of these connections, there has not been much research on it. Therefore, the question which usually arises is which type of organizational culture is most likely to have a positive influence on the intra-organizational networks and lead to a higher density of the network. Based on a literature study and a case study analysis of two Austrian organizations, the authors' aimed at providing some clarifications on the impact of organizational culture on the density of intra-organizational networks. This paper uses the Competing Values Framework and the Social Network Analysis for that purpose.

Key words: Organizational Culture, Intra-organizational Networks, Social Network Analysis, Competing Values Framework.

1 INTRODUCTION

External and internal relationships are more and more acknowledged by scholars and practitioners to play a crucial role in the success of organizations. Solid and dense networks within an organization are the source of improved organizational learning, developed technologies and resources and a unique and dependable competitive advantage (Reagans & McEvily, 2003; Beugelsdijk & Van Schaik, 2005). Research has been done to define the aspects which contribute to understanding how successful networks are created. Works describing the networks research emphasize that networks contribute to efficient organizational performance due such factors as network configuration (Vanhaverbeke & Noorderhaven, 2001), the type of inter firm ties (Uzzi, 1996), trust (Ostergaard, 2008), open communication (Tsai & Goshal, 1998), and joint problem-solving arrangements (O'Dell & Grayson, 1998).

Nevertheless, the question what aspects make some organizations more efficient in forming networks than others has not been widely researched (Beugelsdijk & Van Schaik, 2005). The literature on this issue is limited, but some sources mention an especially impactful aspect influencing network building: organizational culture. (Beugelsdijk & Van Schaik, 2005) Schein (1985) says organizational culture is the unique organizational feature and tends to be the steady force, compared to other organizational phenomena. Therefore, culture can be assumed

to be one of the most significant aspects that can provide with stable information on what allows building dense and solid networks. The article gives an overview on aspects of organizational culture identified in the literature which can be assumed to support the building of dense network ties. Furthermore, the paper provides with the case study of the organizational cultures and networks density of two organizations. Then, the paper gives an analysis of the identified factors from literature and the empirical data and concludes on which culture types have a positive influence on the building of dense intra-organizational networks.

2 THEORETICAL REFLECTIONS

2.1 Organizational culture and Competing Values Framework

Organizational culture is the concept which has been developed for decades and has many definitions which can vary according to the purpose of the study (Schein, 1985). Culture of an organization is an important aspect to take into account when it comes to the research of many organizational and intra-organizational phenomena, because it influences the behaviour of all individuals and groups within the organization and the way they perceive and communicate with the external environment. According to Cameron and Quinn (2006), "*It represents 'how things are around here'. It reflects the prevailing ideology that people carry inside their heads.*" Culture impacts most aspects of organizational life: decision-making, rewards distribution, employee treatment, their relationships etc. (Harrison & Stokes, 1992).

Organizational culture has many categorizations which are useful as the basis for the comparison of phenomena in different companies and understanding of them in respect to other factors. One of the most applicable models for the assessment and definition of organizational culture is the Competing Values Framework (CVF) by Cameron and Quinn (2006). CVF presupposes that a culture of an organization consists of four culture types: hierarchy, clan, market and adhocracy. According to Cameron and Quinn (2006), they can be briefly characterised as following:

Hierarchy: This organizational culture type indicates a formalized and structured place to work. Employees follow procedures and rules in their decision-making. In the long run the organization is concerned about stability, predictability, and efficiency. Organization is held together by formal rules and policies.

Clan: This culture represents a friendly place to work which people perceive as extended family. Leaders are seen as mentors and even as parent figures. The organization is held together by loyalty and commitment. The long-term advantage is the development of individuals. Organization is considered to be successful when it has appropriate internal climate and is concerned about people.

Market: This culture indicates a results-oriented workplace. Leaders are tough and demanding. Organization is held together by the atmosphere of winning and reaching of goals in preset deadlines. The long-term interest is the achievement of strategic goals. Success is understood in terms of market share and penetration.

