Traditional and innovative office-environments; An organizational difference?

Master Thesis

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Preface

In front of you is the master thesis report which contains the results of my graduation project. This project is an element of my study Management, Economics and Consumer studies. Within this study I have chosen the direction Management Studies.

I started my study career 7 years ago in the year 2000. In the year 2004 I completed my first study, this was a professional bachelor in commercial mechanical engineering. Because the commercial aspect was my preference, I decided to continue my study career at the Technical University of Eindhoven within the department Technology Management. However, after one instructive year I decided to switch to Wageningen University because the study content was not matching my wants. From that moment, a pretty, informative period started. The two and a halve year flied by in a rush. Within this period I passed many pleasant moments, but also some difficult ones.

One of these moments was the writing of this thesis. It was for me a totally new research domain. Because two parties where involved, the University and the Samas organization, it was a difficult task for me to demarcate the project. After some months, when the literature study was almost finished, the process started to be more successfully. This project familiarized me with this trajectory, where more parties are involved. All in all it was for me a very informative period.

After widely seven years of studying, lectures, internships, (graduation) projects, examinations and of course all other activities, the time is commenced to finish this great period. I cannot finish writing this preface without pronouncing my thanks to the people who supported me within this graduation project.

First of all I want to thank all the respondents of my research. Their willingness to complete the survey resulted in an excellent response. This created the possibility to carry out valid analyses. Secondly, I would like to thank my University supervisors, Dries van Wagenberg and Geoffrey Hagelaar, for their constructive criticism. Also the organization Samas, mainly Theo Magermans and Gert van de Heuvel, receive my thanks for the offer of the assignment. Last but not least, I would like to thank all the persons who supported me during this last phase of my study.

Ruud de Haas
Wageningen, January 2008

Summary

Last years, office furnishing companies where introducing innovative office furniture, often presented in innovative office environments. Some of these companies are presenting these innovative office environments as new office furniture concepts in their (working) showrooms. Many office orienting visitors are welcomed within these (working) showrooms that show these innovative office environments (like the Village Office concept of Samas). The first reactions are mostly positive; however the greatest part of the visitors is not starting a continuation trajectory to implement an innovative office environment within their own organization. If office furnishing companies can recognize the visitors who are visiting their (working) showroom, they can adapt the further trajectory (started for example with the tour through the showroom) with the visitor. The goal of this research is that office furnishing companies can diversify their visitors (who are guests in their (working) showroom) that will fit an innovative office furnishing and the visitors who are still working (really) traditional and are not suitable with innovative office furnishing.

The research objective that was formulated for this research is:
"*Define if organizations who are considering investments in new office furniture can be typified in different groups, namely traditional or innovative working organizations. Also the different factors that might practise influence on a change process to innovative office furniture must be studied to create an overview (based on literature) of these factors.*"

This research objective will be answered with the research question:
"*Which organizational and context factors are suitable to recognize if office furniture customers, who are considering a refurnishing of their office, match with a traditional or innovative office layout concept?*"

First of all a literature study is carried out to gather background information about innovative office environments, organizational analysis and organizational change. This literature is used as the basis of this research. The literature study resulted in a model that can be used for organizational analysis. Organizational factors that can be used for this analysis are: Organizational structure, organizational culture, organizational leadership style and organizational technology & processes. This model will be used to examine if there are differences between traditional and innovative office organizations. The literature study also revealed that, if an organization is going to change from traditional to innovative, the organizational factors strategy, structure, culture, management/leadership, involved employees, organizational (human) processes and change process must be taken into account to realize a successful change within an organization.

After this literature study a quantitative study is executed to determine if it is possible to distinguish organizations with traditional and innovative office environments on basis of their organizational characteristics and a selection of contextual variables. There is aimed for the use of validated survey questions where possible to guarantee a higher reliability.

The population of the research consisted of Dutch companies and organizations (approximately 650) with more than 500 fte (Full Time Equivalent) which are present within a database of the chair Facility Management of Wageningen University. This quantitative research is accomplished by use of a digital questionnaire. Approximately 360 questionnaires are distributed upon the respondents by mail. From this sample 340 respondents are actually reached. There are 143 questionnaires returned, which results in a response of 43 percent.
With help of this research there can be concluded that it is quite difficult to detect which organizations have a higher chance to be successful for the implementation of an innovative office environment because of the small organizational differences between the groups traditional and innovative. However the companies and organizations within these groups can (partly) be recognized through their characteristics.

The research revealed that approximately 25 percent of the companies and organizations within the Netherlands are working within an innovative office environment (based on the new developed “innovativeness scale”). If organizations are quite small, say less than 200 employees or quite large, say more than 2000 employees and are operating in the sectors (businesslike) Services, Electronics/Information services/Communication or Real Estate the chance that these organizations are possibly suitable for the implementation of an innovative office concept is more reasonable. Also the organizations (according to this research) that are in the profit sector are working more within innovative office environments in comparison with the organizations that are in the non-profit sector. So if an organization is in the profit sector, a higher change of a successful implementation of an innovative office environment is present. Another condition for a successful implementation is that the organization is rather informal or willing to create an informal environment. When this informality is present (or creatable) within an organization a possible fit with an innovative office environment is imaginable.
There can also be concluded with high certainty that the initiative of the works councils within organizations with innovative office environments is higher. So it is wise to approach and convince also employees who are part of the works council. These employees can practice influence on the decision making unit that makes the discussion about which type of office environment will be acquired.

If an organization finally decides to invest in an innovative office environment, the way of working within the organization will (partially) change. The seven factors that are mentioned earlier within this summary must be taken into account during the implementation. If all these factors are observed and managed during the organizational change, there is a higher chance that the implementation of the new, innovative office concept will be accepted and will be successful.

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Chapter 1, Introduction

1.1 Research motive

Last years, many office furnishing companies where introducing innovative office furniture, often presented in innovative office environments. Some of these companies are presenting these innovative office environments as new office furniture concepts in (working) showrooms (for example the Village Office of Samas). Frequently the focus of these office concepts is on the people who are working within organizations. The approach is that people will function better in a social environment, so a location where contacts are stimulated. Within these innovative working environments are places which are designed to meet each other, but also workplaces for individual concentration are present. To promote total freedom within office environments wireless facilities belong to these concepts. To guarantee that the employees are satisfied also common facilities for recreation and inspiration are part of these concepts. All these characterizations are brought together within innovative office environments that contain diverse atmospheres because people have the desire for variation in their working environment.

Many office orienting visitors are welcomed within (working) showrooms that show innovative office environments (like the Village Office concept of Samas). The first reactions are mostly positive; however the greatest part of the visitors is not starting a continuation trajectory to implement an innovative office environment within their own organization. A conceivable cause of this phenomenon is that visitors are staggered by what they see during their visit, but are not aware of the possible application within their own organization. It is expected that this is one of the imaginable reasons that the implementation trajectory of innovative office furniture concept is not started.

It is obvious that an organization must suit an innovative office furniture concept; otherwise the implementation will be a failure. If office furnishing organizations can recognize the visitors who are visiting their (working) showroom, they can adapt the further trajectory (started with the tour through the showroom) with the visitor. For example, a visitor who is only interested in the separate pieces of office furniture, like chairs, drawers and tables, has other information desires than a visitor who is considering a total refurnishing of the office environment in an innovative way.

The added value for office furnishing organizations is that they can diversify the visitors (who are guests in their (working) showroom) that will fit an innovative office furnishing and the visitors who are still working really traditional and are not suitable with innovative office furnishing. If this information is known, the visitor can be approached with a specific method. Think for example about a specific tour through the (working) showroom, specific presentations or specific continuation steps. It is desirable that "profiles" are created of these different organization types. So characteristics how traditional and innovative organizations can be typified must be determined.

If an organization is suitable for an innovative office furniture concept and also has the plans to change, it can be possible that an organizational change process will be started. Important factors for organizational change to innovative office furniture are important for office furnishing organizations because they will be able to guide the customer in the change trajectory.

1.2 Problem definition

It is difficult for office furnishing companies to recognize the different types of visitors (potential customers) who are visiting their (working) showroom.
This is desirable because the visitor-approach that will follow after a showroom visit can be more tailored to the different visitor types. Reason for this is that customers of an innovative office furniture concept will be approached in a different manner than customers who are only interested in (a few) office furnishings.

1.3 Research objective

Define if organizations who are considering investments in new office furniture can be typified in different groups, namely traditional or innovative working organizations. Also the different factors that might practise influence on a change process to innovative office furniture must be studied to create an overview (based on literature) of these factors.

1.4 Research question

"Which organizational and context factors are suitable to recognize if office furniture customers, who are considering a refurnishing of their office, match with a traditional or innovative office layout concept?"

Sub Questions:

- Which factors can be used for an organizational diagnosis in order to typify an organization?
- What are the organizational characteristics of innovative office environments?
- What are the organizational characteristics of traditional office environments?
- What are the differences between traditional and innovative office environments?
- Is it possible to define (during the first customer contact) if a customer is probably willing and able to change in the direction of innovative office furnishing?
- Which factors are influencing an organizational change process in case of innovative office furnishing?

1.5 Research framework

The overview below is showing the design of the research. There will be started with a literature study; this is the basis for the research. An empirical research is the continuation. Afterwards the empirical research results will be analyzed. The project will be finished with the writing of conclusions and recommendations.

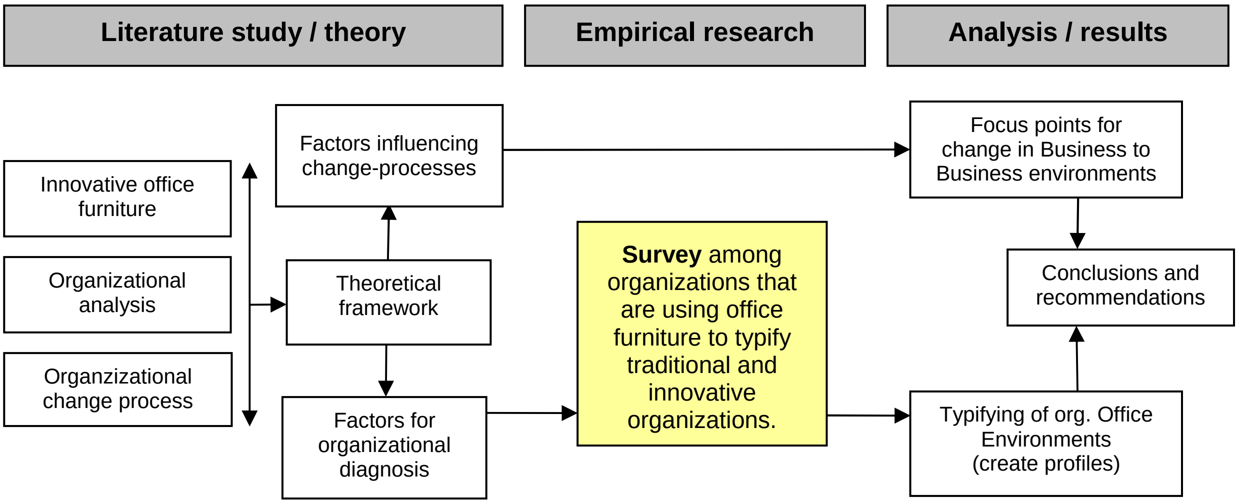

Figure 1 Research framework

1.6 Research material

For this research different sources for the gathering of information are used. The sources that are mentioned are used as basis for this research:

- Books that contain information about change management and organizational diagnosis.
- Scientific articles related to change management and organizational diagnosis.
- Websites that contain information about change management and organizational diagnosis.
- Information about innovative office furniture as seen by Samas.
- Books with information about quantitative research and research methodology.
- Results of the survey among a selection of organizations containing office space.

1.7 Research results

Within this research different results are reached. These different results are summarized below:

- Literature study to the factors that can be used for an organization diagnosis.
- Literature study to the factors that practice influence to an organizational change process.
- An analysis of the organizational differences between traditional and innovative office environments (if these exist).
- Recommendations how potential office furniture customers can be recognized.
- Advice for continuation research if necessary.

1.8 Reader guide

In chapter two of this report the literature study is described. This chapter finishes with the conceptual research model. In chapter three is outlined how the empirical research is carried out. Afterwards chapter four continues with the results of the empirical research. All different aspects are analyzed separately within this chapter. The fifth chapter contains the conclusions and the recommendations for further research. In chapter six is looked back to the research and some aspects of the research are discussed. The report can be read in chronological direction.

Chapter 2, Literature study

When organizations are considering the purchase of a new innovative office furniture concept, it is important that this new office furniture concept will match with the organization who is considering this implementation. If necessary, they must be willing to undergo an organizational-change because innovative office furniture is closely related to a new way of working. When organizations are visiting a (working) showroom (like the Village Office of Samas), they show interest in an innovative office furniture concept and the related products.

Samas is convinced that if they offer a perfect suited guidance process to the customers that are willing to change, these customers also will decide to make the decision to invest in an innovative office concept that consist of office furniture products (of Samas).

When the first contact is made with the potential office furniture customers, it is wise to know if this customer is only looking for office furniture components (like chairs, tables, drawers etc.) or if he would like to change the whole way of working within his office environment. If the customer is looking for a new way of working (like the Village Office concept of Samas) an innovative office environment may suite with his wants. But maybe this customer will be in a phase in between these two extremes, so they are planning to change in the near future. To determine the different customer types, it is important to know which factors are characterizing an organization. These factors can be used for the determination of different organizations (customers). If customers are characterized it is necessary to create more understanding about organizational-change that will occur when customers decide to invest in a new office furniture concept.

In the first paragraph the innovative office will be analyzed more in depth. The second paragraph, paragraph 3.2, is examined which factors are important when an organizational analysis in this branch is carried out. In paragraph 3.3 the factors that practise influence on an organizational-change process are defined. Afterwards, in paragraph 3.4, these different factors are discussed separately. To guarantee a successful implementation of a new office furniture concept, the customer's current organization must be analyzed and maybe some changes must occur to create a fit between the customer's organization and the new office furniture concept. That is the reason why these different factors are discussed more in depth.

2.1 Innovative offices

Nowadays organizations are an element of a continuous changing environment. Because of the different developments the conception office innovation is getting more and more important. The changes in the society, organizations and technology lead to different views about the working environment (Moosdijk, Scholten et al. 2001 in Verroen 2003). In the first place there are some social developments like the fusion of the different 4 themes; living, working, taking care and recreating. A reason for this is the increase in the two-earner households, part-time working and the shortening of the labor duration. The interest for the quality of life is increasing for the most people. People are searching for a balance between their working and private life. Individual freedom and different working organizing opportunities are preferred. Office innovation is in line with these social developments (Moosdijk, Scholten et al. 2001 in Verroen 2003). Secondly there are technological developments like digitalizing of archives, new communication opportunities like e-mail and mobile phones. The developments within the information technology environment result in the opportunities that employees can work more flexible, it is not necessary anymore to work on the same place. Also the content of the work is influenced by information technology; computers took over routine jobs and created more time for the intellectual work. The result is that more concentration, communication and cooperation is required. This will result in a change in the office environment. (Moosdijk, Scholten et al. 2001 in Verroen 2003).

Within innovative offices the way how the innovative office character is implemented can vary considerably. However many aspects are very similar. Vos and van der Voordt listed these different innovative office ingredients (Vos and Voordt 2001). The elements are:

- Advanced communication and information technology is available. Laptops with wireless connection opportunities, mobile phones, blackberries, internet and intranet are some examples.
- Introduction of “flex working”. Part of this concept can be shared workplaces, in this situation a workplace is used by more employees. A second option can be interchangeable workplaces; in this case the workplaces are not designated for one person. Last option is activity related workplaces. Different types of workplaces are designed for various tasks.
- Cellular offices or open-plan offices can be rebuilt or new offices can be designed as a combi-office. An example is enclosed offices on the side of the building that can be used for individual work or concentration work. An open central area is present for group work, meetings and other common facilities.
- Furniture that is designed ergonomically responsible. For instance, the furniture has the opportunity to adapt quickly to the employee. This furniture also can be designed attractively.
- A different type of document archiving system, this can be centralized or digitalized.

- Working from other places than the office, so working at home, at the client's office or under way. This can be done by digital connections. Often this way of working is carried out several days per week, but sometimes it will be done in a continuous period. Working together on a project can be done in a satellite office (this is a teleworking office for employees of the same organization) or in a hotel office (this is a teleworking office where several organizations rent space and facilities).

The expectations around innovative offices are great. Sharing of workplaces and a bigger differentiation in types of office workplaces, adjusted to the different office activities, must lead to a more efficient use of space and other facilities and better achievement of the organization and the employees. The main focus office innovation is about working more effective, more efficient and more pleasant (Voordt 2003). Within the literature different objectives are mentioned (Van Dien 1998, Voordt and Vos 1999, Funke et al 2000, Arge and de Paoli 2000 in Voordt 2003). These different objectives that are mentioned are:

- Better performance, including higher labor productivity;
- Improved communication and collaboration;
- Facility support and guiding for change processes (for example culture);
- More job pleasure (i.e. higher job satisfaction);
- Higher space and means efficiency (i.e. lower costs);
- Increase of the user flexibility;
- Internal and external image improvement;
- Fulfilling an example role;
- Creating insight in developments;
- Acquire experience with new concepts;
- Counteract a moving by better space utilization.

This paragraph summarizes in short some typical characteristics of innovative offices and also different objectives that can be taken into account if an organization is willing to invest in an innovative office environment. The information within this paragraph will be used as basis to measure the innovativeness level within organizations in combination with practical knowledge about the vision of Samas (Samas 2007) on innovative offices.

