

An Examination of the Relationship between Organizational Culture and Retained Organizations Growth Stages

Albert Plugge*, Christiaan Kooijman and Marijn Janssen

Faculty of Technology, Policy and Management, Delft University of Technology

*corresponding author

An Examination of the Relationship between Organizational Culture and Retained Organizations Growth Stages

Abstract

Empirical research on the maturity of retained IT organizations has remained scarce. IS literature shows that studies do not investigate the effect of organizational culture on the relationship with the growth stage of an retained organization. The aim of this paper is to examine the relationship between organizational culture and retained organizations stages of growth. Data from three case studies was collected and the Social Exchange Theory is used to understand the degree of interaction between the staff of retained organizations. Our analysis identified that culture determinants form a predictable pattern with the growth stage of a retained organization. Specifically, the culture determinants *Management* and *Focus* fit with their assumed growth stage in all three case studies. This might indicate that both determinants are interrelated as executive management of a firm has to develop a clear focus to achieve their IT mission and goals. Moreover, the results show that the degree of social interaction between staff is influenced by the perception of IT in the organization.

Keywords: Retained organization, Organizational culture, Social Exchange Theory, Case study

1 Introduction

In an effort to deal with increased competition firms have developed various business strategies to cater for competition (Volberda, 1996). Literature shows that outsourcing can be seen as a valuable business strategy to adapt to market demands (Lacity et al., 2009; Teece, 2010). Joha (2003) argues that in case of outsourcing firms establish an intermediary function or liaison between their business units and IT vendors, also labelled as the retained organization. A firm's retained organization fulfills an essential role in creating coherence in bundling business need while managing vendors delivery of IT services. As a retained organization is influenced by their organizational structure (Weill and Ross, 2004) different growth stages or maturity levels can be identified. Gottschalk and Solli-Sæther (2010) argue that growth stages are based on the 'assumption of predictable patterns (conceptualized in terms of stages) that exist in the growth of organizations..., and the diffusion of information technology, p 280'.

Literature reveal that organizational culture is affected by social interactions in organizational settings (Nadler and Tushman, 1988), which is related to an organizations growth stage. Examples include job attitudes (Birnbau and Sommers, 1986) and technology practices (Hussain, 1998). As an effect, organizational culture determinants, such as organizational structure, communication, and leadership (Cameron et al., 2006) should be aligned with the growth stage of an organization. Misalignment between a firm's growth stage and their dominant organizational culture may deteriorate the performance of a firm. To identify the growth stage of an organization Nelson and Burns (2005) defined a framework ranging from ranging from reactive, responsive, proactive, and high performing. This high-performance framework is based on the assumption that a firm's organizational culture affects their performance. However, studies on firms' organizational culture (Gordon and DiTomaso, 1992; Schein, 2006; Hofstede et al., 2010) have some important shortcomings. First, the main stream of research focuses on firms' corporate function while the relationship with their IT organization or in case of outsourcing, a firm's retained organization is limited. Second, research on the relationship between organizational culture and Information Systems (IS) or Information Technology (IT) is only related to software process improvements (Dybå, 2005) and maturity models like CMMi and Cobit (Ngwenyama and Nielsen, 2003; Müller et al., 2013). Instead in this research we will study the relationship between the assumed organization culture dimensions and the growth stage of an retained organization.

Staff as a part of a firm's retained organization are considered to be a key element in shaping the organizational culture. This is related to the *Social Exchange Theory* (SET) which is based on the assumption that there are differences in the actors that are involved in a firm's relationships (Cropanzano and Michel, 2005). Literature shows that IT mission and objectives might be subject to various cultural interpretations of staff who are involved (Scholz, 1990). However, the influence of organizational culture on firms' retained organization related growth stages is yet unclear. Although previous organizational culture studies on IS/IT shed some light on their effects Leidner and Kayworth (2006) argue that 'there is very little research devoted to examining the role of organizational culture in the process of IT planning, p. 369'. In addition, Gottschalk and Solli-Sæther (2010) state that 'work related to stages of growth has to a large extent been conceptual, p 279'. To the best of our knowledge, the way organizational culture affects retained organizations growth stages has not been researched yet. Therefore, the objective of this paper is to empirically examine the relationship between organizational culture and retained organizations stages of growth.

This paper is organized as follows. First, based on literature we introduce the core constructs (e.g. growth stages, organizational culture, and social interaction) of our study in more detail. Next, we explain the research approach followed by the findings of the case analysis. Subsequently, we discuss the implications followed by the research conclusions, limitations and recommendations for further research.

2 Literature background and introduction of core constructs

Our research focused on the relationship between organizational culture determinants and retained organizations growth stage. The basic assumption is that a specific growth stage requires an accessory set of culture determinants that ideally should fit.

2.1 Retained Organization and Growth Stages

Retained organizations focus on strategic and tactical tasks such as planning, service portfolio management, architecture, and relationship management. In fulfilling their role a retained organization emphasizes managing business demands rather than delivery IT services. Literature (Kern and Willcocks, 2001) stated that the main goal of a retained organization is to mitigate risks and achieve productive and efficient IT operations. Today clients' retained organization and supporting capabilities are perceived to be critical to ensure that it can exploit business advantages over time (Oshri et al., 2015). Although literature shows various definitions for the term retained organization, such as 'residual IT organization' (Willcocks and Fitzgerald, 1994), 'sustaining organization' (Enlow et al., 2006), and 'lean and dynamic group' (Gewald and Helbig, 2006) a clear definition is lacking. In view of our research objective we define a retained organization as 'a firm's IT management function that is responsible to determine an IT mission, objective and plans that are aligned with the firm's business departments while managing the delivery of IT services by external vendors' (adapted from Reich and Benbasat, 1996, p. 56).

Literature show that scholars have studied firms' objectives to improve their organizational performance (Kasarda and Rondinelli, 1998; Pollitt, 2003; de Waal, 2007). As the performance of an organization is affected by the staff's behavior and quality we may assume that the stage of growth or maturity of retained organizations may differ. Literature shows that stages-of-growth models have been used in IT management research (Thompson and King, 1997). Gottschalk and Solli-Sæther (2006) argue that the concept of stages of growth also received some skepticism as previous studies neglected the relationship between the firm's staff. Kazanjian and Drazin (1989) state that organizations do not necessarily demonstrate change by means of a linear sequence of stages, but rather that observed configurations of problems, strategies, structures, and processes will determine a firm's progress. Burn (1993) argues that an important feature of stage models and their manifestations is to identify transition points that can be used to improve the quality of organizations. Notably, a firm's organizational culture has an effect on both collective and individual behavior of an organization (Cameron et al., 2006) and consequently on the growth stage of a retained organization.