Adhocracy: This culture represents entrepreneurial and dynamic atmosphere with the emphasis on creativity and risk-taking. Leadership is visionary and innovative. Organization is held to-

gether by commitment to experimentation. Readiness for change and meeting new challenges are important. In the long term organization is oriented on rapid growth. Success is defined as production of unique products and services.

2.2 Intra-organizational networks

To form social networks is a human need and ability; from early on in childhood, we are members of networks like family, school classes, sport clubs and many more. This seems to be far away from the network definition of social network analysis, where networks are described as a defined sum of nodes or elements and the sum of the edges/ties between them (Jansen, 2006). Nodes are the individuals, such as persons, corporate stakeholder, companies, ministerial accounts or countries. Other authors define social networks as a defined set of persons, and the linkages between them (Tichy et al., 2001). Furthermore, networks are a set of relations, which differ in aim and duration.

Various ways of distinguishing social networks exist. Basically a social network can be formal, e.g. a sports club; or informal, e.g. a group of friends. Informal networks are classified into "communication and influence" and "exchange and negotiation" networks irrespective of their actual topic (Jansen, 2006). Informal networks are a powerful source of horizontal collaboration within a company as well as outside. These ad-hoc networks connect around shared interests and knowledge and build a huge gateway for information and knowledge, which should be considered by the company. However the management of these networks is problematic as it is claimed that informal networks cannot be managed directly, but indirectly, by establishing formal networks in order to enforce and cultivate informal networks (Bryan et al., 2007).

A company's network can be further distinguished into intra-organisational and inter-organisational networks. Intra-organisational networks are the relations between employees, while inter-organisational networks form relations with shareholder, supplier, customer, competitors and any other possible stakeholder as for instance regulatory authorities (Sydow, 2006).

Intra-organisational networks in companies are formal as well as informal. The formal networks in a company are given due to the operational and organizational structure of the firm. The informal networks are those that are triggered due to projects, lunch meetings, private interests and hobbies and many more. An organization has the possibility to enforce these networks with the help of organisational culture. These possibilities, which build a gateway of information and knowledge, should be enforced in order to ensure knowledge sharing.

Two factors of influence basically exist in networks: trust and power. Money, knowledge and democracy can be classified as a kind of power (Sydow, 2006). Trust is defined as the expectations of a partner's reliability with regard to his obligations, predictability of behaviour, and fairness in actions as well as negotiations which is further more a product of the successful integration of norms and values within a network (Beugelsdijk & Van Schaik, 2005). Furthermore promotes network closure and the presence of cohesive ties the development of trust (Gargiulo & Benassi, 2000).

Another important factor of influence within the network is the members' characteristics. Social competence is an important ability needed to cooperate successfully within networks. There are five main competences that have been found to affect influence. These are social

perception, the ability to correctly gauge current moods or emotions of network partners, impression management of own appearance and image, persuasion and influence. The ability to adjust to a wide range of social situations and to feel comfortable with individuals from diverse backgrounds (Social Adaptability) counts as well as emotional intelligence, the ability to regulate one's own emotions and have influence on the emotions of others (Beugelsdijk & Van Schaik, 2005). These social skills are especially important for the management that should foster, develop and ensure solid intra-organisational networks. Solid intra-organisational networks are therefore understood as dense (highly connected) and trusting relationships within a firm.

The effects of social networks lie in the economies of scale (synergy effects) as well as in the economies of scope, which are more focused on quality and innovation and therefore primary target of many companies. Another advantage of social network lies in the transaction-cost theory, which says that the costs for coordination and transaction can be reduced due to social networks. Transaction costs such as costs for search and information, bargaining, policing and enforcement, can be limited with the help of social networks due to trust, proximity, reciprocity and social responsibility (Payer, 2002).