2.2 Organizational classification

Customers of office furniture within this research can be distinguished in two types of customers. There are customers who are already suitable for working with an innovative office furniture concept, and there are customers who are not (jet) suitable for working with an innovative office furniture concept. The difference between both of these customers is the type of organization of the customer. However, the organization that is suitable with the concept will have specific characteristics and the organization that is not suitable, off course, will have other characteristics. The different customer types can be typified by the characteristics that are used for an organizational diagnosis. There are many models available that can be used to typify organizations; some of these are discussed within this paragraph. Afterwards the factors which are relevant for the analysis of the different customer groups are shown.

As told, many organizational diagnosis models are developed in the past. One well known model is the 7s model from Mc Kinsey (Mullins 2007). The model is combining seven factors which are related to each other. The model is shown below; the different factors are discussed below.

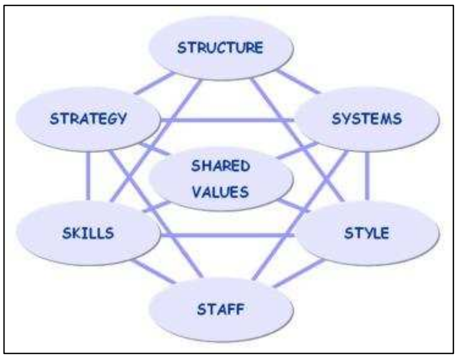

Figure 2 Mc Kinsey 7s model (Mullins 2007)

The central factor in this model is ***shared values***. It is about the vision of the company and the identity that is present in the company. It is hard to change this element. Most times the norms and values are patterns which are embedded within the organization during the time the organization exists. ***Strategy*** is focusing on the intended actions of the management. Which method are they going to use to be effective and how are they going to reach these goals. The implemented strategy will give direction to the way of working of the company. The ***structure*** of an organization is pointing to the design of the organization, so the set of tasks, the coordination, the hierarchy and the information supply. It explains if the organization is al line-, staff- or functional organization. The item ***staff*** concerns all the employees within the organization. The expertise, the reward, the education and assessments are important. Also the "soft" items like morale, motivation and behaviour are concerns of the factor staff. The focus is also on the aspects motivation and maintaining of the employees. ***Systems*** within an organization are about the formal and informal procedures, agreements and appointments. How the work is carried out, who are the involved employees and which rules should pursue are questions that can occur. The ***skills*** of an organization show the excellent characteristics and qualities of the company. It is showing the core competences of the organization. The organization ***style*** is showed in the behaviour of the management and employees. The way of working together is a characteristic of the organization, but also how decisions are taken.

The management style of an organization is, like shared values, also embedded in the company during the time that the company is operating. The company environment practices this (Floor and McKinsey 2007).

The basic assumption of this model is that all seven factors of this model are in balance with each other. This balance will create a stable organization that is guaranteed of her continuity. The factors strategy, systems and structure are changeable in a brief period. The other "slow" factors style, skills and shared values only can change in a longer period. All factors can be influenced by the management; however it depends on the different factors how long it takes to change them.

Another organizational diagnosis model is the Harrison system model (Harrison 1991). This models looks at an organization as an open system (Harrison 1991). The model suggests that an organization consists of inputs and outputs and is part of a turbulent environment. The model is shown in the figure.

The four main elements, goals and strategies, culture, technology and structure are grouped around behaviour and processes, which is central in the model. The company is seen as a system where are inputs, like money, people and environmental information and outputs like products or services. The behaviour and processes are influenced by the main elements.

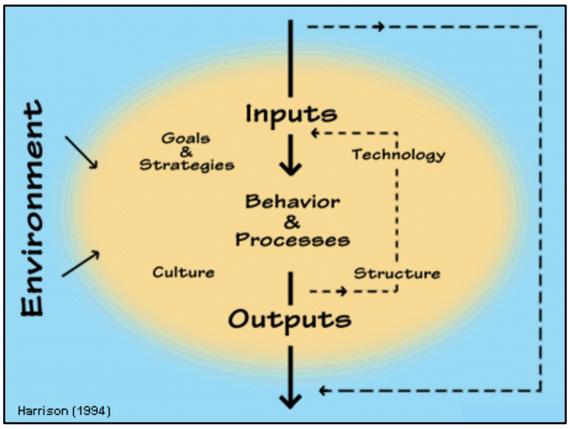

Figure 3 Open system model, Harrison (1991)

The ***goals and strategies*** are the strategies, the tactical and operational goals and the plans and interests of the most dominant decision makers of the organization. So here is a close relation with leadership within the organization. The ***technology*** element concerns the methods and processes to transform resources into outputs. The organizational ***structure*** is the element that shows the relationship between individuals and groups with respect to the role patterns that exist. Also procedures, functions and classification of departments within the organization are part of this element. The item ***culture*** focuses on the shared values, norms, rituals and symbols that are part of the central aspects of the organizational behaviour.
If one or more elements are changed, this will influence the central point within the model will also be adapted. Logically, the output of the organization is also dependent on these changes.

Now organizational analysis models are discussed. The models are showing some clear similarities. The difference is that the model of Mc Kinsey is using more factors than the model of Harrison. The system model of Harrison exists of only a few main elements that make it possible to describe these different elements more deeply and to utilize the factors that are within the model broader in the empirical study. The system model makes it possible to analyze the organization in the same way as the other models but gives a more clarifying view of how the main elements of the organization work together.

According to the discussion of the two models, the focus of the organizational diagnosis will be on the following factors:

- Organizational structure
- Organizational culture
- Organizational leadership style (adapted from goals and strategies, staff and style)
- Organizational technology/processes

These factors will be used for the organizational diagnosis for the classification of organizations who are working within traditional or innovative office environments. Obviously some general factors like, company size, branch, field of activity etc. are also used for this analysis.

2.3 Organizational change

When organizations are changing, an organization is reacting on the disturbance with the environment within the frame of her objectives and organizational processes, within the established ideas, norms and rules. You can see the evolution of a relative stable phase, to a period that can be problematic because of radical interventions and changes, followed by a phase where the employees are experiencing new perspectives and a new view of the organizations future (Van Dijck 1996 in Hermsen 2005).
The change that is discussed here is about the processes that are related to the development of the organization. In this case a change process is present in the organization, where many factors are important, like the dedication of people, ruling values, attitude and feelings (culture related). It is important that a change process is managed correctly. The questions that arise about new strategies and new ways of working are imaginable reactions within an organizational change process.

2.3.1 Stages that occur within the change process

In many articles (Zand and Sorensen 1975; Cornell 1996; Siegal, Church et al. 1996; Macredie, Sandom et al. 1998) the steps that are the basis for an organizational change process are based on the Lewin theory. The phases that are present within an organizational change process are according to Lewin the unfreezing phase, the moving phase and the refreezing phase. If a company or organization wants to change, the first phase is to unfreeze the present level. In this stage the need for change is shown. Open the minds of the people for the change belongs to this phase. In the moving phase the transition to the new situation is made. In a period of confusion (the change) the employees/people are encouraged to accept the new ideas and the new ways of working. When the new situation is reached, the new level must be refreezed. So the new ideas and the new ways of working in the minds of the employees and managers are crystallized. After refreezing the organization is stabilized and the change process is completed (Lewin 1951). This process of change as it is described in the text above will be influenced by different forces; these are described in the text in the next paragraph.

Figure 4 Change process stages

2.3.2 Influencing forces / key factors

According to Lewin (Van Dijck 1996; Beitler 2006) every organizational situation, it doesn't matter how dysfunctional this situation is, will give benefit to someone. Lewin believed the status quo is a result of driving forces and resisting forces.

Driving forces are pushing (driving) for change, so these are the factors who promote the change within an organization. The resisting forces are the factors that influence the change within an organization in a negative way. So the people who have benefits from working in the current situation are creating these resisting forces. According to Lewin, in practice it is wise to increase the driving forces and reduce the resisting forces.

In change processes of course problems will occur. Some important barriers that can occur during change processes (Van Dijck 1996 in Hermsen 2005) are shown in the overview below:

- Differences in cultures and tension fields between different departments will occur to a strong focus on the own department. These symptoms hinder the common analysis and analysis of the problems that are present.
- Conflicting strategic priorities will result in an unclear view of the goals and the course and the direction of the organization. The result is a more blurred view of the direction of the change process.
- The inferior achievement of the organizations top management will result in the increase of tensions and conflicts within the organization. This will result in an unclear direction and also the contribution of the management will be insufficient.
- A classical top-down directed management style with insufficient communication to the top and ground level. The result of this characteristic is a poor link between the change programmes and the problems experienced within the whole organization.

- The insolvency to imagine the understanding of new ways of working because of the present logic of organizing within the organization. This way of organizing is primarily focussed on the goal of efficiency realized by activity division, specialization and control.
- Not underpinning that strategy, organization and technical changes are a combination and must be coupled to a behavioural change and a new way of leading the organization.
- The underpinning of authority processes, interest contradictions and insufficient ability to utilize the contradictions. This can be occurred by the lack of discussion, negotiation or focussed inference.
- Insufficient focus for the creation of a shared problem experience and the undervaluation of the emergency to create a wide basis for the planned change.

Key factors that can be crystallized out of these barriers that are stated in this overview are management/leadership, strategy, structure, culture and people. Management/leadership and people can be related to communication between the involved parties in an organizational changing process.

These key factors that are important are also mentioned by the Ph.D. Micheal A. Beitler (Beitler 2006) who emphasizes the importance of the organization’s structure, culture, and (human) processes supporting the organization’s strategic plan. These factors are brought up many times in his book Strategic Organizational Change. The terms are visualised by Beitler (Beitler 2006) as shown in the following figure:

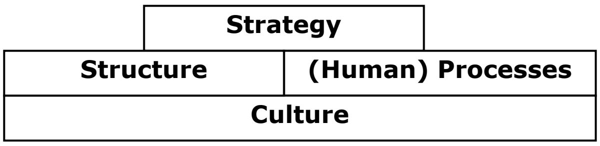

Figure 5 Change model by Beitler (Beitler 2006)

The figure is based on the Strategy-Driven approach. This approach assumes that organizational change in every organization is more effective if “*all the horses are pulling in the same direction*” according to Beitler (Beitler 2006).

The first step within the organizational change process is to be sure that the organization has a well-crafted strategic plan that clearly communicates how senior management intends to fulfil the organization’s mission. Frequently organizations have a vague mission and/or an unrealistic strategic plan. In this situation it is important that the organizations change representative creates sessions with the senior management to achieve a clear, realistic plan.

If this clear plan is present and communicated with the involved people, the current situation, so the organizational structure, organizational culture and the (human) processes that take place within the organization, must be determined. Attempts to implement the new defined strategy will fail if the organization’s structure, culture and (human) processes are not supportive with this new strategy. As shown in the figure up here, it is crucial that the strategy is clearly defined. When this is in place, the possibility occurs to make changes in the other three areas that are below the term strategy.

When an organization is considering an innovative office furniture concept, a whole new way of working will be implemented within their organization. So an organizational change will take place when the decision to innovate their office furniture is made. The factors influencing organizational change that are uncovered in this paragraph are:

- Organization's Strategy
- Organization's Structure
- Organization's Culture
- Organization's Management/Leadership
- Involved employees
- Organizational (Human) processes
- Change Process

Because these different factors will practise influence on the changing-process within organizations, these factors are discussed more in depth in the following paragraphs.

2.4 Definition of analyzed factors

In this paragraph the factors that are mentioned in the two previous paragraphs are discussed more in depth. Every factor is discussed within a separate subparagraph.

2.4.1 Organizational structure

It is possible to diversify organizations roughly in bureaucratic structured and organic structured organizations. In bureaucratic structured organizations the work is relatively easy and standardized and the decision participation is low. In organic structured organizations, the work is relatively complex and is adjusted by consultation, the decision participation is high (Nauta 1996). An organization can seldom be certified as total bureaucratic or total organic. An important indicator of bureaucratic versus organic structures is the level of participation of the employees related to the organizational policy (Nauta 1996). If there is little decision participation within an organization, the power to take decisions is located at one individual. If there is high decision participation among the employees, the decision force is spread over the employees (Mintzberg 1979). In bureaucratic structured departments/organizations the tasks are relatively easy and stable, most times coordinated by standardization. On the other hand the work within organic structured organizations is more complex and dynamic. Bilateral consultation is a more indicated coordination mechanism instead of standardization (Mintzberg 1979). Nauta (Nauta 1996) states that from many studies can be subtracted that in bureaucratic organizations with low decision participation a relatively closed communication climate is present. Leaders are commanding and dominant to the employees and there is less communication. Within organic organizations there is a relatively open communication climate, many communication is present and all employees are taking initiatives. According to Mintzberg (Mintzberg 1979) bureaucratic organizations/departments are conflict avoidant. An organic organization/department is on the other hand more competitive. Outspoken conflicts are not avoided because these can be used to reach creative results. Bureaucratic departments/organizations can be seen as strong structured situations with low freedom in the behavior of the employees. Standardization, rules and procedures are defining the behavior of the organizational members. Communication is not necessary for the job execution. Organic departments/organizations can be seen as relatively unstructured situations with much freedom in the behavior of the employees. Informal communication is used to influence each other (Mintzberg 1979). Within bureaucratic organizations also the difference in status is more remarkable in relation to organic organizations. More decision participation (organic structured organizations) is creating smaller differences between leaders and employees. (Mintzberg 1979).

Based on this text the differences between organic and bureaucratic structured organizations can be related to the openness of the organization. Open organizations are less formal and less centralized as bureaucratic organizations. Formality and centralization are discussed more in depth in the text that will follow.

The decision authority within companies and organizations can be on different levels of the organization. If the power within an organization is more located on one level or to one person/manager, we speak about centralization. If the power is more related to the employees itself, we talk about decentralization (Keuning and Eppink 2004). The managerial dispersion in the organization structure within a company is not always consistent with the geographical dispersion in activities. This means that the composition of the organization structure is not necessary a reflection of the geographical dispersion in activities. So the managerial authority can be centralized at one central place within the organization structure. The level of centralization or decentralization is dependent of different factors. Keuning and Eppink (Keuning and Eppink 2004) mention these factors, some of these can be related to innovative office environments. These related factors are:

- Variability of the environment;
- Technology at task execution;
- Geographical location and time of management and execution.

Innovative offices are close related to high developed ICT facilities. These ICT facilities foresee in the possibilities to work on different locations. There is a remarkable influence of high developed ICT on the level of decentralization (Keuning and Eppink 2004). ICT enables the organization to supply high quality, actual information to employees on lower levels in the organization. Because of that these employees are able to take their own decisions. This results in more independence of these people.
Based on this overview there is expected that the authority level (power within the organization) will differ between traditional and innovative office environments. Expectation is that traditional office environments will be more centralized and innovative office environments will be more decentralized.

According to van de Voordt (Voordt 2003) the organizational structure of organizations with a traditional office design is more typified by a hierarchic structure. When organizations are working in innovative office environments the structure of the organization is more flattened. A flattened organization is more informal in relation to a hierarchic organization which is more formal. A formal organization has been defined by Schein as: “The planned co-ordination of the activities of a number of people for the achievement of some common, explicit purpose or goal, through division of labor and function, and through a hierarchy of authority and responsibility” (Mullins 2007). Formal and informal organizations have, obviously, different characteristics. These characteristics are enumerated by Mullins (Mullins 2007) and visualized in the overview on the next page.

Formal organization:	**Informal organization:**
• Organizational charts • Spans of control • Policies and procedures • Organization mission statements • Job definitions and descriptions • Production efficiency and effective measures	• Personal animosities and friendships • Group norms and sentiments • Informal leaders • Prestige and power structures • Personal and group goals and perceptions • Effective relationships between managers and subordinates • Emotional feelings, needs and desires

Table 1 Characteristics formal and informal organizations

As told before, there is expected that innovative office environments are more informal (Voordt 2003). As shown in the overview, the informal characteristics are (partly) modeled around the conception communication openness and relationships between employees. The expectation is when organizations are working in more innovative office environments the organization will be more informal and the communication will be more open in contradiction to traditionally designed offices.

2.4.2 Organizational culture

The hard fact about culture is that it is not directly visible within an organization. However culture can be derived when there is focused on the behaviour of the people and look what is happening within an organization. (Sanders and Neuijen 1992). When assessing this highly complex phenomena culture it is hard to define the essential dimensions to measure. Different culture assessment instruments are developed in the past (Scott, Mannion et al. 2003). Every assessment method has its own advantages and disadvantages. Some instruments evaluate the organizational climate, usually by collecting participants' views of their work environment. However it is not clear if a relationship between climate and culture is present (Ott, 1989 in Scott, Mannion et al. 2003).

