The Influence of Organizational Culture on IT Governance Performance:
Case of The IT Department in a Large Swedish Company

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Abstract

IT governance is one of the top concerns of organizations today seeking to gain value from their IT investments and create competitive advantage. Organizational culture on the other hand is one of the various factors influencing IT governance performance. However, there is not much research conducted to understand this topic deeply. This research thus is exploring the influence of organizational culture on four IT governance performance outcomes through a case study in IT department of a large Swedish company. The results provide evidence that organizational culture is influencing IT governance performance. Specifically, the current clan culture orientation of the IT department has led to a successful IT governance performance in cost-effective use of IT. Furthermore, adhocracy as the preferred culture is identified to influence IT governance in effective use of IT for growth which is not so successful with the current clan culture.

1. Introduction

IT Governance (ITG) is implemented by many organizations today. It deals with defining the decision rights and responsibilities to receive desirable behavior in use of IT and bring value from IT to business [1]. ITG is an important factor in firms chasing for returns from their IT investments and gaining competitive advantages over the other companies who do not have effective ITG. However, there are many aspects of research in this field that still need investigations [2].

IT Governance Institute (ITGI) emphasizes that the IT governance does not occur in an isolated place and it is influenced by the environment that it takes place in [3]. This highlights the significant role of environmental factors such as culture in ITG. Culture is being blamed so often when some IT investment failures happen in organizations. Consequently, at the organizational level, cultural differences are one of the reasons explaining different levels of ITG performance. However, there is scarce research focusing on cultural differences role on ITG performance ([4]; [5]). Additionally, Cameron and Quinn [6] indicate that today most of the successful firms such as Intel, Coca-Cola, Disney, McDonalds, and Microsoft have a distinctive and identifiable culture. According to them, Organizational Culture (OC) may be created by the founders of the firms or can be arisen over time through the solutions and methods used by the company to overcome the internal and external challenges. They even go further and indicate that in some companies the management team decided to establish an organizational culture directing to the performance improvements.

There are some research on the role of national culture on IS ([7]; [8]), but the topic of organizational culture values in relation to the successful ITG in particular is receiving very limited scholarly attention ([4], [9]). Choo [10] proposes the idea that part of the organizational culture which deals with information may have an effect on the total organization behavior and effectiveness. However, the propositions that the authors suggest are regarding organizational effectiveness and not IT governance in specific. Brown and Grant [11] also remarked that the assessment of the impact of the OC on the organizational design and ITG is an issue needed to be investigated by the researchers. Considering the importance of both concepts of ITG performance and OC in today organizations and the lack of research in this specific area, this research seeks to answer this question: How the organizational culture influences the IT governance performance?

In order to answer the research question a case study is performed in the IT department of a large multinational company headquartered in Sweden. This company has previously done an organizational culture assessment of their IT department, which makes it a suitable case for this research and provides the secondary data. This research is organized through the following sections: research background and conceptual framework, methodology, results and case analysis, conclusions and future research.
2. Research Background

2.1. IT Governance

IT governance is the responsibility of executives and the board of directors. It consists of the leadership, organizational structures and processes ensuring that the enterprise’s IT sustains and extends the organization’s strategy and objectives’’ [3, p.10]. Van Grembergen [12] defines ITG as “the organizational capacity exercised by the board, executive management and IT management to control the formulation and implementation of IT strategy and in this way ensure the fusion of business and IT’’ [12, p.1]. Finally Weill and Ross [1] define ITG as the concept dealing with people rights for making decisions about IT to bringing value to business. This is the definition used in this research as well.