2.2 Organizational culture

Organizational culture is an ambiguous concept that has been defined and interpreted in multiple studies (Pettigrew, 1979; Nadler and Tushman, 1988; Hofstede, 2010). Hofstede's (2010) operating definition of culture is 'the collective programming of the mind that distinguishes the members of one group or category from other' (Hofstede, 1991, p. 5). Scholars studied the concept of organizational culture from various perspectives, such as a value based approach (Cameron and Quinn, 2006), technology transfer practices (Hussain, 1998), firm performance (Gordon and DiTomasso 1992), and linkages between culture and IS/IT (Leidner and Kayworth, 2006). Grover et al. (1998) studied the planning culture of executive management in IS organizations and found that structured planning facilitates the importance of strategic systems investments. Another study conducted by Kanungo et al. (2001) revealed that innovative type cultures are most closely associated with firms having a delineable IT strategy. Leidner and Kayworth (2006), who conducted an extensive literature review on organizational culture, found evidence for the influence of organizational culture on IT management and strategy.

Nelson and Burns (1984, 2005) developed a vision to program an organization to achieve a state of high performance based on the assumption that a firm's organizational culture affects their performance. The authors define four organizational frames or growth stages, ranging from reactive,

responsive, proactive, and high performing (see table 1). The reactive frame describes an organization in which ad hoc decisions are made while limited collaboration and distrust between team members prevail. Next, the responsive frame describes an organization where team members are able to handle their work effectively, focusing on achieving near-time goals by following organizational rules. Subsequently, the proactive frame characterizes an organization that is able to anticipate and handle difficult situations, and applies shared vision and values. Finally, the high performance frame describes an organization that is based on a high level of synergy among team members and where the staff is capable of going beyond expectations, applying a creative and innovative approach. In this research we use the culture determinants of Nelson and Burns (2005) to evaluate their effect on stages of growth. A description of the culture determinants is provided in Appendix B.

Table 1. Organizational culture determinants

Culture determinants	Reactive stage	Responsive stage	Pro-active stage	High performing stage
Planning	Justification	Activities	Strategy	Evolution
Communication	Force feed	Feed back	Feed forward	Feed through
Change mode	Punitive	Adaptive	Planned	Programmed
Structure	Fragmented	Hierarchical	Matrix	Networks
Management	Who's to blame	Coordination	Alignment	Navigation
Focus	Diffused	Output	Result	Excellence
Motivation	Avoid plan	Rewards	Contribution	Accomplishment
Development	Survive	Cohesion	Attunement	Transformation
Perspective	Self	Team	Organization	Culture
Time frame	Past	Present	Future	Flow
Leadership style	Enforcing	Coaching	Purposing	Empowering

2.3 Social Interactions

From an exchange perspective social interactions trade social costs and benefits by means of normative rules and agreements (DiDomenico et al, 2009). This is related to the view of Social Exchange Theory (SET). A general assumption of SET, which is developed by Homans (1961), Blau (1964) and Emerson (1972), is that there are differences in actors involved within a firm's relationships (Cropanzano and Michel, 2005). Firms' staff, for instance, can form various relationships, ranging from internal co-workers (Flynn, 2003) to external vendors (Perrone et al., 2003). As individuals return received benefits, they are likely to be helpful to internal or external partners with whom they have positive social exchange relationships (Masterson, 2000). Therefore, rules of exchange are based on 'normative definition of the situation that is formed among or is adapted by the participants in an exchange relation' (Emerson, 1962, p 351).

Thus, norms of exchange form guidelines to facilitate the exchange process between firms. Key exchange rules or control mechanisms are used to govern people's social behavior (Das and Teng, 2002; DiDomenico et al., 2010). The exchange rule generalized reciprocity is recognized as a norm for collaboration (DiDomenico et al., 2010). Das and Teng (2002) describe generalized reciprocity as 'a group-based exchange relationship in which actors expect quid pro quo exchanges within the group, but not necessarily with any specific actor'. An important tenet of SET is that relationships change over time, influencing the degree of trust, which results in mutual commitments (Cropanzano and Michell, 2005). When establishing trust, Anderson and Narus (1990) suggest that the collaborative actions of firms will result in outcomes that exceed expectations compared to a situation in which they are focused on their own best interests. Thus, relationships based on trust should be more flexible regarding decision-making than those that are not.

Social sanctions, which are related to mutual monitoring between actors, can be seen as a behavioral control mechanism to facilitate conflict resolution. A lack of continuous monitoring of behavior, however, may influence the reputation of other actors involved. Sanctions may result in excluding an actor from interactions within a sourcing arrangement. As actors in a sourcing arrangement are more aware of their position and reputation related to other actors, they are expected to contribute to exchange information. The objectives of actors involved may be contradictory which might hinder the exchange of information and services. Das and Teng (2002) argue that a common culture forms a prerequisite for behavioral control in an inter-firm relationship. Moreover, Ekeh (1974) states that a cooperative form of a common culture is valuable as it facilitates both generalized reciprocity and social sanction.

3 Research approach

3.1 Overall approach

When focusing on the retained organization, the unit of analysis in this research addresses organizational cultural determinants and their relationship with retained organizations growth stage. Given the relative newness of our study, we opted for explorative research. Analyzing a small number of case studies is an appropriate qualitative research method as such revelatory cases (Yin, 2009) may provide rich insight. Our qualitative method thus yielded an exploratory, case-study-based research (Yin, 2009), which is one of the most common qualitative method used in the field of Information Systems (Orlikowski and Iacono, 2001). As we intend to study various types of growth stages related to retained organizations, we opted to apply the high performance framework of Nelson and Burns (2005). Our basic assumption is that retained organizations have experience with organizing and executing IT tasks at least to some degree. Hence, we excluded the reactive growth stage as described by Nelson and Burns (2005) in our research. We selected three case studies, each representing a different growth stage that reflects the HPP framework (e.g. responsive, proactive, high performance). A short description of the case studies including their background is provided in Appendix A. We used two main criteria to select appropriate case studies, namely: A) criticality of IT differentiation in the industry, and B) the role of IT management. Both criteria are based on the findings from Peppard et al. (2011) and Willcocks et al. (2011) that the growth stage of the IT organization and the corresponding role of IT management are ideally aligned with the criticality of IT for differentiation in the industry. These criteria are consistent with research from Luftman (2003) that classifies the role of IT in the three different growth stages.