The scientist Geert Hofstede has developed his own perception on culture and achieved many publications with his view on culture. Hofstede (Hofstede 1980) states that there are five independent dimensions of culture differences, namely power distance, uncertainty avoidance, masculinity, individualism and long-term orientation (Hofstede 1980). *Power distance* is the first cultural dimension. Power distance is stating that power is distributed unequally (Hofstede 1980) and deals with the acceptation of this difference by the members of a society (Hofstede 1984). This inequality occurs with regard to members' abilities and their power within organizations. Hofstede states that unequal power distribution is the essence of an organization. Without inequality there would be disorder. (Hofstede 1980). The fundamental issue addressed by this dimension is how a society handles inequalities among people when they occur. This has obvious consequence for the way people build their institutions and organizations. (Hofstede 1984). *Individualism* is the dimension that describes the relationship between the individual and its environment. There can be a loosely knit social framework were individuals are supposed to take care of themselves. A tightly knit social framework (collectivism) stands for its opposite, so a situation where the individuals can expect their relatives, clan or group there they can expect unquestioning loyalty (Hofstede 1984). According to Hofstede (Hofstede 1984) this cultural dimension is the degree of interdependence a society maintains among individuals. The third dimension stated by Hofstede is *uncertainty avoidance*. The fundamental issue addressed by this dimension is how a society will react on the fact that the future is unknown. Some companies try to control the future; other companies let it happen (Hofstede 1984). Uncertainty is a key concept within organisations, which often is linked to the concept of environment. This is generally seen as everything that is not under the organizations direct control. It is a main source of uncertainty for which the organisation tries to find factors as compensation (Hofstede 1980). Like power distance, uncertainty avoidance has consequences for the way people build their institutions and organizations (Hofstede 1984). The fourth dimension is *masculinity*. This dimension is related to the two different sexes that exist, namely male and female. On his website Hofstede states that masculinity stands for a preference in society for achievement, heroism, assertiveness, and material success. Femininity stands for a preference for relationships, modesty, caring for the weak, and the quality of life. The norm is then that men are given the more outgoing, assertive roles and women the caring, nurturing roles (Hofstede 2007). In organisations a relationship exists between the career possibilities of men and women and the perceived goals of the organisation. According to Hofstede business organisations have "masculine" goals and tend to promote men, whereas for instance hospitals have more “feminine” goals and tend to promote women (Hofstede 1980).

There is solid evidence that the four dimensions are universal. Together they account only for a small part of the differences in cultural systems around the world, but this small part is important if it comes to understanding the functioning of work organizations and the people within them (Hofstede 2007).

Later research by Hofstede has shown that organizational cultures differ mainly at the levels of symbols, heroes and rituals, together, better known as practices. This is also stated by Sanders and Neuijen (Sanders and Neuijen 1992). According to Hofstede national cultures differ on the level of values (Hofstede 2007). Because the research about national cultures (that is described above) is based on values, this research is not perfectly suitable for the comparison of organizations within the same country. That is the motive that Hofstede identified six independent dimensions of practices based on a research conducted by IRIC across 20 organizational units in Denmark and the Netherlands (Hofstede 1998). The results are the following dimensions:

1. Process-oriented vs. results-oriented
2. Job-oriented vs. employee-oriented
3. Professional vs. parochial
4. Open systems vs. closed systems
5. Tightly controlled vs. loosely controlled
6. Pragmatic vs. normative

The business or industry where an organization is operating in is party determining these dimensions. Also some other ‘hard’ company characteristics are related to the scores on these dimensions. When you managing an international business, both national and organizational culture differences must be handled both. Organizational cultures are somewhat manageable, while national cultures are a given fact for the management (Hofstede 2007).

In the view of Sanders and Neuijen (Sanders and Neuijen 1992), the company culture can be seen as the organizational software. Also hardware is present in a company. Some examples are buildings, uniforms or the company cars. For sure, office furniture can be added in this overview. The authors state that this hardware is the expression for the organizational culture, but not the essence of the culture. This means that is not that important how this expression for the organizational culture is constructed, but that it is more important how the users are implementing this basis (Sanders and Neuijen 1992).

As told earlier, ways of expressing a culture are symbols, heroes and rituals. These characterizations refer to patterns of values and principles, which are more deeply entrenched within an organization. Symbols are available in different forms, like objects, words or actions. These symbols are expressing the identity of the company. If we focus on objects, we can think about the companies housing, the office furniture and the office maintenance (Sanders and Neuijen 1992).

The authors that are stated in the text above both point out that the culture of an organization depends on the values, norms and ideas. Many authors and scientists researched the specialism culture and many theories are present. However the basis of these theories is roughly the same. The theory of Handy and Harrison is easy to use and divided in four categories (Harrison 1972). When an organization culture must be analyzed roughly, this model can be used to position a company in a specific quadrant. The different quadrant according Harrison (Harrison 1972) are now discussed separately. A ***Macho or Power Culture (Zeus)*** is present within an organization if there is a strong leader figure. Characteristics of this type are; few rules, the individual is important and power is centralized. This culture is common in family companies and in small and starting companies. A ***Role Culture (Apollo)*** has the basis of rules, agreements, procedures and hierarchy. Persons are not important, role and status in the organization are more important than performance. In large bureaucratic organizations is this culture more common. The ***Task Culture (Athena)*** is related to organizations that are focusing on tasks and expertise. Results are more important than rules, balance of power or personal needs. Teamwork and collaboration is important. This culture found in small organizations that founded for a common goal. Within the ***Atomistic (Dionysus)*** or ***Persons Culture*** is the individual important. Characteristics of this type are minimal rules and procedures. Growth is not an important objective. This culture type is found in professional organizations with high-educated employees and modest size, such as counsels, lawyer companies and cooperation's. These four different culture types are placed within a simple 2*2 matrix, which is shown in the figure.

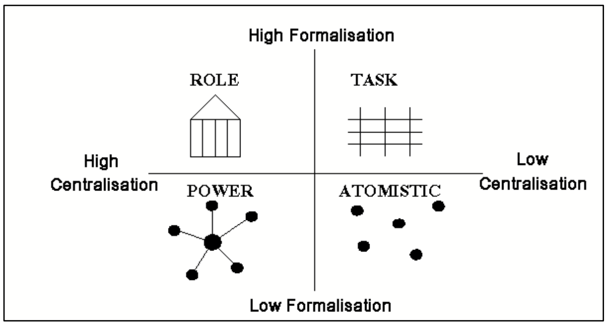

Figure 6 Handy and Harrison culture model

The expectation after this culture paragraph is that more innovative organizations are showing similarities with the persons (atomistic) culture and more traditional organizations will match more with the role culture. This expectancy is present because innovative organizations are less centralized and less formal. This is discussed earlier in subparagraph 2.4.1. Empirical research must prove if this presumption is correct.

2.4.3 Organizational leadership

Motivated people, a shared organization culture and good communication are necessary conditions that are responsible for the success of a organizational change and belong to the tasks of a leader (Hermsen 2005). Effective leaders are familiar with 4 items, namely that they have followers, achieve results, are the example for other people and feel responsible for the organizational change (Dijck 1996). Burns states that leadership is one of the most observed and least understood phenomena on earth (Burns 1978 in Costley, Dorfman et al. 2002). Leadership is based on interactions that occur within groups and is related to the interaction between two or more people (Vlist 1994). The behaviour of an individual that is focused on the realization of a certain goal or range of goals is the definition of leadership given by Hempill and Coons (Hempill and Coons in Hermsen 2005). These goals can be reached by the power exertion of the leader; however that is not the only way to achieve the required goals. Power is the ability to use sanctions as a tool to influence the results of the process. (Vlist 1994).

As described, there are many visions about leadership; however it is clear that goals must be reached as a combination of a good leader and the assistance of the people who are involved within the (changing) process.

According to Kotter, leadership is related to change. Leadership is creating a vision and gives a direction and a strategy. Communication strives that employees will be motivated that they are going in the same direction and will inspire and motivate the employees to start changing (Kotter 1996). Management is different from leadership. Within management the focus on controlling companies like they have to. This is done by processes like budgeting, planning, organizing and control. This is very important, but it is no leadership. Many companies developed a good management, however their leadership is underdeveloped. This is the reason that many changing-processes failed. According to Zaleznik (Zaleznik in Hermsen 2005) are leaders superior to managers. Leaders are more focused on values, goals, consensus and finding the right way in complex situations in combination with the realization of organizational goals where managers are more focused on rules, procedures, controls, the search for regulations and stability (Hermsen 2005).

Kotter (Kotter 1996) states that the style of leadership is an important factor for the success or failure of a changing-process. This relation can be clarified because leadership can be seen as a tool to influence other people to create a successful implementation (Bess 2001).

The path-goal theory of House and Mitchell (House and Mitchell 1974) describes the way leaders encourage their followers to achieve the goals that belongs to the direction (path) of an organization. In particular, leaders clarify the path so employees know which way to go, remove roadblocks that are stopping them to go there, increasing the rewards along the route and make sure they have control over outcomes the employees of an organization desire.

The path that leaders take to encourage their followers to achieve goals depends on the effect that leaders have on followers. Situational factors can be from influence whether the encouraging of leaders will be effective. According to House and Mitchell, there are four leader behaviour styles depending on the situation:

- ***Directive leadership*** has focus on specific advice; ground rules and structure are given to the group and are established. For example, clarifying expectations, specifying or assigning certain work tasks to be followed.
- ***Supportive leadership*** can be related to good relations are promoted with the group and sensitivity to subordinates' needs is shown.
- ***Participative leadership***, here the decision-making is based on consultation with the group and information is shared with the group.
- ***Achievement-oriented leadership*** is challenging goals are set and high performance is encouraged while confidence is shown in the groups' ability.

The chosen leadership can be effective for different kinds of situations; this is shown in the overview below. It is important to choose the right kind of leadership style to set the right goals on al levels of the organization and achieve them.

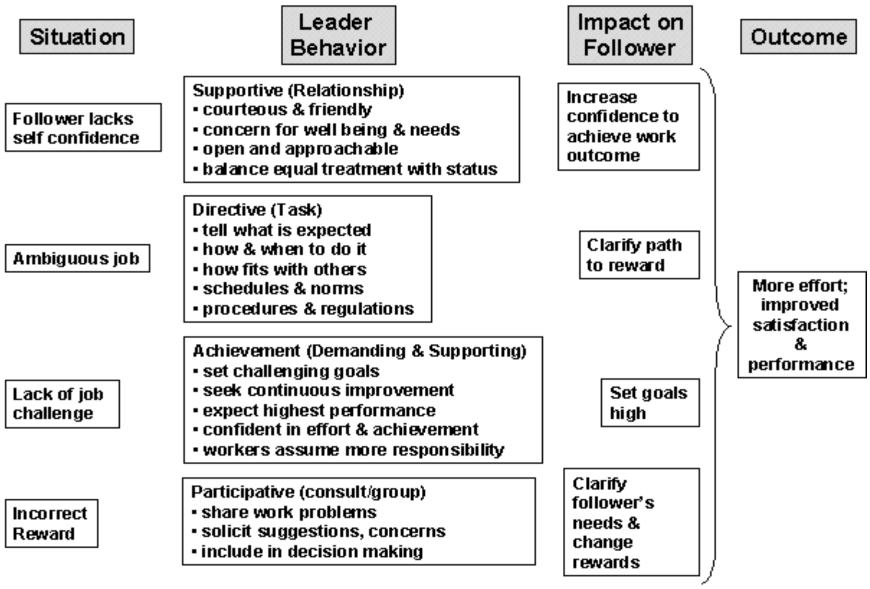

Figure 7 Path-goal theory of House and Mitchell

Another model that looks like the model of House and Mitchell prescribes how a leader must behave in the relation to his inferiors and is described by Hersey and Blanchard (Hersey and Blanchard 1992). A division is made on basis of human-orientation and task-orientation. The way how the leadership must be carried out depends on the level of human-orientation and task-orientation. Effective leadership is present if leaders adapt their activities to the situation and wants of the employees. The leadership style is determined by two factors, the capability and the willingness of the employees. If people are able to carry out tasks by their self and are sure about what they are doing they have the capability, if they are motivated to deliver good performance, they show willingness. Based on the capability and willingness of the employees, Hersey and Blanchard recommend four leadership styles, the participating style, the selling style, the delegating style and the telling style, as shown below.

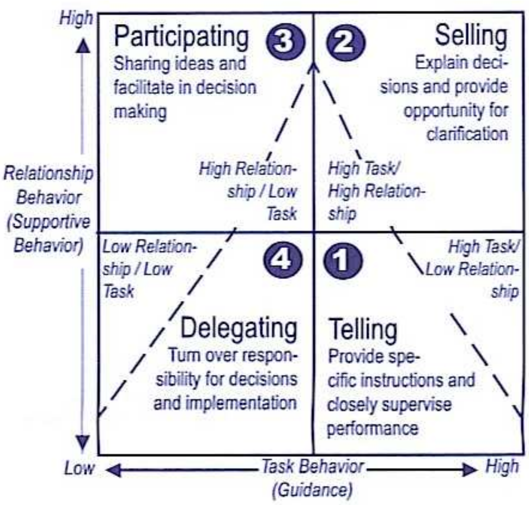

Figure 8 Hersey and Blanchard leadership model

Within the ***participating style*** the happiness and the atmosphere at the departments are most important. The labour situation is adapted to the employees' interests and less on the task that is carried out. The employees and the leaders are accepted as they are. When problems occur, the solutions are sought in a way that creates no resistance by the employees. There is a good internal communication. The ***delegating style*** is more focussed on the fact that if employees are capable and motivated that they can carry out the work by their selves. This leadership style is more focussed on rules and procedures. The manager is delegating the tasks to his employees, his tries to create less responsibility for himself. The manager is just a person that is transferring information from his superiors to his own employees. The ***selling style*** is focussing on the integration of the employees ideas within the decision-making process. The employees are people that can be seen as a contributor to the organizations objectives. The leader is looking for solutions in cooperation with the employee that suits best to the particular situation. The leader is giving direction to the jobs, he is coaching his employees. The communication is both bottom-up and top-down. Mutual notion and support are central within this style of leadership. Within the ***telling style*** the work/tasks are the main focus. The appreciation of the employee is measured in relation to the delivered performance. The workplace is arranged in a way that the work is minimal influenced by human problems and interactions. The leader is the one that makes the decisions. The employees are listening to his "commands". Uniformity of operation is important. The communication is top-down, the work atmosphere is formal.

There is expected that innovative organizations show similarities with the participating leadership style because these employees are less guided in their tasks because of their freedom of task execution. However relationship between employees is quite important. More traditional organizations will probably show more relationship with the selling and telling leadership styles since these styles are more focussed on guidance within the task execution. So the leader is giving directions to the jobs that are carried out, the employees are less free in the way they carry out their tasks.

2.4.4 Organizational technology & processes

The technology aspect is important to achieve innovative furnished offices. Advanced information- and communication technology, like powerful and mobile computers (laptops), mobile phones, intranet and internet are examples of this technology (Vos and Voordt 2001; Voordt 2003). These aspects make it possible to create freedom within the job activities and the location where these activities will be carried out.

Vos and van de Voordt (Vos and Voordt 2001) state that employees who are working most times solo, working most times of the day with their computer or reading documents the most times of the day, a private office is a better solution instead of a flexible workplace. So for many functions within office environments flexible working is not efficient. So functions that require many confidential conversations or with tasks that need high concentration, a private office (more traditional office environment), if possible facilitated with powerful information and communication technology, can be a better solution. So, the fit with innovative offices depends with the activities which are carried out within the office environment. The figure on the next page is showing the average time of office activities per employee.

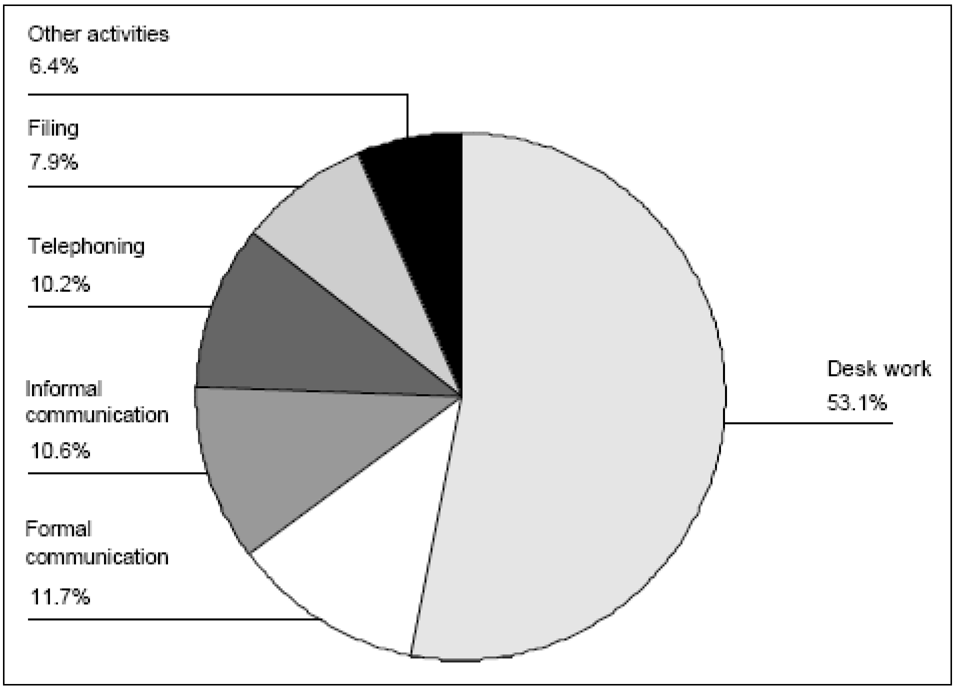

Figure 9 Average office activity partition (Vos and Voordt 2001)

The figure above is showing the most important office activities. The biggest part of the pie is desk work, followed by formal and informal communication. For desk work and communication the location where these activities can be carried out is an important aspect. Some employees can do these tasks at home, at the customer or on the way, if necessary connected with the main office. The next aspect is telephoning. This factor is related to the reachableness of the employees. For some functions this activity can be carried out on different places, however some functions require a fixed location, for example for a higher concentration. The last aspect, the filing (or archiving) is related to the job related attributes because of the fact that some functions require many storage opportunities instead of other functions. Because it is more difficult to store many job related attributes within an innovative office environment, it is plausible that functions that are carried out within innovative office environments are requiring less storage space. Based on this short summary, some keywords can be subtracted. These are:

- Location where the job activities are carried out.
- The mobile reachableness of the employees.
- The filing / achieving possibilities.
- The freedom when and how the tasks are carried out.