2.3 Factors of organisational culture and their influence on social networks

Organizational culture is found to be an important factor which influences positively the quality of many aspects of networks building. However, it is not enough to know only this. Even more important is which aspects of culture exactly have positive influence on social networks building. Based on literature analysis there were distinguished the following features of an organizational culture, which support solid networks building:

Knowledge and information sharing – the sign of Reciprocity: According to O'Dell and Grayson (1998), mutual obligation is one of the most powerful social forces. Inside an organization, once people start helping and sharing with one another, the effort becomes a self-perpetuating cycle. Haldin-Herrgard (2000) mentions that apprenticeship, direct interaction, networking and action learning are more suitable for supporting diffusion of tacit knowledge. In intra-organizational networks all these patterns refer to reciprocity, one of the most crucial factors for building dense networks. This factor is based on trust (Ostergaard, 2008). Reciprocity in general is a pervasive and an economically significant value in networks, no matter if these are long-term relationships, sporadic or anonymous relations. Reciprocity is the propensity to reward generosity and punish opportunism (Sethi & Somanathan, 2003), moreover it is not a kind of altruism but an expectation of future benefits from their action (Fehr & Gächter, 2000). From this underlying principle derives the networking principle 'Do, ut des', [lat.: I give so that you may give].

Common areas of interest and expertise: Not all knowledge-types can be transmitted easily: basically time, intermediary cognitive capacities and related skills are necessary. Moreover the ability to understand and process the information spread in the network, the same knowledge domain and competence field is needed (Ostergaard, 2008). Shared interests provide a communication basis and link individuals as they have something in common. Shared interests and expertise provoke trust and trustworthiness (Tsai & Goshal, 1998), as it is easier to trust someone with whom you have something in common, than a totally stranger. Moreover it is the process of socialisation that enables the exchange of tacit knowledge between individu-

als. Joint experience or interest result in common values and/or technical skills (Seufert et al., 1999), which lead to more dense and solid networks.

Continuous exchange and common target: Only supportive, collaborative culture and eliminating traditional rivalries can build effective exchange between employees (O'Dell & Grayson, 1998). The spreading of these visions and values works especially due to informal links (Tsai & Goshal, 1998). The existence of collective norms, values and targets enables employees trust each other (even if they are not connected). Social skills, such as social perception, impression management, persuasion and influence, social adaptability and emotional intelligence (Beugelsdijk & Van Schaik, 2005) influence the relationship of the management to their teams and the style of their leadership. Without appropriate leadership style and the connection due to a common target among the members of organization the creation of solid intra-organizational networks is impossible. It follows that the management has to guarantee two facilitating conditions, the structural and the cultural one (Seufert et al., 1999).

Personal relationships and trust – Proximity and Strong ties: Dense networks do not spill over automatically, but need cognitive as well as social proximity (Ostergaard, 2008). Proximity is defined as the quality of relationships in psychological, cultural, social and physical dimensions and influences the quality and quantity of communication. Basically, it can be understood as the opposite of distance (Gössling, 2007). Even though weak ties are identified as a source for new information, as they do not lead to redundancies (Granovetter, 2005), strong ties enable sharing information and experiences as due to trust risks of opportunistic behaviour is minimized (Batt, 2008; Gössling, 2007). As dense networks cannot appear through formal ways, informality beside the proximity of the relation matters. Therefore it is necessary to ensure the existence of personal relationships in a firm. It is not possible to build strategically strong ties, but it is possible to foster the development of ties in order to achieve a dense network. Cultural circumstances have to support that process with trust and proximity.

Network architecture - office design: Networking needs real, virtual or mental space for creation and support of networks. Modern information and communication technologies can be used in order to support networking and knowledge sharing (Seufert et al., 1999). Moreover it should be taken into account that network development, especially informal networks, always depends on communication, as the development of trust is highly influenced by unconscious artefacts (e.g.: body language). Therefore the design and architecture of offices plays a vivid role for the creation of informal intra-organisational networks. How the whole office is structured, how certain rooms for meetings are designed makes a difference. Offices for "soft" informal meetings, offices for short meetings as well as places for relaxation are needed (Johansson et al., 2002). Communication between departments is enabled and therefore the creation and fostering of informal intra-organizational networks encouraged.

Even though these factors are insightful for organizational networks analysis, it is not widely researched, how these factors can be systematized to indicate the influence of culture on social networks building. This paper contributes to this gap by in addition to literature research above making an empirical study with the combination of organizational culture evaluation instrument and social networks measurement methods. Therefore, next part of the paper demonstrates this empirical study and gives analysis on what role CVF culture types play in intra-organizational works building.