3.2 Data collection and Data analysis

Data was gathered between August 2014 and March 2015, and drew on various sources. These ranged from desk research, and a survey, to a series of semi-structured interviews, both formal face-to-face and informal telephone interviews. Regarding desk research, information was gathered from internal publications, web sites, organizational charts, and meeting structures. In addition, field notes were recorded during informal meetings, which provided relevant background information to the influence of organizational culture on retained organizations' growth stages. By using multiple data sources we are able to increase the reliability of the data (Benbasat et al., 1989). In total 16 in-depth interviews were conducted with various staff members, including business and IT executives, business information managers, IT team leads, controllers, and experts positioned across the firms. In this way we apply a cross-section within the organizations to gain a richer insight in the effects of organizational culture and to contribute to creating construct validity. Each interviewee was asked to fill out a survey. The survey, which was based on the culture determinants of Nelson and Burns (2005), consisted of the three growth stages and related culture determinants. Moreover, considering the need for clarity, and preventing the terminology from being interpreted differently, a glossary of definitions was included (see Appendix B). As the interviews were confidential, we anonymized the

companies. All interviews with participants, which were held in the Dutch language, were conducted by one of the authors of this paper. A semi-structured interview protocol was designed to gather data regarding the interpersonal interaction, culture determinants and retained organization. The different hierarchical levels of the interviewed staff members prevent potential limitations of the evolving phenomenon from arising. Interviews varied from 60 minutes to 120 minutes in duration while some interviews were replicated for clarification purposes.

The results of the case studies were written down in a case study report and sent to the participants to be validated. Interview data of the staff members was stored in a case study data base. We applied numerous data analysis iterations to create an overview of the firms under study. First, we analyzed the interviews with regard to our core constructs (e.g. interpersonal interaction, culture determinants and retained organization). As a next step statements (i.e. codes) were grouped into the construct categories. Next, we studied the influence of organizational culture on growth stages, which provided us with a more holistic view on the mutual relationships and effect within the context of an retained organization. This step was conducted by multiple researchers. During the second stage of data analysis, we focused on the differences and similarities of organizational cultural determinants of the selected case studies and their related growth stages. The findings of the data analysis were categorized and stored into the case study data base. We will discuss each element hereafter.

4 Findings from the case studies

As our aim is to contribute to deeper insights in the relationship between organizational culture and retained organizations growth stages, this section describes the findings of the three case studies. The description of the findings focuses on the differences between culture determinants (see table 1) and their assumed growth stage.

Culture determinant Planning

When addressing the determinant *Planning* the second case study revealed that the client's business departments consciously invite representatives of the retained organization to co-develop strategic business plans. Business executives have the opinion that IT has become a strategic asset which may become a differentiator in the market. In contrast, strategic IT planning is conducted with limited business participation. An explanation for this finding is a strong focus of the retained organization on modernizing of the IT landscape, such as applications and terminal automation systems. As the existing IT function can be considered as complex, the retained organization is struggling to manage multiple IT projects, which are partially interdependent. Hence, additional coordination is required to manage the modernization initiative. However, from a planning perspective we find an unbalance between business and IT when aligning mutual activities and tasks.

'The IT planning decision-making process is quite complex as managers typically strive to achieve consensus among key stakeholders, which slows down the process. This is strengthened by the internal hierarchy in the company by which key decisions about modernization initiatives are pending. We consider the retained organization to be in a vacuum as a conscious strategic direction is missing. We focus on daily issues and activities, rather than focusing on executing a strategic plan.' (Source: Information manager, second case study).

Culture determinant Communication

As a consequence of the replacement of IT applications we observed that the client in the second case study is mainly focusing on internal communication within the retained organization and towards external vendors. Interviewees stated that IT staff mainly focuses on day-to-day operations with regard to IT modernization initiatives and, as a result, neglect communication with business representatives. Interestingly, on a management level we find that the executive management of the IT organization is improving the communication with business representatives to encourage collaboration and improve planning as part of Business-IT alignment activities. This finding creates a tension between an IT push at an operational level and an IT pull at a management level. Thus, the determinant *Communication* is perceived at a lower growth stage.

'At C-level we do recognize a close alignment between business executives and senior IT managers. At tactical and operational level the relationship between the users in the organization and the retained organization can best be characterized at an arms-length type of relationship which hinders the level of communication.' (Source: COO, second case study).

Culture determinant Change mode

With regard to the third case study our analysis of the *Change mode* shows that the client under study aims to achieve a state of excellence that contributes to maintaining their position as a high-performance organization. We find that the client proactively adapts to changes in the field of IT and are planned upfront, such as transforming applications, and the development of digitization initiatives. Within the context of Business-IT alignment these initiatives take place in close collaboration with business and IT representatives. However, our research identified that the organization as a whole is not able to deal with agility as a form of routine. Although the client encourages staff to apply their creativity to initiate new ideas, not all staff are able to do so as some focus on exploiting assets instead of developing new ones. This finding might be an explanation why the *Change mode* is indicated as Planned.

'Our ideal culture would be an adhocracy type of culture where agility and creativity flourish best. However, the internal pressure to deliver commercially viable solutions based on a short time-to-market requires a careful plan where we invest and innovate'. (Source VP of Development third case study).

Culture determinant Structure

According to the third case study the findings on the culture determinant *Structure* demonstrated that the client is not capable yet to achieve the high-performance status of Network. An explanation can be found in the existing capabilities of IT staff as well as in the complexity of the IT function. We find that the coordination of multiple local vendors by the retained organization requires additional management attention as the provisioning of various applications are dependent of multiple vendors. Next, existing sourcing capabilities need to be strengthened, for instance: governance, collaboration and organizational design. These capabilities can be seen as a prerequisite for profound coordination. In addition, the retained organization focuses on solving operational issues that require continuous alignment with individuals vendors. In doing so, they are unable to govern and collaborate with vendors to achieve a high-performing ecosystem and focus on achieving common goals.