These four factors are determining globally the context of the technology aspects that are related to innovative office environments. These factors will used within the empirical research.

Because the items above are related to the freedom of the employees when carrying out their tasks, there presumption is that tasks, rules and policies are more reported in innovative organizations because the employees in innovative office organizations are able to do their tasks where and how they want. When this occurs within an organization, a frame that contains the conditions is desirable to show the employees what is expected from them.

2.4.5 Organizational changing-strategy

When an organization is going to change it is important that, before the change, this planned change must be shaped in advance. So the strategy, the statement of the required means that will be utilized, is anyhow very important. Many scientists studied this object, and global these results are the same. Within this paragraph the perception of some scientists will be reviewed.

The main element of a changing strategy is certainly a planned change. Successive phases must be realized to guide the changing process. The most strategies that are known in the literature are formalized in certain models. These models are showing the important, most occurring elements of changing strategies that belong to a certain type. Mostly the assumptions about the human perception play hereby an important role (Tak and Netten 2004).

Chin en Benne notice in their book (Benne, Bennis et al. 1974) three different changing strategies. These are the power-coercive strategy, the empirical-rational strategy and the normative-reeducative strategy.
Within the power-coercive approach the focus in on the use of political and economical power. So people within an organization will change because they must because of the plans of their superiors. This strategy can be characterized as a top-down strategy. The leaders can use sanctions which can be useful within a changing process. However the power is also the restriction of this strategy. This type of strategy is already used for a long period of time. Conflict and/or bargaining techniques can be part of this strategy (Benne, Bennis et al. 1974 in Tak and Netten 2004).
The empirical-rational strategy states that conviction is central. People will change their behaviours if they see that these changes will support their own values. However a human is not only a rational being, it is also devoted to certain ways of behaviour, ways of collaboration, leadership and certain colleagues. Research results and the distribution of underpinned project experience are an important element of this strategy (Benne, Bennis et al. 1974 in Tak and Netten 2004).
Within the normative-reeducative strategy they assume that human behaviour just will change after changing their own values and norms. This strategy is opposing to the power-coercive strategy because the orientation is bottom-up instead of top-down. The focus is on the employee and his involvement in the shaping of the change-program. This fact is difficult for the employees because it expects a lot of these people. During the process taken perspectives can be discussed frequently, so the changing-process can last for a long time. Finally the solution will be sought in the influencing of behaviour of the parties involved (Benne, Bennis et al. 1974 in Tak and Netten 2004).

Managers must create a balanced combination of innovative strategies, based on different basic assumptions and situations where the changes will take place. However there is not one best strategy within the change-process.

2.4.6 Organizational change process

A specialist about leadership within organizations is John P. Kotter. In his book “Leiderschap bij verandering” he states that recent methods of changing (like TQM) fail because they are not able to change behaviour within an organization. The focus is on 8 shortcomings within a change-process. These shortcomings are; Allow to much satisfaction, neglecting the creation of a sufficient powerful leading coalition, undervalue the force of a good vision, minimal communication about the vision, allow obstacles that obstruct the new vision, neglect the creation of short term successes, jubilate to early and lacking the anchoring of the changes within the organization culture (Kotter 1997). These 8 shortcomings leaded to an eight stages action plan to change an organization with success. This plan is also related on two important patterns which are based on previous change-trajectories. The first pattern is that useful changes are related to a more-phase process that is enough combative and is creating motivation to conquer all the resistance. The second trajectory is that the changing-trajectory must be supported by high quality leadership and not by sublime management. The 8 phases are:

1. Create urgency awareness;
2. Bring up a leading coalition;
3. Develop a vision and a strategy;
4. Communicate the change-vision;
5. Create a broad basis for the change;
6. Generate short term successes;
7. Consolidate improvement and generate more changes;
8. Anchoring the new approaches within the organizational-culture.

The last step is the change of the organizational-culture and preserves this change intact. If the first 7 stages are finished, they can create an association between new actions and the improvement of the achievements. At this point the new culture can be adapted to the new ways of working. If the culture-change will occur earlier, the danger exists that this early culture change is not matching with the changes that will be implemented during the process. The norms and values of course change gradually during the process. However the final norms and values can be registered at the end of the process. A culture change can occur by lot of talking and information-sharing and by the replacement of people who can’t acquire the new culture (Kotter 1997 in Tak and Netten 2004).

Kotter is more focused on the creation of a change together with all the involved people. This change-process must be led by a leading coalition, not only by one leader. This is necessary in this era where organizations are larger and people are less obedient. However, both scientists are convinced that good supervision is essential within a changing-process. A second similarity between both theories is that the creation of a basis is very important within a change-process because this will stimulate the support of the employees. The way to achieve this basis is different. It can be done by compulsion with help of the convincement of employees or give the employees the opportunity to create input. If the vision will not be changed we can be sure that nothing will change at all. Despite differences between these theories, Kotter and Chin and Benne are not refuting each other. The theory of Kotter is more recent; however a small disadvantage is the space for differences in interpretation.

2.5 Conclusion literature study

Based on the studied literature, two overviews are defined. The decision to make this division is based on the fact that the research is twofold. Within the empirical research only one of both topics is studied. The first paragraph of the literature study is focusing on two organizational models. Based on these two models the key factors that will be used for the organizational analysis are justified. The factors are shown in the picture below.

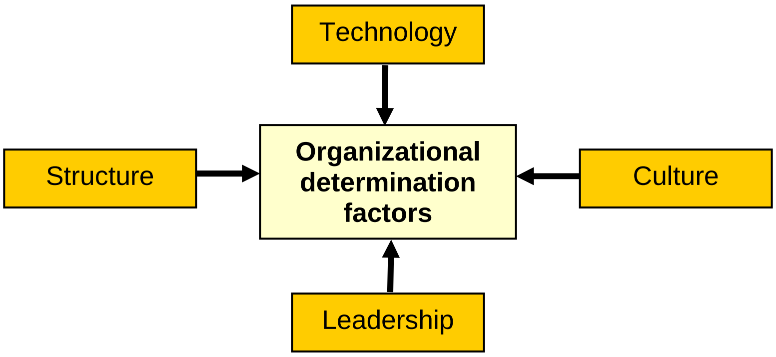

Figure 10 Organization analysis model

The second part of the research is focused on the change-process within organizations. Within this study the focus is on the change-process within organizations who implemented (or failed with implementing) an innovative office environment. The literature study proved that there are different factors influencing the organizational change-process. These seven factors are visualized in the boxes in the outside circle. The combination of these different factors is the degree of successfulness of organizational change.

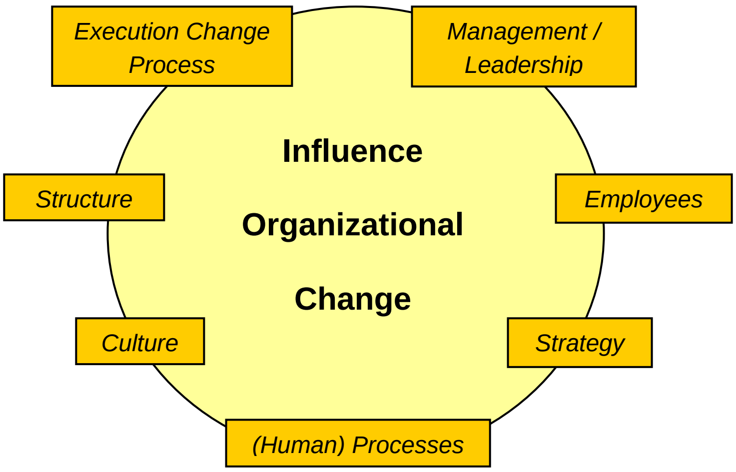

Figure 11 Factors influencing organizational change

The figure is showing that for a successful implementation seven factors must be taken into account. These factors are that occurring influence on the organizational change. Based on this information an advice can be given how change processes have to occur within innovative office furnishing environments.

2.5.1 Conceptual model

The conceptual model that will be used in the empirical research is based on the first model that is shown in this paragraph. In paragraph 2.1 is illustrated what the characteristics are of innovative offices instead of traditional offices. These are shown in the centre of the model and are the organization characteristics that are necessary for an organizational analysis. These characteristics are uncovered in paragraph 2.2.

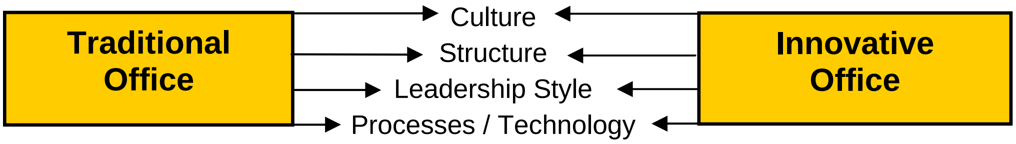

Figure 12 Conceptual research model

The model is showing the extremes, two different types of offices. On the left side the traditional office is shown and on the right side the innovative office is shown. In between the organizational factors are visible; these are the factors that will be used to typify these two types of offices.

Traditional and innovative organizations are typified by their own organizational characteristics. The characteristics that belong to the different organizations according to the literature study are shown in the table below. There is indicated in which paragraph this information is present.

Variable	Traditional office	Innovative office	In paragraph
Organizational Structure	More formal More centralized	More informal More decentralized	2.4.1
Organizational Culture	Role Culture	Persons Culture	2.4.2
Organizational Leadership Style	Selling & Telling Leadership style	Participating Leadership style	2.4.3
Organizational Processes	Lower use of rules, policies & procedures	Higher use of rules, policies & procedures	2.4.4

Table 2 Results literature study

The factors that are important when an organization is going to change can be related to this conceptual research model. However, these factors do not belong to the conceptual research model (that is shown on the previous page) within this research. In the figure below is shown how the organizational change factors can be related to the conceptual research model. This addition to the conceptual research model is showing the factors that are influencing an organizational change. These factors are uncovered in paragraph 2.3. The various factors that are present in the model are discussed separately and more in depth in paragraph 2.4.

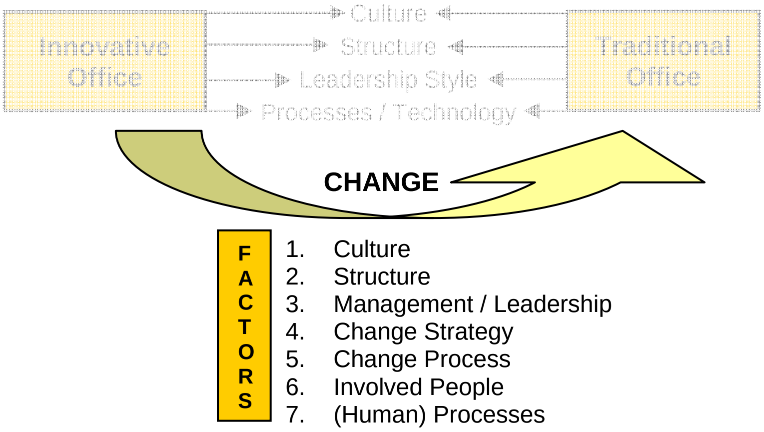

Figure 13 Change factors related to conceptual research model

The factors in this model must be taken into account when an organization is going to change from a traditional office environment to an innovative office environment. These factors will contribute to a successful organizational change if they are taken into account.

Chapter 3, Empirical research

The literature in the previous chapter showed the important factors in relation to an organizational diagnosis and a model that shows the success factors for an organizational change-process. Within the empirical research, the customer characterization will be based on an organizational diagnosis that contains the different factors that are defined in the first part of the literature study.
Organizations that make use of office space (organizations who could be customers of organizations that foresee in office furniture, like Samas) will be approached to fill in an online questionnaire. This questionnaire contains questions to analyze the organizational culture, leadership style, structure, technological and process factors and a few context questions. Based on these characteristics the creation of customer profiles will take place. In the following paragraphs this research approach will be discussed more in depth, the respondents profile will be described and the both research phases are clarified.

3.1 Goal

The goal in of this empirical is to analyze organizations who are potential customers of (innovative) office furniture. Based on this empirical research the differences between organizations who are working in a traditional office environment and organizations who are working in an innovative office environment will be analyzed. If there are clear differences between these two types of office furniture customers, these characteristics that belong to the different groups can be used to recognize different customers who want to invest in new office furniture.

3.2 Quantitative vs. qualitative research

There are two types of research, qualitative and quantitative. The goal of quantitative research is the confirmation of some premises on a larger population. This analysis will be carried out with statistical tools that will be applied on a sample of a larger population. Quantitative research is only applicable when there are sufficient units to measure (Schreuders Peters 2000). The data that will be collected for quantitative research is in numerical form (Punch 2005).

In qualitative research statistical methods are barely used. Frequently the goal of this type of research is to map one case and the possible confirmation if all the theoretic causes for a phenomenon are present. Often there is no population that is large enough to carry out quantitative research, so a quantitative approach is useless in that situation (Schreuders Peters 2000). The data that is used for qualitative research is in the form of words (Punch 2005).

Within this research the quantitative method is applied. This decision is taken because the goal of the research is to analyze the differences between offices with traditional and innovative office furniture. The results of this research must be generalized, if possible, to the whole population because potential customers must be recognized. When qualitative research is carried out, this is not possible.

3.3 Method

The data gathering is done on a structured method. Before the data gathering there is exactly determined which information was necessary. The survey contained specific questions because there was already known which information was needed. All questions within the survey where asked in a mode such that the answer only has to be selected, so the survey only contained closed questions. The questions are asked directly because there were no threatening questions and anonymity was guaranteed.

A selection of the respondents is contacted by telephone to gather their correspondence information. The gathered information is added to the database that already contained a selection of e-mail addresses. The respondents are all approached by e-mail. In this e-mail message the context of the research is clarified. The e-mail message also contained a hyperlink that directs the respondents to a website with the survey questions (Rixtel 2007). The advantage of this online survey is that the respondents can be reached easily, it is quicker, it saves paper and it is less costly (Online-Enquête 2007). The opportunity to fill in the survey anonymously is offered to the respondents. This is done to increase the response. Also a clear research clarifying correspondence is added to the e-mail message to achieve a higher response rate (Baarda and Goede 2006). After one week of completing time, a reminder message is send to the respondents. This action is also executed to increase the response rate.

Before the data gathering a pretest was carried out on two respondents. One of these respondents was an employee within a facility management department of a profit organization. The other respondent was an executive employee of a non-profit organization, also responsible for purchases of office furniture. This test was carried out to analyze if there where unclear questions within the survey and to check the total time to fill in the questions. All comment is examined, if necessary changes within the survey where implemented.

3.4 Measures

Within the questionnaire are different measures used. Within this paragraph the different measures are discussed shortly to give understanding about the composition of this questionnaire.

Innovativeness level

To create different groups, traditional and innovative offices, the innovation level within organizational offices must be measured. There is decided to develop a new scale because of different reasons. First, within the literature no suitable, validated scale is found about innovative office furnishing. Secondly, the scale must match with the office innovativeness in the view of office furnishing organizations (like Samas). The new scale is developed based on the literature study about innovative offices, conversations with specialists within Samas and internal Samas documents that contain information about characteristics about innovative offices in their view. In total, eight 5 point likert scale statements are defined. If the answer is low, the organization is furnished more traditional, if the answer is high; the

organization is furnished more innovative. The disadvantage of a new developed scale is that the validity is not jet justified. However this can be done afterwards by defining cronbach's alpha.
To examine if the scale is measuring the right measure, a control question is adopted within the questionnaire. The question: "Were there publications concerning (innovative) office furniture within your organization?" is used to check if the organizations that had a publication about innovative office furniture are also having higher scores on the new developed scale.

Organizational culture:

The culture that is present within an organization is, according to the literature study, often used for an organization diagnosis. Between organizations that are using traditional or innovative office furniture, differences in culture typologies are expected. By use of the Harrison and Handy culture model there will be checked of a specific culture is present in the described groups. Harrison and Handy (Harrison 1972) suggest that organizations can be classified under four cultures, namely power-, role-, task- and persons culture. Useful, previously used survey questions are gathered from a promotion report (Kollenburg 2003) and an other research (Bensdorp, Coenen et al. 2006). The same questions were also found on a website to analyze organizational culture (Markensteijn 2007). Of course, these questions are based on the Harrison and Handy culture model.

Organizational structure

Organization structure is also a factor that is part of this organizational diagnosis. There is expected that organizations with innovative office environments are more decentralized. Also the contact between employees is expected to be more informal. To measure the (de)centralization and the (in)formality of the organizations existing management scales are used (Bruner, James et al. 2001). These scales consist of a set of premises. The premises must be answered on a 5 point Likert scale. For the scale about centralization a cronbach's alpha (Baarda, Goede et al. 2003) of 0,88 is the result of previous research. The scale about communication openness (this scale is used to measure the formality) has a cronbach's alpha of 0,67. Cronbach's alpha measures the homogeneity within the scale. A higher value indicates a better relationship between the premises, so a higher reliability level. Most times the cronbach's alpha value is assumed to be at least 0,60 (Baarda, Goede et al. 2003). So in this case there can be concluded that these scales are sufficient reliable for this research. The used scales are available in appendix 1.

Organizational leadership style

The literature study showed that leadership style is also a typifying factor for an organization. The leadership style will be measured with validated questions that are gathered from the Jules Ruis website (Ruis 2007). The questions are based on the Hersey and Blanchard leadership model, the original source of these questions is the book "situationeel leidinggeven" (Hersey 1995). The used questions are also used in another research (Bensdorp, Coenen et al. 2006), where it resulted positive expectancies. This declares that the questions are measuring what they should measure; organizational leadership style.