3 CASE STUDY OF INTRA-ORGANISATIONAL NETWORKS AND ORGANIZATIONAL CULTURE

The following case study demonstrates a curious empirical evidence of the influence of the CVF culture types on density of networks.

3.1 Methodology of the case study

Two companies, operating in Austria, have been studied in order to observe the influence of the CVF culture types on networks. Company 1 is a supplier for software solutions located in lower Austria, who is for 25 years in the market with 70% market share and 47 employees. Company 2 is a coating producer located in Vienna, existing since 1937 with an outstanding market position, 60% export and 143 employees. The company is integrated in guilds and clusters and cooperates with its competitors in order to adapt jointly to legislative changes and environmental challenges. Target group in this study were all employees for Company 1 and all employees in the management and administrative employees of the Company 2. The statistics of the study is given in the following table:

Tab. 1 - Statistics of the study. Source: Authors' own.

	Target group	Responses received	Response rate
Company 1	47	33	70%
Company 2	86	36	42%

Methodology used included Organizational Culture Assessment Instrument (OCAI) based on the CVF (Cameron & Quinn, 2006) and Social Network Analysis (SNA). The OCAI was adopted for the purposes of the research and simplified to measure only the current state of culture. In an online questionnaire the employees of every firm were asked to divide 100 points among four different statements representing culture types according to the CVF to assess six different areas of culture such as overall organizational characteristic, leadership, target orientation, employee stimulation and commitment.

Social network analysis is a socio-anthropological method used to measure and visualize the social structure of a group as a whole and the social embeddedness of its individuals (Jansen, 2006; Wasserman & Faust, 1994). In the focus of the analysis can be the relations of groups or individuals in formal or informal relations. For this case study a whole network approach of informal relations between individuals has been chosen and in total seven relations between the defined set of employees in every company analyzed. The seven relational types were business communication, cooperation in joint projects, asking for advice in professional matters, talking about private topics, meeting in private for leisure time activities, asking for advice in private matters and lending an amount of 200,- Euro. From all the possible calculations in social network analysis we were focused on the density in the total network, the ratio of realized relations compared to all possible relations.

3.2 Evaluation of organizational culture

The following figures show the organizational culture study results, which are presented in the form of OCAI plots. These plots are drawn by averaging results of OCAI questionnaire on

each of the culture types and thus represent a graphical summary of the organisational culture evaluation of each of two companies.
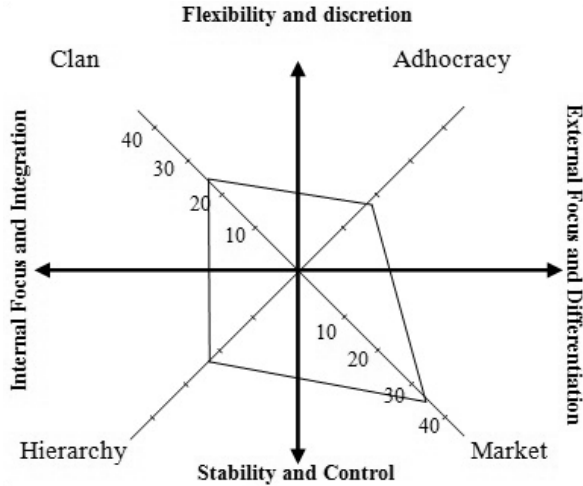

Fig. 1 - OCAI plot of the Company 1. Source: Authors' own.

Figure 1 illustrates the organizational culture plot of Company 1. The two strongest cultures are market and clan. Market culture shows that the company is oriented on achievement of the set objectives, is very driven towards competitiveness, oriented on the outside environment and emphasizes stability. After market, the strongest culture is obviously clan. The strength of the clan culture means that it also pays attention to the personnel and takes care of its employees. Clan culture is often described as warm, friendly environment, where people share a lot of themselves. (Cameron & Quinn, 2006) Personal relationships and trust are common characteristics of such culture. For example, one of the signs of it is the fact that all employees were on first-names term. Another proof is that the firm has a low hierarchical structure and works in teams. Also the office design of this company contributes to this fact as it is characterized by modern light architecture, open space and glass walls between the offices. In the center of the building is the cafeteria located where all the employees spend their lunch-break. Moreover, the hierarchy culture is the third strongest culture, which indicates that besides orientation on competition and care about employees, the organization also estimates the official guidelines, and needs some stability and control to be efficient.