'The unit within our retained organization that is responsible for developing critical customer facing applications has just entered its third stage of development. The first stage focused on the introduction of a global innovation platform followed by development of this platform in terms of products and solutions, as well as its geographical reach. The third stage provides a company-wide innovation platform that supports all business divisions. Getting everyone on board was seen as a necessary hurdle before the unit could be organized more loosely as a network organization. (Source VP of Development, third case study).

Culture determinant Motivation

Analyzing the third case study we find that the determinant *Motivation* is considered at a lower growth stage as expected as the results relate to the position of Contribution. Interviews revealed that Motivation is related to staff behavior and mindset. Importantly, our findings indicate that IT staff , which were originally part of local IT departments, became part of the centralized retained organization during the past year. As a result, the IT staff increased from 150 up to 300 staff. However, IT staff that were originally part of local IT departments had to change their mindset, shifting from a focus on their contribution to being proud of their accomplishments. As these IT staff are geographically dispersed it may take some time to change.

'We experienced that the combination of growth and centralization while changing the organizational culture at the same time is hard to achieve. For instance, changing the structure in terms of allocating staff to a team is quite a change, however, changing staff tasks at the same time is even more difficult to achieve. In the end it's about changing behavior.' (Source VP of Development, third case study).

Culture determinant Development

Interestingly, our findings in the second case study indicate that the determinant *Development* is perceived as transformational. This finding can be explained by a strong focus of the retained organization on technology as the existing IT landscape is transformed and modernized into a state-of-the art IT environment. The client under study allocated establishing a dedicated technology innovation team to the retained organization, with an own mandate to develop initiatives and which may act independent of existing processes. Interviewees postulated that the focus of the retained organization is on continuing transformation and renewal.

'During the past years a lot of effort was spend on implementing successful Lean processes and principles within our Global IT Service Center. We try to learn from every challenge and continuously adapt to the changing business demands. Dealing with continuous improvements is a central theme

in Lean. This may explain the more transformational way in which we organize development.
(Source: Global IT Service Center manager, second case study).

Culture determinant Perspective

Interestingly, the findings of the first case study showed that the outcome of the determinant *Perspective* was indicated at an Organizational level, which is related to the proactive growth stage. We observed that during the past three years the client was involved in various Mergers and Acquisitions. Consequently, the IT function of the various companies had to be integrated to support business processes. The retained organization of our client under study took the initiative to start the integration process and IT management had the opinion that in the near future IT might be a differentiator to increase the firm's market share. Interviews revealed that IT managers focus on the organization as a whole rather than on team level.

'We believe that the first step towards pro-activity lies in the fact that IT management and staff must increase their customer orientation. In all our decisions the added value to the business instead of technical considerations should prevail.' (Source: Manager Program & Project management, first case study)

Culture determinant Time Frame

Regarding the culture determinant *Time Frame* the first case study demonstrate that IT annual planning cycles are discussed between business and the retained organization biannually. Although business and IT departments mainly focus on their own activities, and show a limited personal interaction between staff, planning IT tasks is consciously aligned to ensure the support of business processes. As a result of the various M&A projects the impact of IT integration require mutual alignment regularly. Hence, *Time Frame* is perceived as a proactive task.

'Our staff are typically very task oriented. We are extremely good in doing what has to be done. As a result of the recent mergers the retained organization was challenged to plan and act ahead as the integration process of the new acquired companies' IT infrastructures took a long time. Moreover, the IT integration projects had to be completed directly after the merger was approved. This increased our ability to plan complex portfolios of IT investment and infrastructure projects.' (Source: CIO, first case study).

The modernization of the IT function as sketched in the second case study demonstrates that the project-oriented approach as applied by the retained organization is focused on present problems that need to be solved immediately. From a *Time Frame* perspective this finding is related to the responsive growth stage. Our findings on *Time Frame* are consistent with the determinants *Planning* which is also perceived at a lower growth stage. Based on our analysis we find both *Planning* and *Time Frame* are interrelated as a main focus on IT activities correspond with solving operational IT issues in the present situation.

'In practice we spend a lot of time in the retained organization in dealing with daily issues and activities, rather than focusing on executing a strategic plan.' (Source: Enterprise architect, second case study).

When addressing the third case study we found that within the context of Business-IT alignment plans are set up annually and discussed at a central level. This finding is related to the proactive growth stage. We found evidence that the client's goal is to develop a high resolution vision of future services which encourages IT staff to be creative, initiate innovation projects, and mutually develop services with business participation. This finding is consistent with the aim of the client to become a full high-performance organization.

'The retained organization's mission is to provide highly accountable industry-leading IT services for infrastructure and back-office systems, and collaborative technology leadership across the firm' (Source CEO, third case study).

Culture determinant Leadership style

Our observations of the first case study shows that as a result of the client's recent M&A initiatives the firm shifted from a single disciplinary role (e.g. dredging) into multidisciplinary roles (e.g. dredging, offshore, energy and maritime market). According to the interview with the CIO, in the near future IT will be perceived as a strategic asset that may influence the position of the client in the market. When addressing the culture determinant *Leadership style* we found that the IT executive management focuses on the empowerment of both IT staff and business representatives to stimulate innovation. This reflects the empowering position in the high-performance growth stage. This approach requires intense collaboration with stakeholders across the firm and outsourcing vendors. This finding is consistent with our findings as described to *Time Frame* as currently the planning of IT tasks is consciously aligned with business departments.

'Our corporate culture bears strong elements of a power culture. That's why we see empowerment as a key-success factor for the IT organization's future success. We noticed that the delegation of responsibilities was often problematic in practice. Senior managers had a tendency to interfere in the decision-making process at operational level, which resulted in a lack of trust and confidence on both sides. It seems as if the leadership had skipped the goal of having 'shared purposes' as a prerequisite for delegation without close monitoring.' (Source: manager Program and project management, first case study).