Organizational technology / processes

The questions about the technology were not available in a standard scale. The questions are about the subjects fixed workplaces, mobile reachableness, personal achieving space and freedom of task execution. The questions are asked in the form of a question that states if the success of the company / organization is dependent to the four mentioned factors. The answers to these questions are measured on a 5-point likert scale.

There is also the presumption that tasks and rules are more reported in innovative organizations because the employees in innovative office organizations are freer in the execution of their tasks. To test this premise, a standardized scale is used. The used scale is a four-item, dichotomous yes/no scale to measure the extent to which firms used written rules, policies, and procedures (Bruner, James et al. 2001). The scale has a cronbach's alpha of 0,73 and is shown in appendix 1. Cronbach's alpha measures, as told before, the homogeneity within the scale. A higher value indicates a better relationship between the premises, so a higher reliability level. Most times the cronbach's alpha value is assumed to be at least 0,60 (Baarda, Goede et al. 2003). This results in a conclusion that this is a reliable scale.

Context measures

The survey contained also a selection of more general questions; in this research they are called the context measures. The questions are about the size of the company, the sector where the organization or organization belongs to and a question if the organizations primary processes are office related. Also the amount of flex-workplaces is measured and the influence of the works council is part of these measures.

3.4.1 Measures overview

To clarify the information that is discussed in the previous paragraph, the different measures are summarized. The overview contains three types of variables, the dependent one; this is the traditional or innovative office furnishing, the independent ones that are the organizational characteristics and context variables, which are measuring the more common questions like size and sector. The overview is also showing how the different variables are measured.

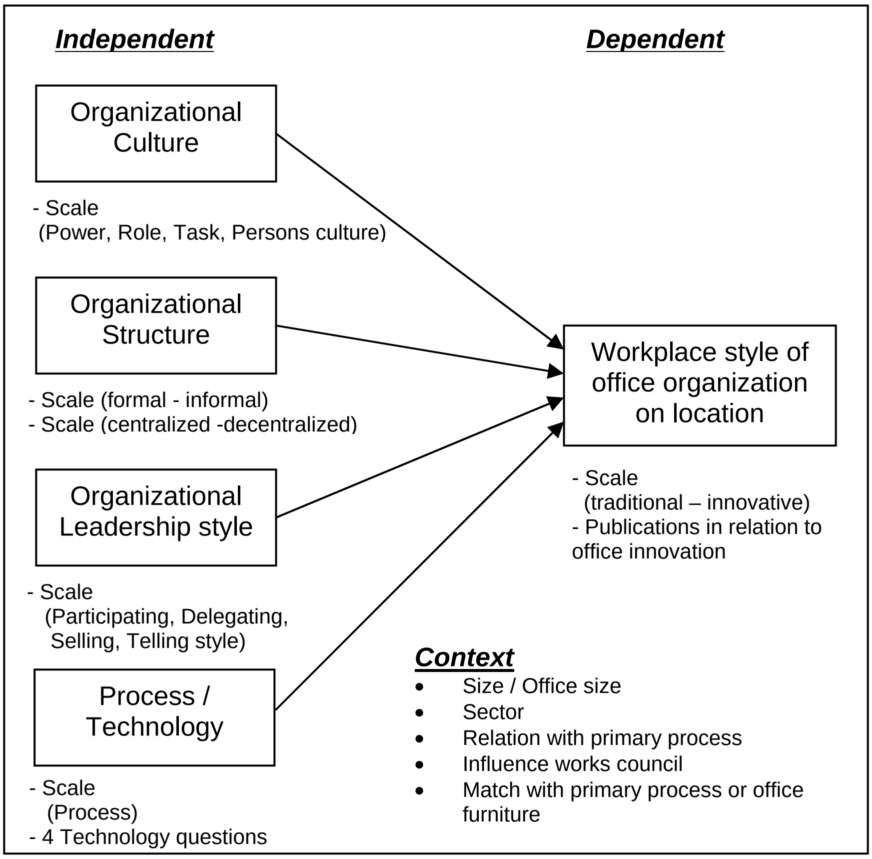

Figure 14 Variables within empirical research

3.5 Respondents

The survey that is carried out is spread among organizations that are larger than 500 fte (Full Time Equivalent). The decision to approach these organizations is made because there is assumed that these organizations are users of larger office departments / buildings.
It is important that an organizational member is reached who is familiar with the office environments of the organization, but this person must also have knowledge about organizational factors within the organization. In most organizations the facility manager is also responsible for the office furniture and furnishing. Because of this information this person is selected as contact person within the organization to fill in the survey. The facility manager is also a person who has a position higher in the hierarchy of the organization. This makes it reasonable that this person is able to answer the questions concerning the organizational factors. If an organization explicitly declared that the facility manager was not able to answer these questions, there is asked for the manager who was responsible for the office furnishing. In some cases a manager who is responsible for the buildings or a purchasing manager is added to the list. However the greater part of the contact persons are facility managers.

3.6 Sample

Within the facility management chair of Wageningen University a database of Dutch companies and organizations with more than 500 fte is available. This database is based on data of the Dutch Chamber of Commerce. This database is replenished with the database from Cap Gemini that contains contact persons of non-profit organizations within the Netherlands. Larger companies and organizations that were not present within the list are added. The corporate information of these companies and organizations is gathered through the corporate websites of these organizations. The total database contains at this moment approximately 650 Dutch companies and organizations. There were already approximately 240 contacts persons present within the list.
There is presumed that to the whole population consists of these 650 organizations. So this list is used as a database of the total population of this research. From this population a sample that must be reached for a valid research is calculated. The sample for this research is specified on 242 organizations (Steekproefcalculator 2007). This is the sample that is necessary. With this amount of respondents the results of the research can be generalized to the whole population, the 650 companies that are mentioned before.
Because non-response is expected, the decision is taken to increase the amount of respondents. A larger sample of organizations is contacted; this resulted in approximately 120 extra contact persons. At this moment about 360 contact persons are known within this list. These 360 contact persons are used to distribute the survey. This is widely 100 more than the sample that is necessary for valid conclusions, so this is sufficient for this research.

Chapter 4, Analysis and results

Within this chapter the analyses which are carried out are discussed more in depth. This chapter also contains the results per treated topic from the survey. The first paragraph contains more general information, like research response, reliability et cetera. The following paragraphs are more going into depth in the analysis subjects of this research.

4.1 Descriptive statistics

Within this paragraph the supporting information is summarized. Within the different subparagraphs this information is discussed separately, arranged per subject.

4.1.1 Research response

As told in the previous chapter, the total population is approximately 650 organizations. The database that is used contains respondent e-mail addresses of 364 organizations. These are the organizations that are contacted. Because the survey is distributed digitally, the response is registered exactly. The results are shown in the following table.

Approached respondents	**364**
Reached respondents	**334**
Observed questionnaires	**218**
Partly completed questionnaires (still useful for part of the analysis)	**143**
Total completed questionnaires	**124**

Table 3 Research response

Based on the respondents who are reached (the e-mail message to some respondents failed because of different reasons; one of the main reasons was that the respondents were not active anymore within the organization) and the partly completed questionnaires a response rate of 43% is reached. Based on the total amount of reached respondents and the total completed questionnaires, still a response rate of 37% is achieved. The partly completed questionnaires can be used partially, so for a few analyses these results are left in the SPSS database.

4.1.2 Reliability of scales

Within the survey some validated, previous used scales are used. This is done to be sure that the given answers were valid. When scales are composed without use of validated scales, there is a risk that the cronbach's alpha is too low, which means that the premises that are used in the scale are not associated with each other; when this occurs the measure cannot be used to draw conclusions. The innovativeness scale is composed within this research because no comparable scale was available. In the table below the alpha values of the different scales are given.

Scale type	Number of Items	Cronbach's Alpha	Original Cronbach's Alpha
Innovativeness	8	**0.82**	Not available (new scale)
Centralization	5	**0.83**	0.88
Formalization	5	**0.71**	0.67
Process	4	0.54	0.73

Table 4 Cronbach's alpha values

Baarda en de Goede state that the cronbach's alpha must be at least 0.6 (Baarda, Goede et al. 2003). In the book of Andy Field the indication is given that the cronbach's alpha must be around 0.7 to 0.8 to use for valid conclusions (Field 2005). As shown in the figure above, all values are higher than 0.7, only the process scale is lower. The innovativeness, centralization and formalization scale are used in total to draw conclusions. However the process scale is not used in total because of the lower alpha value. Because of this the different premises are analyzed separately.

4.1.3 Frequencies

The database that is used for the empirical research contains a diverse selection of different types of companies and organizations. Within the used database is not known to which sectors the companies and organizations belong. Within the survey a question to define the sector per respondent is added to register this information. This information is also used to check if the division is showing no remarkable highlights. The figure below is showing the percentages and absolute values of respondents within the different sectors.

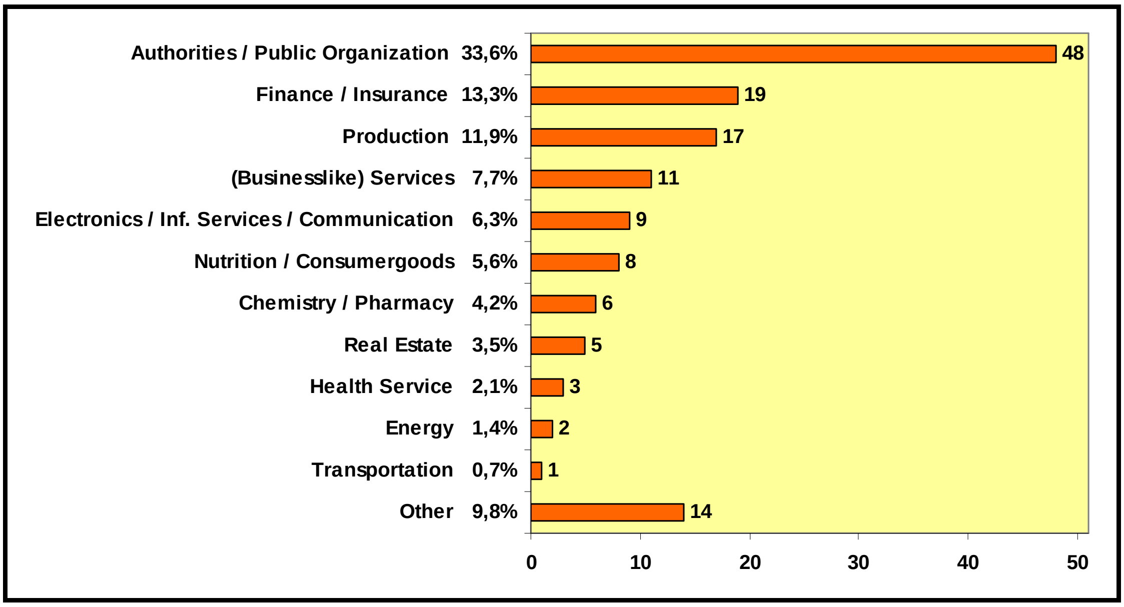

Figure 15 Respondents per sector

The amount of authorities and public organizations attracts directly the attention. One third of the respondents is within this sector. To be sure that the respondents who completed and returned the survey are a reflection of the whole population, this relation is checked. The results are shown in the table below.

	Contacted	Responded
Authorities / public organizations	102	48
Commercial organizations	262	95
Total	364	143
Percentage authorities / public org.	**28%**	**34%**

Table 5 Percentage of commercial organizations

The table clarifies that 28 percent of the contacted respondents is working within an authority of public organization. Among the respondents who returned the survey, 34 percent is working within an authority or public organization. The difference is just 6 percent, so the conclusion is drawn that the high amount of respondents in the group authorities and public organizations is a good reflection of the total population.

The size of the companies / organizations is also measured within this research. There is made a difference between the total organization size and the size of the office space. The size is measured in the amount of employees. The results of this measure are in the following table.

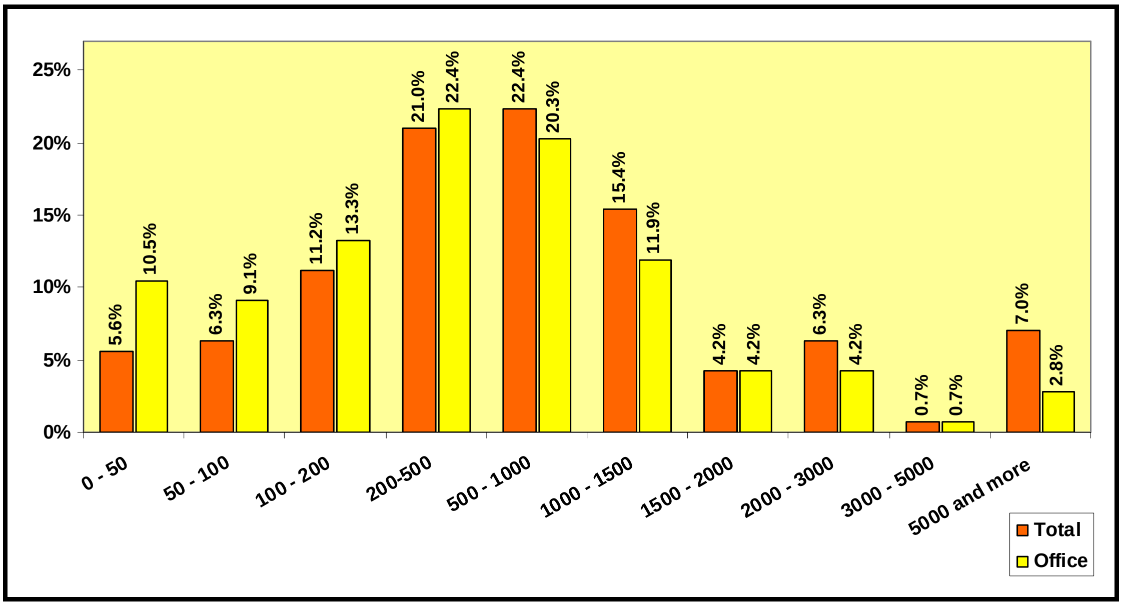

Figure 16 Organizational (office) size

The figure shows that the most respondents are working in medium sized companies. In all groups are sufficient respondents; however one of the biggest groups is clearly smaller. If the total size of the organizations is compared with the total office size, no big differences can be detected. Only small organizations have relatively many office employees and large organizations have relatively few office employees.

4.1.4 Traditional versus Innovative

The degree of innovativeness is measured with help of 8 premises. All these premises are about innovative office furnishing. The respondents are asked to give a score on a 5 point likert scale to these 8 premises. The value 5 indicates “totally agree”, the value 1 indicates “totally disagree”. The value 3 is neutral. Out of these eight premises an average value is calculated as a measure of innovativeness. If the value is higher, the organization is working in a more innovative office environment. The goal of the research is to analyze the difference in organizational characteristics between traditional offices with innovative offices. This requires two groups; “the traditional organizations” and “the innovative organizations”. So the organizations must be separated based on the value that indicates the innovativeness within the organization. Because the scale is from the value 1 to the value 5, there is decided to separate minimal at the value 3 because this is in between one and five. Because of the fact that 3 is the neutral value in this scale, there is considered to increase the value to 3.5 to be sure that the group with innovative organizations are *really* innovative. The table is showing the respondents per group (traditional of innovative) when separated at the value 3.0 and 3.5.

	Scale separated at 3.0		Scale separated at 3.5	
	Respondents	*Percent*	*Respondents*	*Percent*
Traditional	**108**	**75,5 %**	**125**	**87,4 %**
Innovative	**35**	**24,5 %**	**18**	**12,6 %**
Total	**143**	**100,0%**	**143**	**100 %**

Table 6 Frequencies traditional vs. innovative

When the separation is at the value 3.5, there are only 18 respondents left in the group with innovative companies and organizations. The proportion between the both groups is quite skewed. To execute valid comparisons between the two groups, it is desired that there are more respondents in the group with innovative companies and organizations. So the preference is to separate at the value 3.0.

However it is necessary to know that when the scale is separated at the value 3.0 that no strange symptoms are occurring during analysis because “too traditional” organizations and companies are in the innovative group. To prove that the results are not totally different if the separation is at 3.0 instead of 3.5, the tables on the next page are showing some values (means per scale, mean rank Mann-Whitney test) of a selection of (major) scales that are used within this research.

	Separated at 3.0		Separated 3.5	
	Traditional	Innovative	Traditional	Innovative
Initiative works council	2.1	3.1	2.2	3.3
Amount of flex-workplaces	1.3	2.0	1.4	2.4
Level of centralization	2.4	2.4	2.4	2.5
Level of formalization	2.7	2.4	2.6	2.4

Table 7 Mean's per scale

The values that are shown in this table are the averages on the different scale that are answered within the shown groups. The variances that are shown when the scale is separated at the value 3.5 are comparable with the variances that are shown when the scale is separated at the value 3.0. This leads to the conclusion that the change from the value 3.5 to the value 3.0 will not result in strange differences in the average means.

	Separated at 3.0		Separated 3.5	
	Traditional	Innovative	Traditional	Innovative
Initiative works council	*63.5*	*96.0*	*67.2*	*101.5*
Amount of flex-workplaces	*67.1*	*85.3*	*68.2*	*94.5*
Level of centralization	*66.9*	*69.2*	*66.6*	*73.1*
Level of formalization	*72.6*	*52.6*	*69.6*	*53.9*

Table 8 Mean rank per scale (Mann-Whitney U test)

The values in this table are showing the mean ranks which are the result of the Mann-Whitney U test. Also these values are not showing strange patterns when the separation is at 3.0 instead of 3.5.