The combination of strong market and clan cultures is quite rare, since they are opposite to each other. This combination might be difficult for leaders to manage and might indicate some conflicts in organization. However, when well managed, balanced and congruent, the strength of clan and market cultures can provide organization with a lot of flexibility and diversity in values, communication and leadership and thus lead to diverse and solid networks. This therefore can be a unique competitive advantage for the organization.
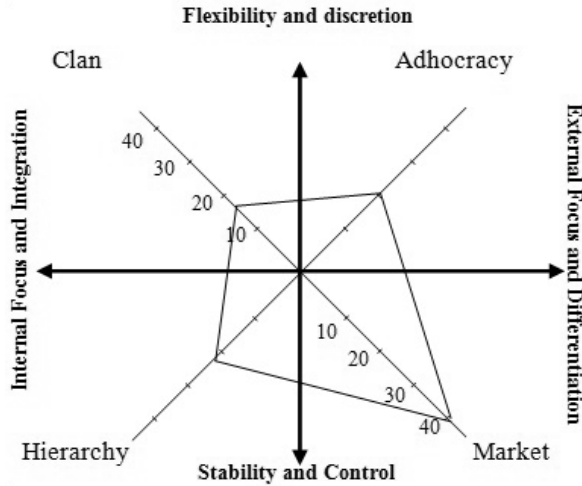
Fig. 2 - OCAI plot of the Company 2. Source: Authors' own.

Figure 2 demonstrates the OCAI plot of Company 2. The strongest cultures are market and hierarchy, indicating that this organization is mostly concentrated on stability and control. Market culture means that it is a very competitive place, where employees are mostly driven towards the achievement of the definite results in short terms. Hierarchy indicates orientation on economical efficiency through simplification of products, services and processes, which is aimed at cost reductions, maximization of production, and economic outcomes. In such cultures there is not much place for paying attention to communication, building of trust and relationships. Diverse hierarchical structure of the Company 2 confirms this, as well as the fact that just 17% of the employees are on first-name terms with each other. Clan culture is present the least in the overall culture of the organization, meaning that care for employees is not as important as the values typical for the other three culture types. This might be explained due to the need to correspond to the environment in which the organization operates. Company 2 is situated in a large building built in 1987 that is split into manufacturing and administrative part, whereby the administrative part is divided on three floors. In comparison to Company 1, the offices are divided by massive walls and moreover by several floors. How the building is designed is an artifact of the company's organizational culture and goes in line with the high rate of hierarchy and market. It is quite clear that such atmosphere is not the most supportive for open and free communication.

3.3 Analysis of the intra-organizational networks

The results of the study of the networks structure of these two companies provide with additional information, which makes it possible to draw conclusions on the connection between culture types and solidity of networks.

In the online-questionnaire employees of each company had the possibility to indicate with whom of their colleagues they are connected by the seven possible relations: Relation 1: Business communication; Relation 2: Cooperation in joint projects; Relation 3: Asking for advice in

professional matters; Relation 4: Talking about private topics; Relation 5: Meeting in private for leisure time activities; Relation 6: Asking for advice in private matters; and Relation 7: Lending an amount of 200,- Euro. The indication of all and none relation was enabled. Table 2 gives an overview of the original and extracted values of both companies. The original values show all relations indicated, also relations to those employees which did not fill in the questionnaire. The calculations of the values for extracted company network was necessary as for the calculation of valid whole networks, a participation of a minimum of 70 percent of a defined group is needed (Lang & Schnegg, 2002), which was not achieved for Company 2.

Tab. 2 - Statistics of the Social Networks of both Companies. Source: authors' own.