2.2. IT Governance Performance

There are five focus areas of ITG defined by ITGI [3]: 1) Strategic Alignment, 2) Resource management, 3) Performance Measurement, 4) Value Delivery and 5) Risk Management. ITG is considered as a continuous life cycle and the organizations can start it at any point. ITG performance measurement as one of the five focus areas, tracks and monitors implementation of strategies and projects and should be done regularly. Weill and Ross [1] declare that “Governance performance assesses the effectiveness of IT in delivering four objectives weighted by their importance to the enterprise: 1) Cost-effective use of IT, 2) Effective use of IT for asset utilization, 3) Effective use of IT for growth and 4) Effective use of IT for business flexibility’’[1, p.121]

1: Cost – effective use of IT is mostly engaged with how much IT has been beneficial for the business. 2: Effective use of IT for growth concern is how IT has been effective in learning, being innovative, gain competitive advantage and making improving changes. 3: Effective use of IT for asset utilization is focusing on how successful IT has been to use the knowledge based assets in an organization; and 4: Effective use of IT for business flexibility investigates on how IT has been successful for the business to respond to the internal and external [3].

In order to use above objectives in an organization, first senior managers need to identify the importance of each of four objectives. The weight of importance can be through a 1-5 scale (1 for not important and 5 for very important). After that, the four objectives of, the organization success in ITG should be rated. Rating can be done through a 1-5 scale (1 for not successful and 5 for very successful). Finally a weighted average formula that is presented bellow is used to calculate the overall ITG performance score with a maximum score of 100.

Overall IT Governance Performance Score is:

\[
\frac{\sum_{n=1}^{4} (\text{importance of outcome}) \times \text{influence of ITG} \times 100}{\sum_{n=1}^{4} (5 \times (\text{importance of outcome}))}
\]

Weill and Ross [1] used this formula for measuring the ITG performance in 256 companies in 23 countries. The average score was 69 out of 100, with minimum score of 20. One third of the companies scored over 74 and only seven percent scored over 90.

2.3. Organizational Culture

Schein [13] defines culture as “a pattern of shared basic assumptions that was learned by a group as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and, therefore, to be taught to new members as correct way to perceive, think, and feel in relation to those problems” [13, p.17]. Organizational culture as a lower level of culture can be defined in different ways. Kostava [14] defines organizational culture as the specific ways that an organization behaves over a period of time. On the other hand the values can also be part of organizational culture formation. These values may have different degrees of influence on the OC. According to Robbins and Judge [15] OC is related with the value system shared by members of an organization. This value system contains the main characteristics in which a group of people understand each other and behave.

2.4. Organizational Culture Assessment Instrument

There are different models and frameworks introduced for identifying or measuring the OC dimensions ([6]; [13]; [16]; [17]). An instrument for diagnosing OC is developed by Cameron and Quinn [6] called Organizational Culture Assessment Instrument (OCAI). Through OCAI, six key dimensions of organizational culture are considered to be evaluated:

1) “The dominant characteristics of the organization
2) The leadership style and approach that permeate the organization
3) The management of employees or the style that characterizes how employees are treated
4) The organizational glue or bonding mechanisms that hold the organization together
5) The strategic emphases that define what areas of emphasis drive the organization’s strategy
6) The criteria of success that determine how victory is defined and what gets rewarded and celebrated” [6, p.151].
OCAI is based on the Competing Values Framework previously introduced by Quinn and Rohrbaugh [18] in which four groups of organizations are diagnosed. These four groups are specifying the core values through which the organization is recognized and judged. These core values are different through two main aspects: 1) Internal focus and integration versus External focus and differentiation and 2) Stability and control versus Flexibility and discretion. Four clusters of OC are named after their most notable characteristic which are clan, adhocracy, market and hierarchy.

The Clan Culture
If an organization is profiled as a clan culture firm it means that they have a friendly environment and people share many things with each other. In such a cultural profile the organizations can be considered as a large family with the managers as the mentors or even parents. Loyalty is an important factor which leads to a high commitment. The human resources are long term beneficial. The main concern is on customers and the success of the organization is defined through how sensitive the organization is regarding its customers. Team work, participation have a high priority in a clan culture organization.

The Adhocracy Culture
In an adhocracy culture the emphasis is on being creative, entrepreneurial and dynamic. The organization is risk taking, leaders try innovative solutions and they want to be the premiums on their own business. Their aim is growth and leading in product or service they provide. The individuals have freedom for creativity as an important commitment.