This information leads to the decision that the scale will be separated at the value 3.0. This decision is taken to increase the amount of companies and organizations in the group with innovative companies and organizations. This will result in a higher validity during the analyses that will follow in the paragraphs that will follow.

4.2 Context measures

Within this paragraph the context measures are analyzed and discussed. These are about publications, the sector, the organizational size, the relation with the primary process, the works council initiative and the amount of flex-workplaces. The other measures will follow in the paragraphs afterwards.

4.2.1 Publications about office furniture

To guarantee that the innovativeness scale is measuring really innovativeness, a control question is added to the questionnaire. The question that is used is: “Were there publications about (innovative) office furnishing within your organization?” The expectation is that there is a relation between the amount of publications and the innovativeness of organizations according to the own developed innovativeness scale. The results are shown in the table.

		Traditional	Innovative	Total
Publications about office furniture.	Yes	36	22	58
		36,0%	66,7%	43,6%
	No	64	11	75
		64%	33,3%	56,4%
Total		100	33	133

Table 9 Publications

The test that is carried out to prove significance is the Fisher exact test (Aarts 2002). This test is for the comparison of two independent groups (traditional and innovative) with two categories (yes and no). As shown, the amount of publications is higher within the group innovative instead of the group traditional. The corresponding p-value that is the result of the Fisher exact test is 0,02. This means that there is a significant difference (with a reliability of more than 95%) between the traditional and the innovative group. So organizations with innovative office environments have more publications about innovative offices instead of traditional ones. This is indirect evidence that the developed innovativeness scale is measuring what is should measure; the degree of innovativeness.

4.2.2 Organizational sector

As reviewed before, the sector is indicated by the respondents. To examine if traditional office organizations are belonging to different sectors as innovative office organizations, a cross tabulation is shown. The group with innovative office organizations is smaller then the group with traditional office organizations. Because of this the percentages are shown in the table on the following page.

Sector	Traditional	Innovative	Total
Authorities / Public Organization	39 **36.1%**	9 **25.7%**	48 **33.6%**
Finance / Insurance	15 **13.9%**	4 **11.4%**	19 **13.3%**
Production	16 **14.8%**	1 **2.9%**	17 **11.9%**
(Businesslike) Services	6 **5.6%**	5 **14.3%**	11 **7.7%**
Electronics / Inf. Services / Communication	5 **4.6%**	4 **11.4%**	9 **6.3%**
Nutrition / Consumer goods	5 **4.6%**	3 **8.6%**	8 **5.6%**
Chemistry / Pharmacy	5 **4.6%**	1 **2.9%**	6 **4.2%**
Real Estate	1 **0.9%**	4 **11.4%**	5 **3.5%**
Health Service	3 **2.8%**	0 **0.0%**	3 **2.1%**
Energy	1 **0.9%**	1 **2.9%**	2 **1.4%**
Transportation	1 **0.9%**	0 **0.0%**	1 **0.7%**
Other	11 **10.2%**	3 **8.6%**	14 **9.8%**
Total	108 **100.0%**	35 **100.0%**	143 **100.0%**

Table 10 Sector division

To prove significance, a chi-square test must be carried out. However more than 20 percent (16 cells, 66,7%) of the cells in the table above have an expected count less than 5 and the minimum expected count is below the value 1 (0.24). So the Cochran rule is not met which results in the fact that the chi-square test cannot be carried out. Significance in the differences between the traditional and innovative group cannot be justified, so there is not proved that the differences that are shown in the table are significant.

Nevertheless the values within the table can be used for analysis. The remarkable differences between traditional and innovative organizations are highlighted. It seems that authorities/public organizations and production organizations are working with more traditional office environments. However organizations within the sectors (businesslike) Services, Electronics/Information Services/Communication and Real Estate show higher percentages in the group that contains the organizations who are working within innovative office environments.

To analyze if there are differences between profit and non-profit organizations, the organizations are regrouped in two groups, profit and non-profit. The results are visible in the cross tabulation below.

	Traditional	Innovative	Total
Non-profit	42 **43.3%**	9 **28.1%**	51 **39.5%**
Profit	55 **56.7%**	23 **71.9%**	78 **60.5%**
Total	97 **100.0%**	32 **100.0%**	129 **100.0%**

Table 11 Profit versus non-profit

To prove significance the Pearson Chi-Square test is carried out. To meet the requirements less than 20 percent (0 cells, 0,0%) of the cells in the table above must have an expected count less than 5 and the minimum expected count must be higher than the value 1 (12.65). So the Cochran rule is met. The results of this test revealed a p-value of 0.093. This value is higher as 0.05, so significance between the traditional and innovative organizations cannot be verified. So the differences that are result of this test can be result of coincidence.

Nevertheless the values that are shown in the table can be used for further analysis to detect possible differences. The table shows that organizations that are in the profit sector are more often working in innovative office environments in comparison to non-profit organizations; however this conclusion is not based on significant differences. So this conclusion can be caused by coincidence.

4.2.3 Organizational office size

The questionnaire contained also a question about the amount of employees working in an office function. To examine if there are office size differences between the traditional and innovative office environments, a cross tabulation is added. The group with innovative office organizations is smaller then the group with traditional office organizations. Because of this the percentages are shown in the table below.

Amount of office employees	Traditional	Innovative	Total
0 - 50	8 **7.5%**	7 **20.0%**	15 **10.6%**
50 - 100	10 **9.3%**	3 **8.6%**	13 **9.2%**
100 - 200	13 **12.1%**	6 **17.1%**	19 **13.4%**
200 - 500	27 **25.2%**	5 **14.3%**	32 **22.5%**
500 - 1000	24 **22.4%**	5 **14.3%**	29 **20.4%**
1000 - 1500	15 **14.0%**	2 **5.7%**	17 **12.0%**
1500 - 2000	4 **3.7%**	2 **5.7%**	6 **4.2%**
2000 - 3000	3 **2.8%**	3 **8.6%**	6 **4.2%**
3000 - 5000	1 **0.9%**	0 **0.0%**	1 **0.7%**
5000 en meer	2 **1.9%**	2 **5.7%**	4 **2.8%**
Total	107 **100.0%**	35 **100.0%**	142 **100.0%**

Table 12 Organizational office size

To prove significance, a chi-square test must be carried out. However more than 20 percent (12 cells, 60,0%) of the cells in the table above have an expected count less than 5 and the minimum expected count is below the value 1 (0.25). So the Cochran rule is not met which results in the fact that the chi-square test also cannot be carried out during this analysis. Significance in the differences between the traditional and innovative group cannot be justified, so there is not proved that the differences that are shown in the table are significant.

Nevertheless the values within this table can be used for further analysis. Some obvious values are highlighted within the table. Smaller organizations, up till 200 employees seem to be using more innovative office environments. Medium-sized organizations, from 200 to 1500 employees, are working more within traditional office environments. Organizations with more than 2000 employees also seem to be more innovative instead of traditional organizations.

4.2.4 Relation with primary process

The assumption existed that organizations who have a relation with office activities, so the primary organizations activities are office related, are working in more innovative office environments instead of organizations where the primary process is not related to office tasks. To verify if this idea is correct, a question is added to the questionnaire. The respondents are asked to indicate if the organization was a producer of office furniture and if the primary activities of the organization generally are executed from office workplaces. The results of this question are given in the table.

<table>
<tr><th></th><th></th><th>Traditional</th><th>Innovative</th><th>Total</th></tr>
<tr><td rowspan="4">Relation with office activities</td><td rowspan="2">Yes</td><td>69</td><td>17</td><td>86</td></tr>
<tr><td>63.9%</td><td>48.6%</td><td>60.1%</td></tr>
<tr><td rowspan="2">No</td><td>39</td><td>18</td><td>57</td></tr>
<tr><td>36.1%</td><td>51.4%</td><td>39.9%</td></tr>
<tr><td colspan="2">Total</td><td>100</td><td>108</td><td>35</td></tr>
</table>

Table 13 Relation with primary process

To prove if there are significant differences the Fisher exact test (Aarts 2002) is carried out. This test is for the comparison of two independent groups (traditional and innovative) with two categories (yes and no). As you see, the amount of office related organizations is lower within the group innovative instead of the group traditional. The corresponding p-value that is the result of the Fisher exact test is 0,08. Both conditions for the Fisher exact test (higher value within innovative group and a p-value lower than 0.05) are not met. This results in the conclusion that the shown differences about the relation with office activities between traditional and innovative offices are not significant.
So the expectation that organizations that have a certain relation with office activities (producer of office furniture or the primary activities are carried out from office workplaces) are organizations with innovative office environments is not verified.

4.2.5 Works council initiative

Within companies and organizations (most times) a works council is present. The influence that this works council is practicing on the decisions (also related to office circumstances) to be taken is measured within the questionnaire. To measure this influence this statement is given: "How much initiative is taken by the works council in relation to changes within the organization that will influence the way of working within the organization". The correlation between these answers and the innovativeness level is calculated.

		Innovativeness level	Works council initiative
Innovativeness level	Correlation Coefficient	1.000	.385(**)
	Sig. (2-tailed)	.	**0.000**
	N	143	142
Works council initiative	Correlation Coefficient	.385(**)	1.000
	Sig. (2-tailed)	**0.000**	.
	N	142	142
** Correlation is significant at the 0.01 level (2-tailed).			

Table 14 Correlation between innovativeness level and works council initiative

The table above is showing a p-value of 0.000. This means that the correlation between these two variables is significant. The correlation coefficient is almost 0.4, which means that there is a correlation. So the organizations where the works council is practicing more influence to the way of working are also working in more innovative office environments.

The following table is showing the average means in the groups traditional and innovative. The traditional organizations are scoring lower on the scale; this corresponds more to "not much initiative". The innovative organizations are scoring a higher value; this corresponds more to "much initiative".

	Respondents	Average Mean	Std. Deviation	Mean Rank
Traditional	107	2.10	.980	63.50
Innovative	35	3.14	1.287	95.96
Total	142	2.36	1.151	

Table 15 Descriptives work's council initiative

To prove if there is significance between the groups the Mann-Whitney-U-test is executed. One of the conditions is that the groups are independent. This condition is met. The second condition is that the variables must be measured minimal on an ordinal scale. Also this condition is met. The p-value is 0.000. This value is smaller than 0.05, which gives the conclusion that there is a significant difference between the both groups. There is nearly no chance that these differences are result of coincidence.

The conclusion is that if the works council has to some extent more influence to the way of working within the organization this organization is working in more innovative office environments. So if the works council is influenced there is a higher chance that innovative office furniture will be accepted within the organization.

4.2.6 Amount of flex-workplaces

There is expected that when organizations are working in more innovative office environments, also more flexible workplaces are present within the company. So there is assumed that higher number of flexible workplaces is desirable and applicable if a more innovative office environment is getting used within an organization.

		Innovativeness level	% Flexible workplaces
Innovativeness level	Correlation Coefficient	1.000	0.289(**)
	Sig. (2-tailed)	.	**0.000**
	N	143	142
% Flexible workplaces	Correlation Coefficient	0.289(**)	1.000
	Sig. (2-tailed)	**0.000**	.
	N	142	142

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

Table 16 Correlation between innovativeness level and percentage of flexible workplaces

The table above is showing a p-value of 0.000. This means that the correlation between these two variables is significant. The correlation coefficient is almost 0.3, which means that a correlation is present. So the organizations that contain more flexible workplaces are also working in more innovative office environments.
The next table is showing the average means in the groups traditional and innovative. The traditional organizations are scoring lower on the scale, this corresponds more to a lower percentage of flexible workplaces. The innovative organizations are scoring a higher value, this corresponds more to more flexible workplaces.

	Respondents	Average Mean	Std. Deviation	Mean Rank
Traditional	108	1.34	0.949	67.14
Innovative	34	2.03	1.566	85.34
Total	142	1.51	1.159	

Table 17 Descriptives flexible workplaces

To prove if there is significance between the groups the Mann-Whitney-U-test is executed. One of the conditions is that the groups are independent. This condition is met. The second condition is that the variables must be measured minimal on an ordinal scale. Also this condition is met. The p-value is 0.001. This value is smaller than 0.05, which gives the conclusion that there is a significant difference between the both groups. There is nearly no chance that these differences are result of coincidence.
There can be concluded that organizations with innovative office environments have also more flexible workplaces. So if an organization is working in a more innovative office environment, also the amount of flexible workplaces is higher.

The following figure is inserted to show how many percent of flexible workplaces is present within the different organizations. There is visible that, if organizations are getting more innovative, the level of flexible workplaces is rising. This corresponds with the expectations.

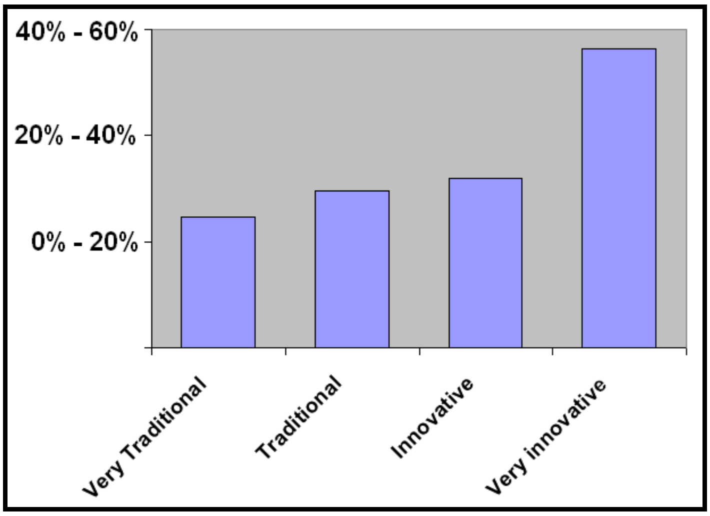

Figure 17 Amount of flex-workplaces

The shown values are average values that are defined per group. Within the group "very innovative" where also organizations who are working 100% with flex places. However this is not visible in this figure because averages are shown.

4.3 Organizational culture

The literature study showed that an organization can be classified by four different culture types. These are shown in the table below. Every respondent reviewed 10 problems where 4 answer possibilities where present. Every answer possibility represented a culture type.

The first idea for analysis was to assign one culture style to every organization. The most chosen answers (that correspond to a culture style) indicated the culture type of the organization. These results are shown in appendix 5. However a problem appeared; many respondents scored, for example 5 answers within one culture type, 4 answers within another culture type and 1 answer in a third culture type. So many organizations contained a double culture type because of this phenomenon.

To neutralize this problem, a second method of analysis appeared. Because a large amount of the organizations has a combined culture type, there is decided to admit combined culture types. These results are also shown in appendix 5. Although with this analysis method, it was also not possible to assign a culture style to all organizations. Also a chi-square test to prove significance was not allowed because the conditions were not met because of the large diversity of answer possibilities.

Since the cultural difference between the traditional and innovative organizations is analyzed in this paragraph, there is decided to add up all the given answers in the traditional and innovative group. The consequence is that organizations within the groups cannot be separated anymore, but the advantage is that all given answers are included in the analysis. Another advantage is that the chi-square test can be carried out under these circumstances. The results are shown in the table on the next page.

Organizational Culture	Traditional	Innovative	Total
Power Culture	117 **13.4%**	39 **12.5%**	156 **13.2%**
Role Culture	233 **26.7%**	74 **23.8%**	307 **25.9%**
Persons Culture	346 **39.6%**	138 **44.4%**	484 **40.9%**
Task Culture	177 **20.3%**	60 **19.3%**	237 **20.0%**
Total	873 **100.0%**	311 **100.0%**	1184 **100.0%**

Table 18 Organizational culture

To prove significance the Pearson Chi-Square test is carried out. To meet the requirements less than 20 percent (0 cells, 0,0%) of the cells in the table above must have an expected count less than 5 and the minimum expected count must be higher than the value 1 (40.98). So the Cochran rule is met. The results of this test revealed a p-value of 0.524. This value is much higher as 0.05, so significance between the traditional and innovative organizations cannot be verified. So the differences that are highlighted can be result of coincidence.

Nevertheless with this remark the values that are shown in the table can be used for further analysis to detect possible differences. To create a clearer overview of these results they are visualized graphically.