The findings of the case studies, which show the relationship between the culture determinants and assumed growth stage, are summarized in table 2. The table shows that elements of all three cases are in more than one stage. Although case study A, which is identified by the blue line, was primarily in the responsive stage is has two elements in the pro-active stage and one in the high-performing stage. Case study B, illustrated by the red line, is predominantly in the pro-active stage but some elements are in lower stages and one element is in a higher stage. The final case study C, which is reflected by the green line, is mainly in the high-performing stage, however, 4 out of 11 elements are in a lower stage. Although the cases show that culture determinants form a predictable pattern with the assumed growth stage it is also shown that a case study might reflect to more than one stage. Not all of the culture determinants might show the characteristics of that particular stage. The results are discussed in section 5.

Table 2. Overview of culture determinants per case study

Culture determinants	Responsive stage (Case study A)	Pro-active stage (Case study B)	High performing stage (Case study C)
Planning	Activities	Strategy	Evolution
Communication	Feed back	Feed forward	Feed through
Change mode	Adaptive	Planned	Programmed
Structure	Hierarchical	Matrix	Networks
Management	Coordination	Alignment	Navigation
Focus	Output	Result	Excellence
Motivation	Rewards	Contribution	Accomplishment
Development	Cohesion	Attunement	Transformation
Perspective	Team	Organization	Culture
Time frame	Present	Future	Flow
Leadership style	Coaching	Purposing	Empowering

5 Discussion

As empirical research on retained organizations growth stages remains scarce, and therefore the objective of this paper is to empirically examine the relationship between organizational culture and retained organizations stages of growth.

Three cases were studied using interviews and a survey administered by employees of clients. The results provided evidence that culture determinants form a predictable pattern with the assumed growth stage. The results from our analysis show that the culture determinants *Management* and *Focus* fit with their assumed growth stage in all three case studies. This might indicate that both determinants are interrelated as executive management of a firm has to develop a clear focus to achieve their IT mission and goals. The social interaction between retained organizations staff affects the relationship between culture and growth stages as identified by examples of the degree of collaboration between staff. The way in which IT is positioned within the organization also affects the degree of collaboration between IT staff in aligning tasks. The more IT is positioned as a strategic asset, the more social interactions between staff members are required. As a consequence, the level of trust between staff members will increase that is a prerequisite to exchange essential information. Next, we will elaborate on the findings related to the studied growth stages.

Responsive stage

Our analysis reveals that culture determinants related to the client in the first case study in majority fits with the responsive growth stage. The determinants *Perspective*, *Time Frame* and *Leadership*, however, differ positively as they are related to the proactive and high-performance growth stage respectively. From a historical view, the client is acting in an industry (e.g. dredging) where IT is perceived as a cost driver, rather than a strategic asset. However, endogenous developments (e.g. M&A strategy) changes the client's perspective on IT, which shifts in focus from cost efficiency towards a market differentiator. This might be an explanation for our finding of the determinant *Leadership* that reflects the shift to the high-performing growth stage. Our findings show that the interaction between staff to align mutual IT related tasks is limited. The client's retained organizational structure can be described as hierarchal. The IT teams are strictly separated, each focusing on delivering their own output. This might explain why the cultural determinant *Management* indicates coordination rather than alignment.

Our analysis shows that retained organizations management have the opinion that IT will become more important and IT tasks within the retained organization should be aligned. However, we found that IT staff are focusing on executing their own tasks rather than on collaboration. As a result, tensions between staff of different teams influenced their behavior negatively. In turn, the degree of social interaction and trust between staff decreased. Applying a SET lens, social sanctions are related to the continuous monitoring of behavior, which can be seen as a behavioral control mechanism to deal with conflict resolution. Based on our analysis we found that retained organizations staff did not focus on collaboration between teams to share information and knowledge. Moreover, we did not find evidence that mechanisms were implemented to continuously monitor the behavior of staff. We argue that the client has to develop and implement monitoring mechanisms to encourage the exchange of information and knowledge.

Proactive stage

When addressing the second case study we identified that seven out of eleven culture determinants fit with the assumed growth stage, which provides evidence for a predictable pattern. Importantly, we found that staff of various IT teams collaborated and contributed to developing strategic IT plans. Based on our analysis we found a deviation of the determinants *Development* and *Time frame* with regard to their assumed growth stage. From a *Development* perspective we found that IT staff is motivated to transform and modernize the IT function that appeals to their technical skills and capabilities. As a result the culture determinant *Development* is related to the high-performing stage. In an opposite direction the determinant *Time frame* deviates from the proactive stage negatively. Interviews reveal that IT staff pay less attention to solving operational IT issues which cause performance issues, affecting the business.

We found evidence for social interaction between staff of various IT teams as shown by the determinants *Management*, *Focus* and *Motivation*. Due to the interaction of management as well as staff between teams in the retained organization, the degree of trust increased. However, the findings about the determinants *Planning* and *Communication* show a lack with regard to the proactive stage and correspond to the responsive stage. An explanation might be found in the dominant attention of IT staff for content related topics such as transforming IT applications and infrastructure, which reflects their technical skills. Consequently, they spend limited time on planning and communication in aligning mutual tasks. Our analysis shows that management and IT staff invested in building relationships during the past years, which resulted in sharing insights in developing strategic IT plans. Strengthening the social interaction between staff over time corresponds to the SET exchange rule of generalized reciprocity (Cropanzano and Michell, 2005) which is recognized as a norm for collaboration (DiDomenico et al., 2009). Our findings demonstrate that the degree of trust between IT staff increased through indirect reciprocal processes. This is consistent with Das and Teng (2002) who argue that actors in a group receive benefits from a specific actor and subsequently pay back the favor to another actor.

High-performing stage

The findings of the third case study provide evidence for a predictable pattern as seven out of eleven determinants fit with the assumed high-performing growth stage. Although the client's IT strategy focuses on excellence, four determinants are indicated at the proactive stage, namely: *Change mode*, *Structure*, *Motivation* and *Time frame*. Interviewees state that the matrix type of organizational structure is perceived as highly complex as multiple IT teams, which are geographically dispersed, have to align tasks between staff intensively. We found that the client under study is struggling to change the culture determinants *Change mode* and *Structure* specifically to cater for exogenous developments taking multiple existing IT vendors into account. We argue that strengthening those determinants may encourage the implementation of an ecosystem network. In addition, interviews show that the client's *Leadership style* is based on empowerment as IT staff is encouraged to initiate

innovations and support business growth. Subsequently, the degree of social interaction increased as a result of the collaboration between staff.