The Hierarchy Culture
Hierarchy culture in an organization equals with having a high formalized and structured work environment in which there is a procedure for everything and everybody with specific tasks. Leaders are not risk taking or innovative and they are more efficiency minded instead. Stability is the long term aim and the performance just needs to be efficient with usual operations. Such organizations consider themselves efficient when they have the needed delivery of products or services, follow the formal rules on time and have a low cost and not on how creative people are.

The Market Culture
A market culture organization is a result-oriented one. The most important concern is getting the job done on time and competition is crucial in such organization. The leaders are drivers and compete a lot. Organizations are considered successful if they have a notable share in the market and there is a lot of need for their products or services. An important issue in a market culture organization is managing to have a competitive pricing as well as reputation.

Motivations to Use OCAI for This Research
According to Cameron and Quinn [6], OCAI instrument uses the integration of many dimensions of OC. OCAI includes aspects both regarding the current state of the OC and the way the members believe it should be developed based on the business demands. Moreover, OCAI is a validated tool used by over 10000 companies worldwide [19]; it examines OC and the desire for change in an organization through an integration of many dimensions. It can be used by consultants to help an organization make the constructive changes with new teams and leaders with new working methods [20]. The reasons argued above make OCAI an appropriate OC model to be used for the purpose of this research which is finding the influence of OC on ITG performance. Additionally in this research the focus is on ITG performance and the departments working on IT have a great potential of changing their teamwork methods. These changes need to be followed by changes in peoples’ behavior and culture and OCAI can be very useful in identifying and applying desired cultural changes.

2.5. Conceptual Framework
The conceptual framework shown in Figure 1 is followed to address the goal of this research that is finding out how the organizational culture can influence the IT governance performance. Both OC and ITG performance measurement concepts should be recognized through proper objectives. OCAI model [6] is used for OC and the objectives introduced by Weill and Ross [1] are used for ITG performance measurement. Through this conceptual framework, this research is directed and the analysis is according to it as well.
As shown in the Figure 1, the OC is studied through the lens of OCAI dimensions. The six dimensions are shown in the first rounded rectangle from left which are: dominant characteristics, leadership style, management of employees, organizational glue, strategic emphases and criteria of success. Through these six OC dimensions, the organization can be grouped as one of the four cultural types of clan, adhocracy, hierarchy or market. Additionally, on the right rounded rectangle in Figure 1, the objectives of ITG performance are represented.

Since the goal of this research is to find out how the OC can influence the ITG performance, the arrow in Figure 1 is directed from OC to the ITG performance. The results of this research will explain whether and how exactly organizational culture has an influence on each of the four objectives of the ITG performance. Thus the analysis of the empirical data is done through 4 themes of: 1) The influence of OC on cost effective use of IT; 2) The influence of OC on effective use of IT for asset utilization, 3) The influence of OC on effective use of IT for growth; and 4) The influence of OC on effective use of IT for business.

3. Methodology

A single case study is used in this research to find out how the organizational culture in the IT department of a Scandinavian multinational construction company headquartered in Sweden (anonymously labeled ITS) is influencing its IT governance performance. According to Yin [21], a case study is a method that can be used when we have questions about “how” or “why” and when we have no control over the situation that is studied. The use of case study and qualitative analysis of data in the prior studies that have explored IT governance (for instance [5]; [22]; [23]; [24]; [25]; [26]) provides credence for selecting this method for addressing this research question.

As the first step, a conceptual framework is produced based on literature study on OC and ITG performance (Figure 1). This conceptual framework provides direction for the research. Data collection is done through seven in-depth semi-structured interviews with IT managers of ITS during fall 2014. The interviewees included the CIO, vice president of service management, business liaison, enterprise architect, IT supplier manager and senior and middle managers of different functional units of ITS. In addition to the seven face-to-face interviews which took around 90 minutes each, the interviewees were asked to provide scorings to each of the OC and ITG performance measurement dimensions. The collected data from interviews were transcribed and then analyzed qualitatively by looking for patterns, themes and categories and their inter-connections in order to interpret the data aligned with the research conceptual framework. Computer aided software (NVivo 10) was used to create codes and help to find the themes from the transcribed interviews as well. A qualitative approach is used in this research since a qualitative study is more likely to obtain unexpected information than the quantitative approach which is more structured and detailed from the beginning [27]. This research aims to uncover the opinions and interpretations of participants with respect to the influence of the OC on ITG performance. Additionally, based on the scores provided by the interviewees to the OCAI dimensions and ITG performance objectives, the total score for each of these criteria is calculated.