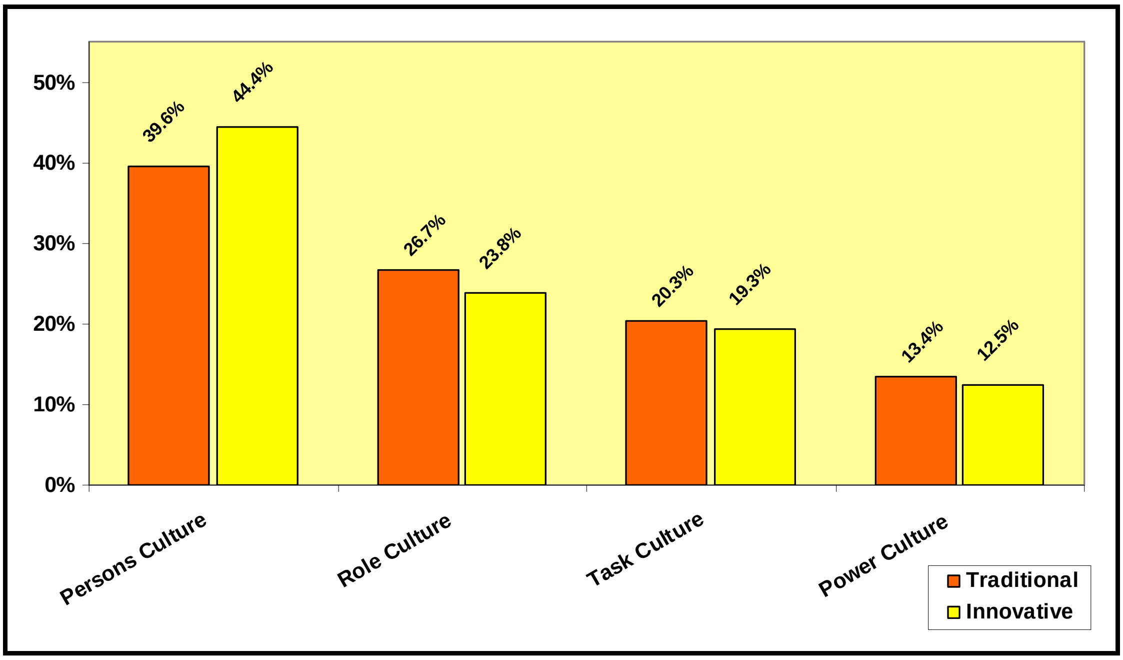

Figure 18 Organizational cultures

There is shown that the differences between traditional and innovative organizations are small. The clearest difference is that organizations with innovative offices score higher on the person's culture. A smaller difference is the higher percentage of traditional organizations within the role culture. It seems that, if organizations are getting more innovative, a culture switch occurs from role to person's culture.

4.4 Organizational leadership style

The literature study showed that an organization leadership style can be classified by four different leadership styles. These are shown in the table below. Every respondent reviewed 10 problems where 4 answer possibilities where present. Every answer possibility represented one type of leadership style.
The first idea for analysis was to assign one leadership style to every organization. The most chosen answers (that correspond to a leadership style) indicated the leadership style of the organization. These results are shown in appendix 6. However a problem appeared; many respondents scored, for example 4 answers within one leadership style, 4 answers within another leadership style and 2 answers in a third leadership style. So many organizations contained a double leadership style because of this phenomenon.
To neutralize this problem, a second method of analysis appeared. Because a large amount of the organizations has a combined leadership style, there is decided to admit combined leadership styles. These results are also shown in appendix 6. Although with this analysis method, it was not possible to assign a leadership style to all organizations. Also a chi-square test to prove significance was not allowed because the conditions were not met because of the big diversity of answer possibilities.

Since the leadership style difference between the traditional and innovative organizations is analyzed in this paragraph, there is decided to add up all the given answers in traditional and innovative group. The consequence is that organizations within the groups cannot be separated anymore, but the advantage is that all given answers are included in the analysis. Another advantage is that the chi-square test can be carried out under these circumstances. The results are shown in the table.

Leadership Style	Traditional	Innovative	Total
Telling	46 **5.3%**	27 **8.6%**	73 **6.2%**
Selling	208 **23.8%**	57 **18.2%**	265 **22.3%**
Participating	512 **58.6%**	195 **62.3%**	707 **59.6%**
Delegating	107 **12.3%**	34 **10.9%**	141 **11.9%**
Total	873 **100.0%**	313 **100.0%**	1186 **100.0%**

Table 19 Leadership style

To prove significance the Pearson Chi-Square test is carried out. To meet the requirements less than 20 percent (0 cells, 0,0%) of the cells in the table above must have an expected count less than 5 and the minimum expected count must be higher than the value 1 (19.27). So the Cochran rule is met. The results of this test revealed a p-value of 0.039. This value is lower as 0.05, so significance between the traditional and innovative organizations can be verified. So the differences in the table are not the result of coincidence (with a reliability of more than 95%).

The small differences that are present within the results are significant, so they are not based on coincidence. To create a clearer overview of these results they are visualized graphically.

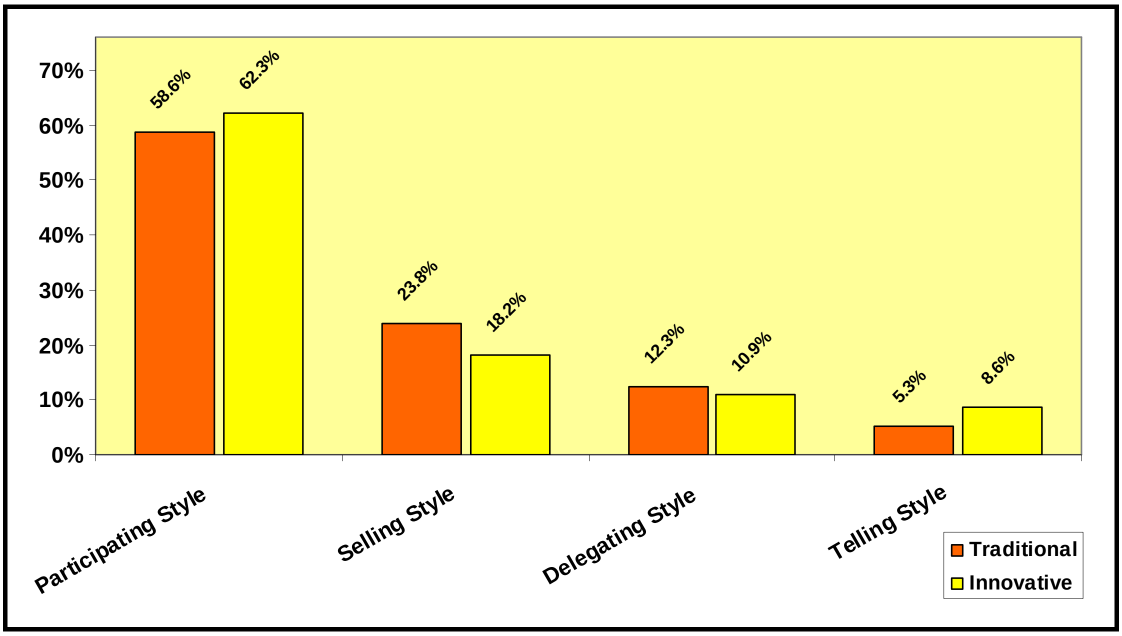

Figure 19 Leadership styles

In the figure is shown that the differences between traditional and innovative organizations are very small. The clearest difference is that organizations within innovative office environments have a lower score on the selling leadership style. Other, smaller differences are the higher values for organizations with innovative office environments are matching more with the participating and telling leadership style. The difference within the delegating style is minimal, so this will not be discussed further in this report.

4.5 Organizational structure

As told in chapter three, the organizational structure is measured with scales that measure the centralization and the formalization. Based on these results an indication about the organizational structure can be given. In the following subparagraphs both factors are discussed separately.

4.5.1 Formalization

There is assumed (shown in literature study) that organizations with innovative office environments are less formal instead of organizations with more traditional office environments.

		Innovativeness level	Formalization level
Innovativeness level	Correlation Coefficient	1.000	-0.378(**)
	Sig. (2-tailed)	.	**0.000**
	N	143	134
Formalization level	Correlation Coefficient	-0.378(**)	1.000
	Sig. (2-tailed)	**0.000**	.
	N	134	134
** Correlation is significant at the 0.01 level (2-tailed).			

Table 20 Correlation between innovativeness level and formalization level

The table above is showing a p-value of 0.000. This means that the correlation between these two variables is significant. The correlation coefficient is almost -0.4, which means that there is a negative correlation. So the organizations who are working in more innovative office environments are more informal. Organizations in traditional office environments are more formal.
The next table is showing the average means in the groups traditional and innovative. The traditional organizations are scoring higher on the scale; this corresponds to a more formal organization. The innovative organizations are scoring a lower value, this corresponds more to more informality.

	Respondents	Average Mean	Std. Deviation	Mean Rank
Traditional	100	2.69	0.653	72.57
Innovative	34	2.36	0.561	52.59
Total	134	2.61	0.645	

Table 21 Descriptives formalization level

To prove if there is significance between the groups the Mann-Whitney-U-test is executed. One of the conditions is that the groups are independent. This condition is met. The second condition is that the variables must be measured minimal on an ordinal scale. Also this condition is met. The p-value is 0.009. This value is smaller than 0.05, which gives the conclusion that there is a significant difference between the both groups. There is nearly no chance that these differences are result of coincidence. The group averages are not that big, but these values prove that innovative organizations are a bit more informal instead of formal organizations.

4.5.2 Centralization

The literature study showed that the organizational structure can be measured by measuring the formalization and the centralization. There is assumed that organizations with innovative office environments are less centralized instead of organizations with more traditional office environments.

		Centralization	Innovativeness level
Centralization	Correlation Coefficient	1.000	-0.040
	Sig. (2-tailed)	.	0.643
	N	134	134
Innovativeness level	Correlation Coefficient	-0.040	1.000
	Sig. (2-tailed)	0.643	.
	N	134	143

Table 22 Correlation between innovativeness level and centralization level

The table above is showing a correlation coefficient that is almost zero. Also the corresponding p-value is 0.643, which is much higher as 0.05. So significance cannot be proved. This means that there is no correlation between the two variables. So the organizations who are working in more innovative office environments aren't more decentralized as organizations who are working in more traditional office environments.
The next table is showing the average means in the groups traditional and innovative. The traditional and innovative organizations score almost the same values on the scale. This is a confirmation that there is no difference between these two groups.

	Respondents	Average Mean	Std. Deviation	Mean Rank
Traditional	100	2.37	0.798	66.93
Innovative	34	2.42	0.784	69.18
Total	134	2.38	0.792	

Table 23 Descriptives centralization level

To prove if there is significance between the groups the Mann-Whitney-U-test is executed. One of the conditions is that the groups are independent. This condition is met. The second condition is that the variables must be measured minimal on an ordinal scale. Also this condition is met. The p-value is 0.770. This value is much larger than 0.05, which gives the conclusion that there is no significant difference between the both groups.

4.6 Technology and processes

The last variables that are analyzed are technology and processes. These both variables are measured in a different manner. The technology variable and the processes variable are discussed separately in the following subparagraphs.

4.6.1 Organizational technology

To measure the technology aspects four different premises are used. These four premises are analyzed separately; the results are shown in the table below. The respondent is asked how important the aspects are for a good functioning of the organization. The questions are answered on a 5 point likert scale.

	Correlation with Innovativeness level	P-value
1. Fixed workplace	-0.073	0.407
2. Mobile reachableness	0.209*	**0.016**
3. Personal archiving space	0.133	0.126
4. Freedom of task execution	0.306**	**0.000**
*. Correlation is significant at the 0.05 level (2-tailed) **. Correlation is significant at the 0.01 level (2-tailed)		

Table 24 Correlation between innovativeness level and technology factors

The table is showing that two out of four aspects are significant, correlation is present. So the mobile reachableness and the freedom of task execution are more important for organizations who are working in innovative office environments. The table below is showing the means of the four different aspects.

	Mean Traditional *N = 100*	Mean Innovative *N = 33*	Mean Total *N = 133*	P-value
1. Fixed workplace	2.55	2.48	2.53	0.64
2. Mobile reachableness	2.89	3.45	3.03	**0.03**
3. Personal archiving space	2.63	2.91	2.70	0.36
4. Freedom of task execution	2.76	3.36	2.91	**0.01**

Table 25 Descriptives technology factors and corresponding p-values

To prove if there is significance between the groups the Mann-Whitney-U-test is executed. One of the conditions is that the groups are independent. This condition is met. The second condition is that the variables must be measured minimal on an ordinal scale. Also this condition is met. The p-values are both lower than 0.05. This means that there is a significant difference between traditional and innovative organizations on the aspects two and four (mobile reachableness and freedom of task execution). So there is proven that the innovative organizations score significantly higher on these aspects.

4.6.2 Organizational processes

There is also the presumption that tasks and rules are more reported in innovative organizations because the employees in innovative office organizations are freer in the execution of their tasks. The results of these questions are shown in the table on the next page. The question is asked if the shown items were present within the organization.

		Traditional	Innovative	Fisher's Exact Test
Information booklets about safety, working conditions etc.	Yes	72	24	0.563
		72.0%	**72.7%**	
	No	28	9	
		28.0%	**27.3%**	
Written manual about procedures and defined rules.	Yes	88	31	0.32
		88.9%	**93.9%**	
	No	11	2	
		11.1%	**6.1%**	
Written instructions about operations related to employees tasks.	Yes	80	26	0.529
		80.0%	**78.8%**	
	No	20	7	
		20.0%	**21.2%**	
Written function descriptions.	Yes	99	33	0.752
		99.0%	**100.0%**	
	No	1	0	
		1.0%	**0.0%**	

Table 26 Organizational processes results

To prove if there are significant differences the Fisher exact test (Aarts 2002) is carried out for every item separately. This test is for the comparison of two independent groups (traditional and innovative) with two categories (yes and no). All the p-values, these are highlighted in the right column, are higher then the value 0.05. This results in the conclusion that the shown differences about the shown items with office activities between traditional and innovative offices are not significant. This is also noticeable when looking to the percentages between traditional and innovative; these are really close; almost no differences are present.

4.7 Overview of results

The following table is showing the empirical results in relation to the organizational variables. Only the highest values for organizational culture and leadership style are given within this table. Although this is not the only culture that is present within the organization; it is a combination of cultures.

Variable	Traditional office	Innovative office	In paragraph
Organizational Structure	More formal	More informal	4.5
Organizational Culture	Role Culture	Persons Culture	4.3
Organizational Leadership Style	Selling Leadership style	Participating & Telling Leadership style	4.4
Organizational Processes	High use of rules, policies & procedures	High use of rules, policies & procedures	4.6

Table 27 Empirical results of organizational variables

Chapter 5, Conclusions and recommendations

In continuation of the literature study and the survey, this chapter will give an answer to the research question that is defined in chapter one. In the second paragraph of this chapter, some recommendations are given for continuation research.

5.1 Conclusions

Within paragraph 1.4 the research question is formulated. The central question within this study is:
"*Which organizational and context factors are suitable to recognize if office furniture customers, who are considering a refurnishing of their office, match with a traditional or innovative office layout concept?*"

The corresponding research objective was:
"*Define if organizations who are considering investments in new office furniture can be typified in different groups, namely traditional or innovative working organizations. Also the different factors that might practise influence on a change process to innovative office furniture must be studied to create an overview (based on literature) of these factors.*"

In paragraph 2.2 is defined which factors can be used for an organizational analysis. These factors are based on the McKinsey 7S model (Floor and McKinsey 2007; Mullins 2007) and the Harrison system model (Harrison 1991). The results of this part of the literature study are the following factors that are suitable for organizational analysis:

- Organizational structure
- Organizational culture
- Organizational leadership style
- Organizational technology / processes

These four variables for the empirical research are replenished with a selection of context variables. These context variables are about office size, organizational sector, the relation with primary process, influence of works council and the organizational match between office related activities and the primary process of the organization. The results of these various variables within the empirical research are discussed one by one. After these separate conclusions, a common conclusion is given.

Context variables

A small selection of context variables is measured within this research. The first measure was the organizational sector where the organization belongs to. The results expose that it seems that authorities/public organizations and production organizations are working with more traditional office environments. However organizations within the sectors (businesslike) Services, Electronics/Information Services/Communication and Real Estate show higher percentages in the group that contains the organizations who are working within innovative office environments. These results are not proven significant, but can possibly be clarified by the following.

Authorities and public organizations are indirectly leaded by the government and are bureaucratic organizations. These types of organizations are mostly driven by rules and procedures. All activities within these organizations are standardized. Because of the structure of these organizations an open layout is not necessary. The hierarchy that is present within these organizations is creating control within the organization. All customers are treated in the same way, and everything can be checked and monitored because of the transparency that is present within these organizations. Also authorities and public organizations assign (mainly in the past) their orders to previous defined suppliers. The amount of money that is available is defined in advance. These different factors are conceivable clarifications that authorities/public organizations are working within more traditional office environments. Within organizations that focus on production of goods the offices within the organization are not related to the core activity of the organization; the organizational tasks are not primary related to office tasks. Also most office tasks within these types of organizations are suited for traditional office environments. According to these reasons it seems explicable that investments in innovative office environments are not made that quick. This can be simply because of the fact that, if innovations are considered, these are carried out in the departments that contain primary process of the organizations instead of the supporting departments.
The clarification that organizations within the sectors (businesslike) Services, Electronics/Information Services/Communication and Real Estate are showing higher percentages in the group that contains the organizations who are working within innovative office environments can be found in the fact that all organizations that belong to these sectors are carrying out their primary activities from office locations. For these organizations it is more obviously because those investments are made because the investments concern the core activities of the organizations.

If there is looked more too organizational size in relation to the office innovativeness there can be seen that smaller organizations, up till 200 employees seem to be using more innovative office environments. Medium-sized organizations, from 200 to 1500 employees, are working more within traditional office environments. The large organizations, these contain 2000 or more employees, are also (same as the smaller organizations) making use of more innovative office environments. This information is also not significant, so the differences can be based on coincidence. However, it seems reasonable that smaller organizations are investing faster in new, innovative, office environments. The hierarchy within small organizations is more flat, so these organizations suit quite well with innovative offices. Also the decisions to change can be taken more quick because laws and regulations are less present within small organizations. A reason why large organizations, containing more than 2000 employees, are also working often work within innovative office environments is not found.

Furthermore there is uncovered that there is no significant difference within the relation between the primary activities of the organization and the level of innovativeness. So the idea that organizations that have a certain relation with office activities (producer of office furniture or the primary activities are carried out from office workplaces) are organizations with innovative office environments is not verified. However the p-value was 0.08, which means that there is still a high change, 92 percent, that this expected relation is not result of coincidence. A relation seems logic because organizations that are office related have more affinity with the office furnishing, simply because all employees are working within office environments. The earlier mentioned organizations, within the sectors (businesslike) Services, Electronics/Information Services/Communication and Real Estate, are also organizations that are office activity related, so this corresponds with each other.