	Company 1		Company 2	
	original	extracted	original	extracted
Nodes	47	32	86	41
Ties aggregated	926	636	1641	785
Relation 1	703	492	1492	727
Relation 2	323	231	293	129
Relation 3	412	281	268	123
Relation 4	295	197	317	174
Relation 5	43	27	34	17
Relation 6	62	43	37	20
Relation 7	355	233	285	142
Density aggregated	0.4283	0.6411	0.2245	0.4787
Relation 1	0.3252	0.496	0.2041	0.4433
Relation 2	0.1494	0.2329	0.0401	0.0787
Relation 3	0.1906	0.2833	0.0367	0.075
Relation 4	0.1364	0.7986	0.0434	0.1061
Relation 5	0.0199	0.0272	0.0047	0.0104
Relation 6	0.0287	0.0433	0.0051	0.0122
Relation 7	0.1642	0.2349	0.039	0.0866

The spread of ties on the seven possible relations is similar in both companies. Most ties are in the relations business communication, project, business advice and lending money. Meeting in private and asking for advice in private matters are low in both companies. The rank of the number of ties is though a bit different in both companies, in Company 2 in the extracted network has the relation type project more ties than the relation advice in business matters. An aggregation in social network analysis means an addition of all relational types to one relation. Here we wanted to see how many relations were realized in total, but not counting multiple relations of actors.

The lower part of the table shows the density of the original and extracted networks of both companies. Hereby we can observe that the extracted values are higher as the number of actors of every network has been reduced to those who filled in the questionnaire. The aggregated, extracted density for Company 1 which equals 0.6411 indicates that 64% relations of all pos-

sible relations are realized. In Company 2 just 47% of all possible relations are realized on an aggregated level. Comparing the extracted values of Company 1 and 2, we find out that the density values of Company 2 are lower. Especially in the Relations 2, 3, 4 and 7 (joint-project, business advice, private communication and lending money) the density values are much lower. The values show us that in Company 2 joint-projects are less frequent. Asking for advice in business matters, does not only show prestigious actors in the network who are valued for their knowledge and expertise, but moreover it says something about knowledge-sharing and trust in the organisation. Private communication in an organisation can be considered as a channel for trust building and establishment of common norms, values and beliefs. Relation 7 "Whom of your colleagues would you lend an amount of 200, Euro", is a tool for testing trust, as somebody would just lend this amount of money, in case they trust the other one to return the money. Therefore we can conclude that the level of trust in Company 2 is much lower than in Company 1. The only restriction in this case applies for the members of the management, as due to their hierarchical power employees would lend money to them not because of trust, but because of power and superior position.
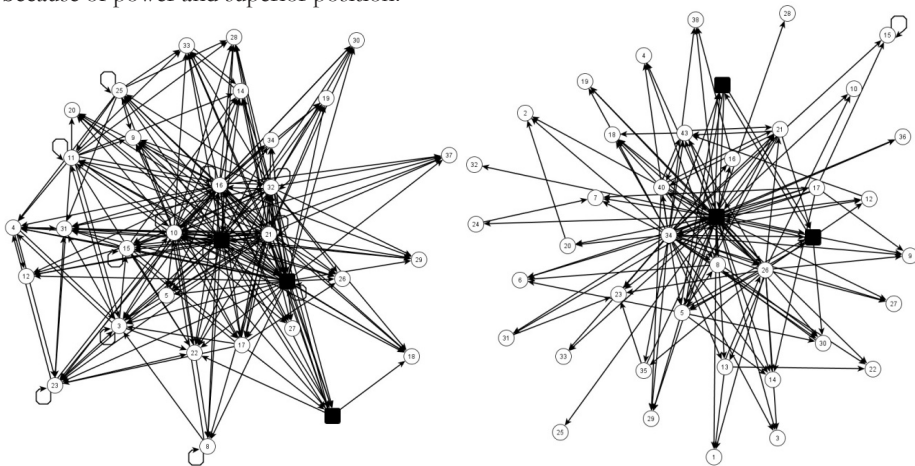
Fig. 3 - Relation 7 (Lending Money) for Company 1 (left) and 2 (right).
Source: Author's own. Illustration with the visualization software Visone.