To enhance the validity and reliability of the research, triangulation is done between interviews, secondary data and literature review. Using triangulation, interview transcripts were cross-checked against each other and compared with ITS documents for the analysis. ITS also provided its internal data which included its scorecard, strategic map and results from its OC assessment using OCAI for the whole IT department to be used in this research. Finally the analysis of the case study is structured according to the four themes of the research conceptual framework.

4. Results and Case Analysis

Research data are collected from multiple resources including: scores on ITG performance and OC assessment provided by ITS managers, data from interviews, internal data provided by the IT managers and public data from the company website. As mentioned before, the OCAI model was used for OC assessment and the formula from Weill and Ross [1] was used for assessment of four outcomes of ITG performance. We first present the results collected from ITS managers and then in the next section an analysis of the role of OC in each of the four outcomes of ITG performance is provided.

4.1. Case Description

The studied case is the IT department of a large construction company headquartered in Sweden, anonymously called ITS in this research. ITS has 220 employees providing most of the IT services for the whole company. At the IT department they have almost a traditional structure with CIO on the top and some senior managers, middle managers and the managers for small team. They have their own finance and HR units. All the operating and delivery functions are distributed to four main groups of: 1) service integration and support, 2) local application services, 3) Nordic global application services and 4) infrastructure services and then each of them has some IT sub units and groups. The senior managers of these
groups are in direct communication with the CIO (meetings every second week) and the CIO has board meetings every quarter with the business managers and business liaisons which are the communicators between IT and business units. At the ITS the environment is very international and the communication language is English.

4.2. IT Governance Performance at ITS

The total ITG performance score for ITS is calculated by applying the data collected from ITS into the formula from Weill and Ross [1] introduced earlier in the research background. The total ITG score gained by ITS is **62.74 out of 100**. This score is close to the average score of the 256 companies studied by Weill and Ross [1] which is 69. Figure 2 represents the scores for each of the ITG outcomes.

![Figure 2. The average success score for each ITG performance outcome in ITS.](image)

As it is shown in Figure 2, cost–effective use of IT has received the highest and effective use of IT has received the lowest average score at ITS.

4.3. Organizational Culture at ITS

As shown in Figure 3, OC at ITS is more directed to the clan culture now (30.35 out of 100) and the preferred culture for future is directed almost equally to both clan (29.04 out of 100) and adhocracy (25.35 out of 100). The OCAI assessment done by the organization also showed that they are more clan oriented now but prefer adhocracy culture; this confirms findings of this study. These results represent that at the current situation with the clan oriented OC, the organization is a friendly place to work, the relationships and communications are mostly in an informal way, said the interviewees. Comparing the preferred OC orientation with the current one shows that they have the highest difference in the adhocracy quadrant (Now: 15.71 and preferred: 25.35). This reveals that they prefer to move to the adhocracy type of culture in a great level and keep the clan type almost in the same level and decrease from the level of orientation in hierarchy and market culture.

![Figure 3. OCAI assessment results of organizational culture type in ITS.](image)

Research confirms that in successful organizations there should be some kind of congruence in their OC [19]. This means that regardless of the total culture type in their organizations, they have a relatively similar culture type in each of the six dimensions of the OCAI framework. The more congruent the culture types are, there will be less inter organizational conflicts. The incongruence between some of the dimensions usually makes the managers aware of a necessary change. The incongruence may be because of the people with different ideas in different departments of the organizations or because of different positions of the people in the organization structure. Table 1 represents the culture type in ITS in each of the six dimensions of the OCAI model.