Interviews revealed that creating shared IT goals increased the degree of social interaction between staff. Our analysis demonstrates that the highly collaborative mode between staff resulted in an iterative form of communication approach to determine the IT planning. In turn, we found that the degree of trust between staff increased as their personal contribution to collaboration was rewarded. Social exchange literature suggests that shared values require current knowledge about one's partner to the exchange by means of an existing exchange process. Sharing common values involves communication as well as an understanding of the goals and values of the partner. The case study showed evidence for the existence of a common culture that was supported by the determinants *Management* and *Communication*. Nord (1969) argues that in generalized social exchanges, a common culture is important to establish sustainable exchange relationships between actors. It should be noted that firms that invest in building a common culture are more comfortable with indirect reciprocity (Ekeh, 1974). When applying shared values less attention is required for coordination or in our case study on aligning IT tasks between staff in the retained organization.

6 Conclusions and limitations

To the best of our knowledge, the relationship between organizational culture and retained organizations has not been researched yet. Given the scarce attention for retained organizations this discussion has sought to assist both researchers and practitioners. With regard to science the case studies shed some light on the under-researched topic of retained organizations and some first indications of the influences of social interactions. The culture determinants *Management* and *Focus* fit with their assumed growth stage in all three case studies. This might indicate that both determinants are interrelated as executive management of a firm has to develop a clear focus to achieve their IT mission and goals. Moreover, the results show that the degree of social interaction between staff is influenced by the perception of IT in the organization (e.g. IT as cost driver or strategic asset). Although the cases show that culture determinants form a predictable pattern with the assumed growth stage it also shown that a case study might be in more than one stage. Not all of the determinants might show the characteristics of that particular stage.

Our research also aims to contribute to practitioners as they become aware of the impact of culture determinants in a specific growth stage of the retained organization. As reflected in the first case study, culture determinants such as *Planning*, *Management*, *Focus* and *Motivation* invoke strategic, alignment and collaboration skills which influences behavior as more social interaction is required between staff. We argue that clients have to consider whether their organizational structure encourages social interaction between staff. In a response type of growth stage IT is organized in a more hierarchal way and operates on arms-lengths. However, as the boundaries between departments in high-performing organizations are blurred, a more network type of organization is used. Thus, to achieve effectiveness the type of management has to be consistent with the type of organizational structure used.

Limitations and suggestions for further research

Although our study provides important implications for retained organizations, we are aware that our exploratory case study approach shares several limitations associated with this study. First, this study was limited to Information Technology outsourcing. Culture determinants that impact the outsourcing of other functions such as Human Resources, Finance and Accounting, Research and Development, could have another effect when compared to the IT function. Secondly, the degree in which IT tasks are outsourced (e.g. limited scope, extended scope) may influence the boundaries of the retained IT organization and subsequently, the way culture determinants effect the retained organization's growth stage. Examples include *Change mode*, *Structure*, and *Motivation* as a retained organization is dependent on its vendors. Finally, although the research is based on three case studies, the

generalizability of the results is limited. The case studies identify, however, multiple avenues that require a more rigorous validation of our findings. We hypothesize that culture determinants may vary per industry, and therefore have another effect on clients retained organization. Our results suggest that monitoring culture determinants regularly is a prerequisite for clients to assess if their intended growth stage is still valid. Further research may provide insights if clients are willing and able to strengthen culture determinants that are underexposed related to their intended growth stage.

References

- Anderson, J. and Narus, J.A. (1990) A Model of Distributor Firm and Manufacturer Firm Working Partnerships. *Journal of Marketing*, 54(1), 42-58.
- Benbasat, I., Goldstein, D.K. and Mead, M. (1987) The Case Research Strategy in Studies of Information Systems. *MIS Quarterly*, 269-286.
- Birnbaum, D. and Sommers, M.J. (1986) The Influence of Occupational Image Subculture on Job Attitudes, Job Performance, and the Job Attitude-Job Performance Relationship. *Human Relations*, 39(7), 661-672.
- Blau, P.M. (1964) *Exchange and Power in Social Life*. New York: Wiley.
- Burn, J. M. (1993) Information systems strategies and the management of organizational change - strategic alignment model. *Journal of Information Technology*, 8(4), 205-216.
- Cameron, K.S. and Quinn, R.E. (2006) *Diagnosing and changing organizational culture*. Book San Francisco, Jossey-Bass.
- Coleman, J. (1993) The design of organizations and the right to act'. *Sociological Forum*, 8, 527-546.
- Cropanzano, R. and Michell, M.S. (2005) Social Exchange Theory: An Interdisciplinary Review. *Journal of Management*, 31(6), 874-900.
- Das, T.K. and Teng, B.S. (2002) Alliance Constellations: A Social Exchange Perspective, *Academy of Management Review*, 27(3), 445-456.
- De Waal, A. (2007) The characteristics of a high performance organization. *Business Strategy Series*, 8(3), 179-185.
- DiDomenico, M.L., Tracey, P. and Haugh, H. (2009) The Dialectic of Social Exchange: Theorizing Corporate Social Enterprise Collaboration, *Organization Studies*, 30(8), 887-907.
- Dybå, T. (2005) An Empirical Investigation of the Key Factors for Success in Software Process Improvement. *IEEE Transactions on Software Engineering*, 31(5), 410-424.
- Ekeh, P.P. (1974) *Social Exchange Theory: Two Traditions*. Princeton, NJ: Princeton University Press.
- Emerson, R.M. (1976) Social Exchange Theory. *American Review of Sociology*, 2, 335-362.
- Enlow, S. and Ertel, D. (2006) Achieving Outsourcing Success: Effective Relationship Management. *Compensation Benefits Review*, 38(3), 50-55.
- Flynn, F.J. (2003) How Much Should I Give and How Often? The Effects of Generosity and Frequency of Favor Exchange on Social Status and Productivity. *Academy of Management Journal*, 46, 539-553.
- Gewald, H. and Helbig, K. (2006) A Governance Model for Managing Outsourcing Partnerships: A View from Practice. *Proceedings of the 39th Hawaii International Conference on System Sciences*.
- Gordon, G.G. and DiTomaso, N. (1992) Predicting corporate performance from organizational culture. *Journal of management studies*, 29(6), 783-798.
- Gottschalk, P. and Solli-Sæther, H. (2006) Maturity model for IT outsourcing relationships. *Industrial Management & Data Systems*, 106(2), 200-212.
- Gottschalk, P. and Solli-Sæther, H. (2010) The Modeling Process for Stage Models, *Journal of Organizational Computing and Electronic Commerce*, 20(3), 279-293. Hofstede, G.H. (1991). *Cultures and organizations: Software of the mind*. London: McGraw-Hill.