Figure 3 shows Relation 7 for Company 1 and 2. In both networks the management has been marked by black, squared nodes and all other employees of the company with white, round nodes. The graph-theoretical layout of the network was generated by spring embedding, an algorithm that uses iterative fitting to locate the points to each other according to their smallest geodesic distance (Wasserman & Faust, 1994). It is visible that in both networks at least one member of the management (the CEO) is in the total center of the network showing his trustworthy and powerful position. The network of Company 1 is much denser than the one of Company 2 on the right side. Every actor in network of Company 1 is linked by several relations to other employees, while on the network of Company 2 some actors are liked to just of their colleagues, which shows the lack of trust for lending money to other employees.

3.4 Influence of culture types on social networks

After the literature research and basing on the results of the above described case study, it is possible to make some conclusions on which culture types are more likely to influence the solid networks building. Therefore, the next paragraphs explore in more details, how each culture type of the CVF impacts the building of the solid networks.

Clan culture and solid networks building: Literature study and the given case study demonstrate that clan culture is the culture, which supports the creation of solid networks the most. For the Company 1, clan culture is one of the strongest, and Table 1 and Figure 3 demonstrate that it has high indications of the solid networks. At the same time, Company 2, which has a very low clan culture rate (Figure 2), has also much lower indicators of network density (Table 1, Figure 3). These results demonstrate that indeed culture of clan fosters solid networks building.

Underlying values, directing the culture of clan, are flexibility and discretion and internal focus and integration. These values are a very good basis for supporting natural emerging of solid intra-organisational networks, since the focus of organization on its internal environment together with flexibility results in such phenomena as shared values and goals, cohesion, participation, individuality, and the sense of "we-ness". Considering the leadership factor, the manager of a clan culture is a mentor or a parent figure. He/she is ready and willing to share his/her experience and to pass best practice. The leader builds team, supports and creates warm climate. Certainly, in such conditions it is easier to talk, to openly ask questions and honestly talk about a problem. In these cultures the feeling of being obliged to help each other is an inherent characteristic and creates fruitful environment for the building of solid networks.

Effectiveness criteria of the clan culture include human resource development and teamwork. These factors are also connected with building of solid networks. In this culture type one of important believes is that involvement and participation of employees foster empowerment and commitment. Cameron and Quinn (2006) write: *"Committed, satisfied employees produce effectiveness."* We can add, and therefore, big competitive advantage. In other words, committed, satisfied employees are open to communicate and therefore they share more of their experience, expertise and understandings in the networks and this leads to effectiveness. Moreover, clients and stakeholders are perceived in this culture type as family members and partners, which is another premise for solid networks building.

Adhocracy culture and solid networks building: The second culture type, which is likely to contribute to fostering solid intra-organisational networks, is adhocracy culture. Underlying values directing the culture of adhocracy are flexibility, creativity and external focus. Moreover, this is the culture which is very entrepreneurial. It is obvious that the existence of solid networks is high when there is flexibility in terms of sharing, freedom in expression and differentiation in how to communicate and what to talk about.

Effective leaders in organizations dominated by the adhocracy culture tend to be entrepreneurial, visionary, innovative, creative, risk oriented and focused on the future. This kind of leadership, which includes understanding the importance of interpersonal relationships and the power of connections between people, supports solid networks. Value drivers, such as transformation, innovative outputs and agility, are better realized in practice when the ties

between employees are strong and dense. This culture might contribute to building the solid networks, if it is managed properly: the spirit of innovation and risk unifies people and makes a solid team of same-minded people committed to a higher objective. However, this culture is in its "shadow", people might be jealous to the success of each other, concentrate on their own ideas and this is not the best basis for solid networks. Therefore, if leaders understand the development of solid intra-organisational networks as a resource that always brings something new and is included in the vision, it becomes a very important factor making organization more competitive. In both Company 1 and Company 2 the share of this culture type is medium, and thus it is difficult to say how exactly it influences on solid networks building without further qualitative research.