<table>
<thead>
<tr>
<th>Culture Type</th>
<th>1 Dominant Characteristics</th>
<th>2 Organizational Leadership</th>
<th>3 Management of Employees</th>
<th>4 Organization Clues</th>
<th>5 Strategic Emphasises</th>
<th>6 Criteria of Success</th>
</tr>
</thead>
<tbody>
<tr>
<td>Clan</td>
<td>29.28</td>
<td>22.15</td>
<td>25.72</td>
<td>25.72</td>
<td>35</td>
<td>37.85</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
<td>100</td>
</tr>
</tbody>
</table>

Table 1. ITS Now (N) and Preferred (P) culture type scores for six organizational dimensions.
As shown in Table 1, the scores are divided among each type of culture for each of the six dimensions of organizational culture with a total of 100 for each dimension. These results together with the interviews data show that the incongruence in ITS organizational type is in “leadership” and “criteria of success”. This means that in these two dimensions, the organizational culture assessment has different results and it is not clan oriented like in the other dimensions. Regarding the preferred changes on OC type the “dominant characteristics” and “organizational leadership” turned out to be more preferred to be changed by the ITS; in both of them the desired change is to adhocracy. The clan culture at the current situation of ITS and the preferred move to be more adhocracy reveals the influence that clan culture had till now on their ITG performance and also the need to be more adhocracy directed based on the need they have for their ITG performance improvements. Additionally, at ITS they have defined OC values of being generous, creative, accountable and team players. According to CIO these values are defined to make clear their cultural journey.

4.4. Analyzing the Influence of Organizational Culture on IT Governance Performance

Based on the conceptual framework of this research, the results found regarding the influence of OC on ITG performance are analyzed through the four themes of OC influence on four outcomes of ITG performance. Table 2 presents the key findings from the interviews expressing the influence of OC at ITS on their ITG performance.

Table 2. Summary of key findings at ITS sorted through four themes of research conceptual framework.

<table>
<thead>
<tr>
<th>Four defined themes of this research</th>
<th>Key findings from interviews for the influence of OC on ITG</th>
<th>Interview extracts</th>
</tr>
</thead>
<tbody>
<tr>
<td>OC and Cost-effective use of IT</td>
<td>Clan culture and being team players led to work within the budget. Clan culture helped for fixing the basics (reducing costs by IT). Clan culture is not enough for bringing more value from IT.</td>
<td>“In ITS we have a very clan oriented ... being team players is one of our cultural values which leads us to use the most of our teams within the limited budget” (CIO) “In the past 4-5 years it was only [asked from business] go and fix the basics but now the business asks us to come and help to understand what to do to add values ... with this new request from business we cannot stay with clan culture and need to change the culture” (CIO)</td>
</tr>
<tr>
<td>OC and Effective use of IT for growth</td>
<td>Missing creativity and innovation is causing low use of IT for growth. Moving to adhocracy culture will lead to improve ITG performance in terms of uniqueness and innovation.</td>
<td>“We have a clan culture now but we need to have more adhocracy in balance with market and hierarchy” (CIO) “ITS four defined cultural values can help us to be more competitive and improve IT governance performance” (Service and project manager) “we are really missing creativity in our culture which is needed for IT governance performance” (Senior manager 1) “moving to adhocracy will help us to improve IT governance ... risk taking, innovation, freedom and uniqueness in our culture are very low at the moment” (Service and project manager)</td>
</tr>
<tr>
<td>OC and Effective use of IT for asset utilization</td>
<td>Using expertise from separate units (asset utilization) is challenging because of OC. The informal communication through clan culture reduces the level of knowledge integration (asset utilization).</td>
<td>“The most difficult part of ITS governance is to deal with separate local units and the main reason is the organizational culture” (Senior manager 2) “We produce a lot of information in each project but we are not good in using them” “our expertise are mainly used outwards and within each single group and is not integrated through all ITS ... we do not share knowledge assets within groups” (CIO) “most of our communication is informal and that is why sometimes in the beginning of projects we do not have information on what resources we have” (IT supplier manager)</td>
</tr>
<tr>
<td>OC and Effective use of IT for business flexibility</td>
<td>Clan Informal communication is helpful for business flexibility in some levels, but not in all of them. Cultural differences make it challenging to adapt with new business needs.</td>
<td>“communication is not very formalized, in some levels we have SLA or use some maintenance objectives, but we need to have the same structure” (Senior manager 2) “in some units we have more hierarchy culture and it is a challenge working with new partners or stakeholders when they decide to make changes” (middle manager 1) “the gap between executive management and senior executive teams is affecting their IT governance and responding to the changes” (business liaison)</td>
</tr>
</tbody>
</table>