- Hofstede, G. (1991) *Culture and Organizations: Software of the Mind*, McGraw Hill, London.
- Hofstede, G., Hofstede, G.J., Minkov, M. (2010) *Cultures and Organizations*. 3rd Edition McGraw-Hill.
- Homans, G.C. (1961) *Social Behavior: Its Elementary Forms*. New York: Hartcourt Brace.
- Hussain, S. (1988) Technology Transfer Models Across Culture: Brunei-Japan Joint Ventures. *International Journal of Social Economics*, 25(6-8), 1189-1198.
- Joha, A. (2003) *The retained organization after IT outsourcing: The design of its organizational structure*. Unpublished Master Thesis, Delft University of Technology.
- Kanungo, R.N. (2001) Ethical values of transactional and transformational leaders. *Canadian Journal of Administrative Sciences*, 18(4), 257-265.
- Kasarda, J.D. and Rondinelli, D.A. (1998) Innovative Infrastructure for Agile Manufacturers. *Sloan Management Review*, 39(2), 73-82.
- Kazanjian, R.K. and Drazin, R. (1989) An Empirical Test of a Stage of Growth Progression Model. *Management Science*, 35(12), 1489-1503.
- Kern, T. and Willcocks, L. (2001) *The Relationship Advantage*. Information Technologies, Sourcing and Management, Oxford University Press, Oxford.
- Lacity, M.C., Khan, S.A., and Willcocks, L.P. (2009) A Review of the IT Outsourcing Literature: Insights For Practice. *The Journal of Strategic Information Systems*, 18(3), 130-146.
- Leidner, D.A. and Kayworth, T. (2006) A Review of Culture in Information Systems Research: Toward a Theory of Information Technology Culture Conflict. *MIS Quarterly*, 30(2), 357-399.
- Luftman, J. (2003). *Assessing Business-IT alignment maturity*, In W. Van Grembergen (ed.), *Strategies for Information Technology Governance*. Hershey, PA: Idea Group Publishing.
- Müller, S.D., and Axel, N.P. (2013) Competing Values in Software Process Improvement: A Study of Cultural Profiles. *Information Technology and People*, 26(2), 146-171.
- Nadler, D., and Tushman, M. (1988) *Strategic Organization Design*. Scott Foresman and Company, Glenview, IL.
- Nelson, L. and Burns, F.L. (1984) High Performance Programming: A Framework for Transforming Organizations, in *Transforming Work: A Collection of Organizational Transformation Readings*, ed. John D. Adams, (Alexandria, VA: Miles River Press, 1984).
- Nelson, L. and Burns, F.L. (2005) *High Performance Programming: A Framework for Transforming Organizations (2nd Edition)* Book Section *Transforming Work* ed. Adams, J.D. Alexandria: Miles River Press.
- Ngwenyama, O., and Nielsen, P. A. (2003) Competing Values in Software Process Improvement: An Assumption Analysis of CMM from an Organizational Culture Perspective. *IEEE Transactions on Engineering Management*, 50(1), 101-111.
- Nord, W.R. (1969) An Integrative Approach to Social Conformity. *Psychological Bulletin*, 71, 174-208.
- Orlikowski W.J. and Iacono C.S. (2001) Research commentary: desperately seeking the "IT" in IT Research: a call to theorizing the IT artifact. *Information Systems Research*, 12, 121-134.
- Oshri, I., Kotlarski, J. and Willcocks, L.P. (2015) *The Handbook of Global Outsourcing and Offshoring*. 3rd Edition. Palgrave Macmillan, London.

- Peppard, J., Edwards, C. and Lambert, R. (2011) Clarifying the Ambiguous Role of the CIO. *MIS Quarterly Executive*, 10(1), 31-44.
- Pettigrew, A.M. (1979) On Studying Organizational Cultures Author(s). *Administrative Science Quarterly*, 24(4), 570-581.
- Reich, B.H. and Benbasat, I. (1996) Measuring the Linkage between Business and Information Technology Objectives. *MIS Quarterly*, 20(1), 55-81.
- Perrone, V, Zaheer, A, and McEvity, B. (2003) Free To Be Trusted? Organizational Constraints on Trust in Boundary Spanners. *Organizational Science*, 14, 422-439.
- Pollitt, C. (2003). *The essential public manager*. Manchester, UK: Open University Press.
- Schein, E.H. (2006) *Organizational Culture and Leadership*. San-Francisco: Jossey-Bass
- Scholz, C. (1990) The Symbolic Value of Computerized Information Systems, in *Symbols and Artifacts: Views of the Corporate Landscape*, P. Gagliardi (ed.), Aldine de Gruyter, New York, 233-254.
- Teece, D. (2010) Business Models, Business Strategy and Innovation, *Long Range Planning*, 43, 172-194.
- Thompson, S. H. T and King, W.R. (1997) Integration between Business Planning and Information Systems Planning: An Evolutionary-Contingency Perspective. *Journal of Management Information Systems*, 14(1), 185-214.
- Volberda, H.W. (1996) Toward the Flexible Form: How to Remain Vital in Hypercompetitive Environments. *Organizational Science*, 7(4), 359-374.
- Weill, P. and Ross, J. (2004) *IT Governance: How Top Performers Manage IT Decision Rights for Superior Results*. Boston, Harvard Business School Press.
- Willcocks, L.P. and Fitzgerald, G. (1994) *A Business Guide to Outsourcing Information Technology*. Business Intelligence, London.
- Willcocks, L.P., Cullen, S. and Graig, A. (2011) *The Outsourcing Enterprise: From Cost Management to Collaborative Innovation*. London, Palgrave Macmillan.
- Yin, R. K.(2009) *Case Study Research. Design and Methods*. Thousand Oaks, CA Sage Publications.