Market culture and solid networks building: Market culture is oriented towards the external environment instead of internal affairs. The major focus of market is to conduct transactions (exchanges, sales and contracts) and to create a competitive advantage. Competitiveness and productivity are core values. In such an environment, where rivalry is more emphasized then unity, the creation of solid networks is more likely be low. An aggressive and decisive leader, whose main focus is on winning, barely pays attention to the creation of relationships and a warm and friendly environment. As market culture in its pure state is focused on getting things done, hard work, productivity and accomplishing things, there is little space for reciprocity or proximity.

However, if the organization is strongly unified by an important factor such as a common target and if the organization perceives itself as a team that competes with other teams, where rivalry happens just outside of the organisation, then strong and densely connected intra-organizational networks may emerge. Trusting relationships between members and the willingness to share are only supported if competitors are perceived to be outside of the team and the organization. As these features are actually related to clan culture and therefore are solid intra-organizational networks are hardly natural parts of pure market culture. This is also confirmed by the results: Company 1, which has stronger networks, also has stronger clan culture rate and less market culture presence. On the other hand, Company 2, which has weaker networks, has stronger market and lower clan culture rate.

Hierarchy culture and solid networks building: Out off all four types of cultural examples within the CVF, Hierarchy culture in its pure state probably has the lowest support for the creation of solid intra-organizational networks. Hierarchy culture emphasizes internal focus and integration together with stability and control. Control is a factor of power, which is the contrary factor of trust. Power often assumes negative consequences while trust tends to assume positive consequences (Sydow, 2006). In a trusting relation favours are exchanged because it is expected that they will be reciprocated. In the case of both power types (hierarchical or due to structural holes) things are done in order to prevent negative consequences. In the case of hierarchical power an employee will do a favour for their boss or superior because they do not want to risk losing their job or reputation, which can be observed in the money lending relation (Relation 7), demonstrated in Figure 3. Power and trust always exist simultaneously in networks though one factor is predominating. Therefore the more power exists in a network, the less trust is possible.

Moreover control and efficiency leave little space for a personal factor. Typical metaphor for this kind of organizational culture is mechanism, and the parts of a mechanism do not share their interests and concerns with each other, they just do their job. Pure hierarchy is stable and not flexible. Internal orientation is more focused on procedures and rules, than on people like in clan culture. There is very little exchange of personal questions and experiences. In order to raise the probability of provoking dense intra-organizational networks, it is necessary to add the clan culture proportion in the overall culture of organization. In the results of the study, hierarchy culture is medium in both companies, which does not provide with enough information to judge its influence on network density.

According to the reviewed literature and the above described results of the case study, we can assume that building of solid intra-organizational networks is most natural in the clan culture. In general, social networks emerge best when the personal factor in a company is high. The importance of personal, face-to face interaction, good relationships, open communication and exchange, as well as common interests and targets, are all features of clan culture and at the same time supporting factors for the development of solid networks and therefore build strong competitive advantage.

4 CONCLUSION

Though it is widely known that organizational culture has influence on networks building, it is not widely researched, how exactly. This paper describes the connections, dependencies and intersections between CVF types of organisational culture and intra-organizational networks. After literature research and empirical study, based on the CVF and social network analysis, an outline of the demands on organisational culture has been done. Certain cultural aspects have been identified which provide the best circumstances for solid networks and lead to competitive advantage of organizations in a row.

The analysis of the case study with two Austrian Companies showed that clan culture offers the best environment for the emerging of dense intra-organisational networks, which are characterized by a developed structure of strong ties and trustful relationships. This kind of intra-organisational network builds the best basis for competitive advantage. The results from this analysis have been discussed according to each of the culture types of the CVF.

This work focused on the organizational level, omitting inter-organizational networks and the role of the individual in it. It hast to be outlined that the social networks in our case studies were informal communication networks, that differ from the formal networks which are assigned in the organizational structure of a company. As this work aims to contribute to a better awareness of the factors influencing the density of intra-organizational networks from the organizational culture point of view a whole network analysis approach has been chosen. Further factors having impact on this matter should be researched in further studies to which this paper is calling among those are cross cultural, religious and educational aspects. The results, even though insightful, are based on one case study and need to be proven by broader empirical and practical research to which authors are hoping to contribute in the nearest future.

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