An analysis was also done using NVivo in terms of word frequency and similarity for each of the conceptual framework themes (Figure 4). Figure 4 shows the clusters through which the analysis of the interviews were directed to find the influence from each of the four OC types on each of the four objectives of ITG performance. The clusters are sorted based on the word similarity in each node. According to the results, those nodes that received more words in common are linked with a shorter line to each other. The linkage between all the nodes are shown in Figure 4 but since it is only based on word analysis we only
consider a relation between 2 nodes when they are on the top close related ones compared to the others.

![Figure 4. Clusters of conceptual framework themes based on word similarity](image)

As represented in Figure 4, there is closer relation between adhocracy OC type and effective use of IT for growth and also clan culture and cost-effective use of IT based on the word similarities.

### 4.4.1. Organizational Culture Influence on Cost-Effective Use of IT.

The company has the highest score (3.57) for cost–effective use of IT among the other outcomes of ITG performance. This means that IT has been more successful in financial terms and being beneficial for the business. The reason is that during the past 5 years they have been focusing only on providing the needed services from business with a limited budget. “Fixing the basics” was the only task they have focused to do. As part of their culture they were looking to create trust among the employees and also between the business and IT and the first issue that could fix it was to price the services in an accurate way. Having a clan culture with its characteristics such as mentoring style of leadership, loyalty and mutual trust and commitment among employees has helped ITS to achieve a high score in cost-effective use of IT. Having a high score in this outcome of ITG performance is matching with their strategy in those past 5 years. As indicated by the CIO and other interviewees “being team players” has helped them to use the most of their teams. Team work, consensus and participation are part of the employee management style defined for organizations having a clan culture. Most of the communications are informal at ITS as part of their clan culture and only in case of problems or incidents they follow some processes for communications. This issue has helped them to provide the requested services from business in a cost–effective way. On the other hand ITS has many local systems with different ways of working and the individuals who are experts are located in different units which are not communicating. The challenge that the organization is facing now is that the communication and cooperation among these units are not strong and this is affecting the cost-effective use of IT. “our projects are becoming more and more similar, therefore we need a more organized way of communication for sharing information and integrating our services, this way we can stay cost-effective and prevent duplications” says vice president of service management. Directing the OC to a more adhocracy oriented culture while keeping the clan, hierarchy and market culture in balance, will help the IT department to fix the problem of communication between their internal units. According to the interviewees, they have grown a lot and their projects are becoming more and more similar, therefore they need a more formal and organized way of communication between their groups. They need to be able to use the big amount of data existing in different units and grasp the innovative ideas from their experts. The organization’s desire to have a higher level of adhocracy type of culture is aligned with the previously mentioned objectives and approves the influence of their type of OC on managing their cost-effective use of IT.