Appendix A: Background to case studies

Case study 1: represents a reactive stage of growth

The client under study is a leading global services provider operating in dredging, maritime infrastructure and the maritime services sectors. The company develops innovative all-round solutions to provide major infrastructural projects in the maritime, coastal and delta regions of the world. The company comprises 11,000 staff and is operational in 75 countries across six continents. The retained organization is strongly centralized and hierarchically structured into functional teams: IT infrastructure; application management team, service desk and project management. The size of the retained IT organization is a staff of 90 persons, largely centralized in their headquarters. Information Technology is on the tipping point to become a strategic asset. The retained function operates largely independently and it is directly funded from the Board. It manages its own budgets and investment projects. The majority of IT tasks are coordinated and executed in-house. External vendors are almost exclusively used for hiring specialized skills and/or capacity. The client's vision is to outsource specialized services gradually.

Case study 2: represents a proactive stage of growth

The client under study is the world largest independent provider of bulk storage and handling capacity of liquid chemicals, gasses and oil products. It operates in 28 countries spread around the globe along the major shipping routes and is comprised of approximately 6,000 staff. The client is acting in a very dynamic and competitive market and their ambition is to excel in a strongly rooted culture of safety, flawless execution, and operational excellence. Information Systems play an essential role and is perceived as a strategic asset and used to develop innovative IT solutions that contribute to the efficiency of terminal operation. The retained organization, which consists of 150 staff, is set-up as a federated matrix type of organization. Divisional IT teams are responsible for both information management and management of local applications. Management of IT infrastructure and companywide type of applications are organized on a central level.

Case study 3: represents a high performing stage of growth

The client under study provides professional publishing services based on information services and decision support systems globally. The client provides services in over 150 countries and is comprised of 19,000 staff. The client's executive management focuses on acting as a high-performance organization in which they emphasize a customer focus, embrace innovation, clear accountability and integrity, value creation and teamwork. The retained organization, which consists of 300 staff, is based on a federated structure and organize IT tasks in a matrix type of organization. In order to create a competitive advantage in the market the client decided to focus on innovation and develop applications in-house. In addition, the client outsourced their IT infrastructure management and coordinates the delivery of a range of in-house services, namely: data centers, networks and corporate applications.

Appendix B: Organizational culture determinants

1. Time Frame

The responsive organization is characterized by a strong focus on *present* problems that need immediate solving. In the proactive organization the *future* focused time frames are built around, for instance, annual planning cycles. When in state of 'flow' leaders are able to build on rich legacies, proud traditions as valued roots of the organization's past and sustain and communicate a high-resolution vision of the future they want to create (high performing).

2. Focus

In a responsive organization the successful completion of tasks and delivery of related *output* is seen as the prime purpose of the organization. In the proactive organization the focus is on *results* recognized and valued by its customers. Not so much the output is the target but the resulting outcome. Ultimately (high-performing) the focus can shift to achieving high standards of *excellence* by identifying new potentials, seeking out new avenues of opportunities and activating human spirit.

3. Planning

In a responsive organization the central theme in the planning process is the planning of *activities* of tasks to be done (operational planning). In the proactive organization the planning cycle is targeted around defining long-term results and *strategies* to achieving them. In the high-performing organization the management's time sense allows them to plan a continuing *evolution* of the organization towards an even more promising future.

4. Change mode

In the responsive organization management keeps team efforts coordinated and responsive (*adaptive*) to changing needs and conditions. Staff in the organization work as cohesive teams, able to adapt as they identify problems. In the proactive organization changes are *planned* upfront and changes are used by leaders as a method to keep the organization clearly focused on its purpose. In the high-performing state the agility of the organization is '*programmed*' in the organization's culture and values and by satisfying the conditions for energy, creativity and innovation to be able to excel.

5. Management

In a responsive organization management is setting goals and focuses on the *coordination* of tasks that need to be done to achieve these goals. In a proactive organizations management ensures the *alignment* and integration of sub-organization objectives within the greater whole. In high-performing organizations leaders focus on strategic *navigation* of the total organization, also the parts that do not fall under their direct formal power (e.g. networks and partners).

6. Structure

In responsive (*hierarchical*) organizations the distribution of power is according to a hierarchical organization structure. In proactive organizations authority is distributed along two or more dimensions (*matrix*). People may have multiple reporting lines. In high-performing organizations the IT organization shares power with other stakeholders (e.g. third parties in the *network*).

7. Perspective

In a responsive organization leaders and members take a *team* perspective rather than a self-centered one, which results in team members reaching out for each other. In later stages Perspective extends to the entire *organization*. The interest of the staff in the entire organization comes first. Ultimately leaders include the organizational culture into their frame of reference. They build a strong corporate *culture* that give members a strong and proud heritage to maintain and reinforce.

8. Motivation

In a responsive organization people are motivated by positive feedback and increased pay, based on merit (*rewards*). In the proactive organization staff are motivated by the opportunity to make a *contribution* toward achieving a future they value. Finally in the high-performing organization leaders create a work environment that energizes the staff, who are proud of their *accomplishments*.

9. Development

In responsive organizations staff work in *cohesive* teams, with a strong 'we' focus. Development takes place by the participation of all members in defining new and higher goals and better plans of action. In the proactive state the organization develops by raising the awareness of larger perspective of the organization and the *attunement* of goals and plans of action accordingly. In the high-performing state the focus on development is on continuing *transformation* and renewal.

10. Communication

In a responsive organization managers and staff feel free to provide *feedback* on information, tasks and achievements. In the next level of maturity communication is focused on the future and how the future goals can be achieved (*feed forward*). In a high-performance organization leaders make sure that information is *fed through* all parts of the network. Successes are communicated to unleash new energy and drive the organization towards excellence.

11. Leadership style

In a responsive organization leaders *coach* their followers on the path of organizational growth. They adapt their leadership style to fit the maturity of their subordinates. To reach the proactive state leaders must adopt a value-based leadership style. They focus on developing their followers' potential and satisfying their needs. The leaders in high-performing organizations follow a holistic view where they not only lead their own organization but the entire environment with which their organization interacts. They push power down to *empower* their followers so that they gain the freedom and energy to seek creativity and innovation.