### 4.4.2. Organizational Culture Influence on Effective Use of IT for Growth

Effective use of IT for growth has the lowest score (2.57) in ITG performance. This objective deals with IT being effective in learning in organization, being innovative and competitive and making improving changes. This means that IT has not been so successful in having a driving role in business strategies and being innovative. This is exactly matching with what is stated by the IT managers that at the moment they have been successful in delivering the needed services from business but they are looking to have more innovative solutions and bring competitive advantage from IT to business. As mentioned by one interviewee, they are “not brave enough to make creative decisions and be risk taking” since their first priority was to stay in budget. As shown is the Figure 2, they received the highest score for Cost-effective use of IT and lowest in effective use of IT for growth. It is also very important that in their future vision for their OC, the type of culture that they want the most attention to is adhocracy. Adhocracy is the type of OC in which the focus is more on innovativeness, creativity and entrepreneurship. After focusing on fixing the internal issues and basic needs, as the next step they are looking to have external focus and differentiation with being innovative. CIO of ITS believes at this point they need to be “more competitive and proactive” to improve ITG performance. ITS current clan culture and having generosity as one of their OC values, helps them to be open and share the processes and work together. But since they have only focused on providing the business requested service till now, they have not been very creative and innovative to use the expertise distributed in their different units. If they change their OC to a more adhocracy oriented culture
specially in dominant characteristics and organizational leadership dimensions (as it is shown in Table 1) they can be more innovative and improve their effectiveness of IT in growth. Additionally the new style of working used by ITS recently is influencing the effectiveness of IT in growth in different ways. They are using “Activity Based Workplace” (ABW) method, in which the employees do not have specific desk and they need to find a place to sit every morning. This is part of their clan culture to have a friendly environment and also the cost saving strategy. According to the statements of the IT managers in different levels, this method of working helps them to be connected at anytime and anywhere they are. On the other hand with this way of working sometimes the employees cannot find a place next to the people they work with every day and according to some interviewees this issue has reduced their performance during last year. This method works for the higher level employees and managers who are busy and cannot be found in their offices easily and communicate informally most of the times, but for the employees working with maintenance services for instance, ABW may not be very effective. The ABW method also requires employees to communicate through their internal blog. The advantage is that they can reach each other anytime and anywhere. However this makes their conversation limited to only fixing the problems and there is no chance of talking about new and creative solutions. People need to send messages to each other and then if needed have video talk or meeting and if necessary meeting face to face for which they need to book a room. This process makes employees lazy to communicate about any innovative solution and they only aim to fix their problems and finish their assigned projects. If ITS seeks for more innovative and competitive solutions, they need to change their culture in a way that people are more willing to communicate about new solutions (adhocracy).

4.4.3. Organizational Culture Influence on Effective Use of IT for Asset Utilization

Effective use of IT for asset utilization is dealing mostly with how IT is successful to use the knowledge based assets. At ITS all the operating and delivering functions for IT services are divided through four main groups of service integration and support, local application services, Nordic global application services and infrastructure services. The CIO meets every second week with the heads of these four groups and there are also informal communication among them, at the lower levels the similar way of communication exist between the other senior managers and middle managers of each group which is resulted from their current clan oriented OC. The effective use of IT for asset utilization with the score of 3.14 out of 5 is almost in medium level for the whole organization. The challenging cultural issue influencing the effective use of IT in ITS is the lack of integration among different groups. The CIO and other interviewees indicated: “we are producing a lot of data and they are not using it in a systematic way”. That is exactly where IT should be helpful most and can make a difference by making all that data accessible, integrated and reusable. The organization desire to be more adhocracy oriented as their preferred OC is in fact aligned with what they expect from IT regarding asset utilization; ITS seeks for being more innovative in using new resources, optimizing the use of their experts and data and being entrepreneur. In ITS current clan oriented OC most of the communication is informal and according to the interviewees this is not working in some cases that they need to receive the needed information on time. As emphasized by the service manager and supplier manager of ITS, they have the capacity management problem. For instance they have many IT projects with large groups working on them and sometimes it happens that they are in the middle of the work process and they have no information whether they have all the needed resources to deliver the project. They should have received information before start of each project from supply manager. The clan style of organization leadership, mentoring and communication is not sufficient in such huge dispersed groups needing organized knowledge integration.

4.4.4. Organizational Culture Influence on Effective Use of IT for Business Flexibility

The focusing issue in effective use of IT for business flexibility is how IT is successful to help the business to respond to the internal and external changes in an optimized way and speed. ITS received score 3.14 out of 5 for this ITG outcome. The clan culture they have now together with the common Swedish flat organization structure, have helped them to be responsive to the business changes. The managers of the IT group responsible for each business unit are able to make their own decisions for their unique projects; this helps them to response quickly to business changes. ITS cultural value of “being accountable” also encourages the employees to be accountable in making the needed improvements. On the other hand they have a large organization with almost 12000 IT users only in Nordic countries and 220 IT providers. As mentioned by the interviewees “it is challenging to make the interfaces in a way that a regular manager knows how to use it and provide the exact service they need”. In different IT groups, they have different degree of change acceptance and speed. For instance the IT service and project management group is ready
for rapidly changes as part of their culture, but the level of change acceptance is lower in other groups such as service maintenance. As it was mentioned for the other ITG outcomes, the business now requests the IT to have a more strategic role to understand how to add value and not only fixing the basics. The IT then needs to be more innovative to be able to respond to this new business need. At the current situation with their clan culture, the higher managers are only looking for the tasks to be done but not really encouraging employees or smaller groups to present their new ideas. One problem mentioned by some IT employees is that they do not receive appropriate and on time feedback from the higher managers or from the business stakeholders. More orientation to adhocracy cultural type can help them to reach this goal since adhocracy is more focusing on being an innovative and entrepreneur organization.

4.5. Discussion

The analysis of results from the case study through four themes of ITG performance outcomes provided evidence that the OC at ITS is influencing the ITG performance. As explained by Cameron and Quinn (2011), there is usually one of the four culture types which is dominant in each organization, the other types also exist but not in an extreme level as the dominant one. In this case the dominant OC type is clan. Through this clan OC in this case, most of the communication is informal, employees are team players and the criteria of success is defined as fixing the basic business IT related tasks. The findings of the case studied shows that these characteristics of clan culture have facilitated the teamwork with the aim to meet business requirements within the limited budget. This results in high score in the cost effective use of IT. However ITS aims to improve the other three ITG performance outcomes in order to satisfy the recent business requests. The whole company is expanding globally and ITS projects are growing and getting similar; that is why ITS is demanded to play a more strategic role and bring more value from IT to business. Currently ITS has the lowest score in effective use of IT for growth in ITG performance. ITS managers admitted that creativity and innovation are needed to gain this outcome and become more competitive. Therefore ITS is moving towards a more adhocracy oriented culture which has more emphasis on innovativeness and creativity. Moreover it was found that the clan culture specifically with its informal communication style is not very helpful in effective use of IT for asset utilization and business flexibility. For improving these ITG performance outcomes, ITS needs more integration of data and innovative ways in using IT assets including huge amount of information to response to business changes. The “business liaisons” play a very important role in this movement by making sure that IT has the right dialogue with the business stakeholder and make the work more predictable and transparent. The results of this research contribute to the knowledge in the field of IT governance by exploring the influence of organizational culture on ITG performance.

5. Conclusions and Future Research

This research was seeking to answer the question on how the organizational culture can influence the IT governance performance. The research is done through a case study at the IT department of a large construction company in Sweden. Based on the findings of this study, it is concluded that there is an influence from organizational culture on the IT governance performance of the organization. Particularly the characteristics from organizational culture types involving communication styles, innovation and creativity acknowledgements were found influencing the IT governance performance in most of its outcomes. Having a more clan oriented culture at this organization has influenced them in getting a higher score for cost-effective use of IT outcome of their IT governance performance. However in such large organization this clan oriented culture has caused disintegration, disability in optimized use of the produced information, missing creativity and innovative solutions and being afraid of taking risks. All these cultural characteristics have an influence on receiving lower success scores on effective use of IT for growth, asset utilization and business flexibility. OCAI assessment also revealed that the organization prefers to move to a more adhocracy oriented culture in which creativity and innovation are the main characteristics. According to the IT managers, these characteristics are most needed while aiming for improvement in the effective use of IT for growth.

However there are some limitations to this study that should be highlighted. This research involved a single case study and the results are affected by some specific conditions of this case. Moreover the data is collected at the headquarters of the IT department with the overall dominant clan organizational culture and the results are not necessarily representing the influence of the culture of some sub units which may be different from the dominant culture. The findings of this study suggest several areas of further research. More empirical research is encouraged to be done to discuss detailed organizational culture characteristics influencing the IT governance performance. Furthermore different organizational culture types needed in different IT units based on their functionalities and the role of middle managers in improving the IT governance performance can be the future research topics.
6. References