Significance is proven between the innovative of the works council and the innovativeness within office environments. So the relation between these two factors is certainly not caused by coincidence. If the works council has to some extent more influence to the way of working within the organization this organization is working in more innovative office environments. This declares that the works council has the power within the organization to influence decisions related to how employees are working within the organization, which is indirectly related to innovative office environments. If it is desired that an organization is going to change to an innovative office environment, it seems interesting to convince the works council about the positive aspects of innovative office environments. Employees within the works council can subsequently practice positive influence to the employees/managers who make the decision to invest.

Another significant difference is proven between the amount of flex-places and the innovativeness level within office environments. There can be concluded that organizations with innovative office environments have also more flexible workplaces. So organizations that already decided to go working with flexible workplaces are potential organizations where an innovative office environment will suit better instead of organizations that don't work with flexible workplaces. This is afterwards a logic conclusion because one aspect of innovative office environments is the employees' possibility to work where they would like to work.

Organizational structure

According to van de Voordt (Voordt 2003) the organizational structure of organizations with a traditional office design is more typified by a hierarchic structure. When organizations are working in more innovative office environments the structure of the organization will be more flattened. A flattened organization is more informal in relation to a hierarchic organization which is more formal. Mullins (Mullins 2007) is mentioning some characteristics of formal and informal organizations. These characteristics are tested with a scale from Kitchell (Bruner, James et al. 2001). This scale is measuring how the communication is happening within the organization. The result of this measure is a significant difference. So the organizations who are working in more innovative office environments are more informal. Organizations in traditional office environments are more formal. This is easy to illustrate since communication is easier within innovative office environments. Information technology and open places for group work are some characteristics of innovative offices that promote communication between employees. These facilities make it easier to communicate, what is proved over here.

The literature study also shows that ICT facilities, which are present within innovative offices, foresee in the possibility to work on different locations. This creates a remarkable influence on the level of decentralization (Keuning and Eppink 2004). The freedom to choose the location for task execution among the employees results in the premise that the authority level is lower within organizations who are working in innovative office environments. So these organizations are more decentralized instead of traditional organizations. This premise is tested with a scale of Menon, Jaworski, and Kohli (Bruner, James et al. 2001) which is measuring the centralization. The result of this measure is not showing a significant difference. A difference was expected between traditional and innovative organizations (concluded in the literature study). However this expected difference is not present.

Organizational culture

The literature showed that four culture types can be present within an organization; these are a power culture, a role culture, a task culture and a person's culture (Harrison 1991). All styles are explained in subparagraph 2.4.2. The literature study states that more innovative organizations are showing similarities with the persons (atomistic) culture and more traditional organizations will match more with the role culture. This expectancy is present because innovative organizations are less centralized and less formal. Standardized questions that are used in different studies in the past are used to verify if this premise is true.

No significant difference could be proven. Therefore, the small differences that occurred could be the result of coincidence. Differences between traditional and innovative organizations are quite small. The clearest difference is that organizations within innovative office environments have a higher score on the person's culture. Another, smaller, difference is the higher percentage of traditional organizations within the role culture. So it seems that, when organizations are getting more innovative, a small culture switch occurs from role culture to person's culture. This is also we expected on the basis of the literature study. However the differences between the two groups are really small, so very obvious conclusions cannot be drawn, since the small differences can be result of coincidence.

That the differences that are measured are small is result of the fact that measuring an organizational culture is rather difficult since there are many different measurement methods to measure this quite broad subject. Therefore, there is expected that large differences will not be detected. Because an organizational culture is entrenched within the organization (Sanders and Neuijen 1992) it is difficult to change an organizational culture. If an organization is changing to a more innovative office environment the way of working and communicating will change, which occurs influence on the organizational culture. However this culture is not changing from a 100 percent role culture to a 100 percent person's culture, simply because an organization cannot be placed within one culture style. Only small changes will occur within the proportion of organizational culture types as a result of an organizational change.

Organizational leadership style

Hersey and Blanchard (Hersey and Blanchard 1992) state that there are four types of leadership styles. These styles are the participating style, the delegating style, the selling style and the telling style. More information about these styles is located in subparagraph 2.4.3. In the literature study is concluded that there is expected that innovative organizations show similarities with the participating leadership style because these employees are less guided in their tasks because of their freedom of task execution. However relationship between employees is quite important. More traditional organizations will probably show more relationship with the selling and telling leadership styles since these styles are more focussed on guidance within the task execution. So the leader is giving directions to the jobs that are carried out, the employees are less free in the way they carry out their tasks.

The test that is carried out showed that there is a significant difference between the traditional and innovative group. However the differences between traditional and innovative organizations are very small. The clearest difference is that organizations within innovative office environments have a lower score on the selling leadership style. Other, smaller differences are the higher values for organizations with innovative office environments are matching more with the participating leadership style. These differences are corresponding to the expectations within the literature study.

The differences are, just like the variable culture, quite small. This can be grounded by the same reason as given by the culture conclusion. Leadership style is also rather difficult to measure. Leadership style is something that is also dependent of the personality of the employees/managers. If an organization is changing, it is not logic that the employees/managers are simply changing also. If an organization is changing to a more innovative office environment the way how employees are directed is requiring different leadership skills since people are freer in the execution of their tasks. The leaders are not able anymore to control the employees on their presence within the organization. So controlling the employees is more difficult within organizations with innovative office environments. However, if a change is taking place, the leadership style will not change from a 100 percent selling or telling style to a 100 percent participating style, because a leadership style can be a combination of more styles. The changes of the proportion will happen gradually, simply because of the fact that the leadership style is a combination of the leader itself and the organization where he is working. It is quite plausible that large differences are not provable.

Technology / processes

Vos and van de Voordt (Voordt 2001; Voordt 2003) indicate in their research that the technology aspect is important to achieve innovative furnished offices. Advanced information- and communication technology, like powerful and mobile computers (laptops), mobile phones, intranet and internet are examples of this technology. These aspects make it possible to create freedom within the job activities and the location where these activities will be carried out. To measure the technology aspects four different premises are used.

Two out of four premises are showing significance. The analysis shows that mobile reachableness of the employees and the freedom how the tasks are executed are significantly different between organizations with innovative and traditional office environments. This means that innovative organizations, if these organizations will be successful, must be aware of the mobile reachableness of their employees and the freedom how these employees will carry out their tasks.

The other premises show no significant differences. Respondents working within innovative organizations do not state that a flexible workplace is necessary for a successful task execution within the company. However, if the organizations offer freedom of task execution to employees, this often corresponds to flexible workplaces. The availability of personal achieving space is also not crucial for successful functioning of the organization. Both traditional and innovative organizations score almost the same value to this aspect. So for being successful in their business, the availability of archiving space is not a determining factor.

The last analysis subject is the presumption that tasks and rules are more reported in innovative organizations because the employees in innovative office organizations are freer in the execution of their tasks. To test this premise, a standardized scale is used. This scale is measuring the presence of information booklets about safety and working conditions, the presence of written manual about procedures and defined rules, the presence of written instructions about operations related to employees' tasks and the presence of written function descriptions. All of these four measured aspects are not showing significant differences.

It comes true that organizations with innovative office environments are not registering more about the job and task activities within the organization. An imaginable explanation is that all employees who are working within (traditional or innovative) office environments are most times higher educated, professionals. Independent of the way how and where tasks are executed, the employees have their own responsibility about their tasks and they will be controlled on the basis of their results.

5.1.1 Overall conclusion and recommendations

This study shows that often significant differences are verified. However, rather often these differences between traditional and innovative organizations where pretty small. Because of these small differences it will be discussable if these differences can be used to recognize if an organization shall match with a traditional or innovative office environment based on the organizational characteristics. Nevertheless the results of this research outline the characteristics of the two groups, traditional and innovative office environments.

Except of the fact that it is not easy to detect which organizations have a higher chance to be successful for the implementation of an innovative office environment these organizations can (partly) be recognized by the characteristics that are shown below.

If an organization is quite small or large (say less than 200 employees or more than 2000 employees) and is operating in the sectors (businesslike) Services, Electronics/Information services/Communication or Real Estate the chance that these organizations are possibly suitable for the implementation of an innovative office concept is more reasonable.
Also the organizations (according to this research) that are in the profit sector are using more innovative office environments in comparison with the organizations that are in the non-profit sector. So if an organization is in the profit sector, a higher change of success is present (not proven with significance).
Another condition for a successful implementation is that the organization is rather informal or willing to create an informal environment. When this informality is present (or creatable) within an organization a possible fit with an innovative office environment is imaginable.

With high certainty there can be concluded that the initiative of the works councils within organizations with innovative office environments is higher. So it is wise to approach and convince also employees who are part of the works council. These employees can practice influence on the decision making unit that makes the discussion about which type of office environment will be acquired.

This research also revealed (based on new developed “innovativeness scale”) that the market for innovative office environments within the Netherlands is at this moment approximately 25 percent of the total population.

If an organization finally decides to invest in an innovative office environment, the way of working within the organization will (partially) change. The literature study showed that seven factors must be taken into account when an organizational change takes place. These seven factors are the organizational culture, structure, management/leadership style, change strategy, change process, involved people and the (human) processes. These aspects are discussed more in depth within the literature study. If all these factors are observed and managed during the organizational change, there is a higher chance that the implementation of the new, innovative office concept will be accepted and will be successful.

5.2 Recommendations for further research

Within this research is decided to focus on 4 organizational variables and a selection of context variables. All these variables where combined within one survey. Because one respondent per organization is approached and only a small selection of questions is asked per variable, it was hard to prove obvious differences at most variables. Within a continuation research there can be decided to focus on one, or a selection of the variables used in this research. If fewer variables are investigated, it is possible to ask more questions per variable; eventually more respondents per organization can be contacted. In this case the variables are researched more in depth, and clearer differences can appear instead of this research.

In the literature study is indicated which aspects are important when an organization is going to change. Organizational change in general is described within this study. However there is not verified within this study if these seven aspects are also of influence on an organizational change related to innovative office environments. If it is possible to approach a selection of organizations that changed from a traditional office environment to an innovative office environment, a qualitative research can be carried out. Through the execution of semi-structured interviews more information about the aspects can come to the light. It is plausible that only a selection of these aspects is really important. When an organization decides for a change to a new innovative office environment, this selection of investigated factors can be used to guide the changing process to guarantee a successful implementation.

Chapter 6, Discussion

The research has given insight in the organizational differences between organizations who are working within traditional and innovative office environments. The response of the research was extremely high, around 43 percent. No hard numbers are known for average response, but conversations with outsiders revealed that a response of 20% is already quite high. So this value is doubled within this research, what is a good result. The proportion between commercial and public organizations among the organizations who responded was almost the same as the division within the population. With the exception of these successful results, also some imperfections can be pointed out. These are discussed separately in the paragraphs that follow.

6.1 Used database

Within this research an existing database (present within the Facility Management chair of Wageningen University) is used to select the respondents. This database is close to the whole population of organizations with more than 500 fte within the Netherlands.
However one aspect is not present within the database used; this is the sector where the organization belongs to. This is valuable, missing, knowledge because this information can be used to verify if the division of organizations within the sectors of the sample is reflecting the division of organizations within the sectors in the total database, which is seen as the total population. Within the sample of this research, organizations in all sectors are represented. However, some sectors contain more respondents instead of other sectors. Because of the missing information in the database, there cannot be verified if this unequal division can be explained due to the existing division in the whole database.
It is recommended finding out this information to professionalize this database. This can be done if the organizations are contacted during studies in the near future. It is imaginable that the information is also present at the chamber of commerce of the Netherlands, so this organization perhaps can foresee in this information request.

6.2 Questions within questionnaire

During the formulation of the questionnaire, there is made use of validated survey questions as much as possible. It was difficult to find reliable culture and leadership questions. Finally two sets of validated questions are used to analyze these variables. However these questions are most times used to measure the view of individual employees.
Within this research it was not achievable to reach more than one person in every respondent's organization to create a better view of the organizational culture and leadership style. So the respondent is asked to choose the answer on a question that fits best with the common organization. The premise that is made within this research is that measuring leadership style or organizational culture at one certain employee (a person higher in the hierarchy, so a more organizational-wide view) within the organization gives the same result as measuring on more employees. This seems logic because a certain leadership style of organizational culture will be present within an organization, and will be experienced the same by all employees. Nevertheless, some remarks are given by some respondents (original remarks in Dutch are in appendix 4). These remarks are shown on the next page.

- *"Many questions are about the organization; however these questions ask for a review how they (the respondents) will react within a specific situation. That is never organization related, but always dependent of manager, employee, and type of problem (executive, tactical, strategic). I don't exclude that the answers given to these questions are partly social desirable answers (and therefore they concern my opinion/expectation; not the ones of the organization). "*
- *"There is expected a great uniformity about types of activities and employees; while the average organization is multiform. Not all behavior is relevant for all employees."*
- *"The answers in the first section are based on my own experiences within the organization. The second section is my own leadership style; this is certainly not applicable to the whole organization."*
- *"The last 20 questions are not answerable in a good way. It is not possible to answer these questions for the whole organization because every department is unique. All answers are partly correct and it is difficult to choose one answer that matches 100% with my view."*

Afterwards is become known that it was difficult to fill in the culture and leadership questions. As shown, some respondents indicate that they are not sure that their answers are reflecting the situation within the whole organization.
Within further research it is recommend finding out if different culture and leadership measurement methods are available to measure these variables or test these variables among more respondents. It is imaginable that the answers, with this other measurement method, are more diverse in comparison with the answers in this study.

6.3 Sample

There is made use of a digital survey method, distributed to a known sample. However the survey was approachable by a web-address, not protected by a password. To achieve a higher response, the respondents were able to fill in the questions anonymous. So within the results there is not known the respondents name and organization. There is a small possibility that the survey is completed by persons who do not belong to the sample. There is also a chance that respondents filled in the survey twice or more. This could have resulted in a distorted view of the population.
The phenomenon can be counteracted with personal login data for all the respondents. However in this situation anonymity cannot be guaranteed anymore. This definitely resulted in a lower response. This was the consideration that is made within this study; a higher response was more important instead of the risk that is discussed in this paragraph.

Despite of these limitations, it is plausible that these practiced only little influences on the results, there can be looked back with a satisfied feeling. After all the study revealed valuable information within this rather new specialism.

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Appendices

Appendix 1 Survey scales

Centralization

This is a five-item, five point Likert-type scaling measuring the extent to which actions and decisions must await approval by superiors in an organization.

1. There can be little action taken here until a supervisor approves a decision.
2. A person who wants to make his or her own decision would be quickly discouraged here.
3. Even small matters have to be referred to someone higher up for a final answer.
4. I have to ask my boss before I do almost anything.
5. Any decision I make has to have my boss's approval.

Formality

This is a five-item, seven-point Likert-type scale to measure the extent to which a firm's corporate culture encourages open communication among peers, subordinates, and superiors.

1. Communication between peers in this company is excellent.
2. Supervisors in this company are willing to share all relevant information with subordinates.
3. There is very little upward communication from subordinates to supervisors in this company. **(r)**
4. The direction of information flow in this company is mainly downward from bosses to subordinates. **(r)**
5. There are few opportunities for junior staff to have informal conversations with senior personnel. **(r)**

Processes

This is a four-item, dichotomous yes/no scale to measure the extent to which firms used written rules, policies, and procedures.

1. Do you hand out information booklets to your employees addressing such topics as security, working conditions, and so on?
2. A written manual of procedures and fixed rules?
3. Written operating instructions to workers?
4. Written job descriptions?

Appendix 2 Guiding letters

2.1 Letter for organizations already in the database

Geachte heer/mevrouw,

Mijn naam is Ruud de Haas, ik ben momenteel bezig met het uitvoeren van mijn afstudeeronderzoek voor mijn MSc Management Studies, afstudeerrichtingrichting Facility Management aan de Wageningen Universiteit. Bij dit onderzoek wordt ik begeleid door prof. dr. ir. A.F.G.M. van Wagenberg.

Het thema van het onderzoek is innovativiteit binnen kantooromgevingen bij bedrijven en organisaties in Nederland. Er wordt bij dit onderzoek gekeken of er een relatie is tussen diverse organisatiekenmerken (denk aan bedrijfscultuur, leiderschap, structuur etc.) en de mate van innovativiteit binnen de kantooromgevingen.

Binnen de leerstoelgroep Facility Management van de Wageningen Universiteit is een bedrijvenlijst met contacten aanwezig van bedrijven en organisaties binnen Nederland. Het grootste gedeelte van deze organisaties is groter dan 500 fte. Ik neem contact met u op omdat ook uw contactgegevens in deze lijst aanwezig zijn en uw organisatie daarom past binnen mijn onderzoek. Ik wil hierbij duidelijk benadrukken dat dit geen commerciële enquête is en deze bedrijvenlijst alleen gebruikt wordt voor wetenschappelijke doeleinden.

De enquête is als proef getest bij enkele respondenten. Hieruit is gebleken dat het invullen van de vragen 15 tot 20 minuten van uw tijd in beslag zal nemen. De enquête wordt digitaal afgenomen en kan anoniem ingevuld worden. Ik kan de ingevulde resultaten dus niet koppelen aan uw organisatie als u besluit geen contactgegevens achter te laten. Discretie is dus gegarandeerd.

De enquête kunt u bereiken door op de volgende link te klikken:
http://www.thesistools.com/?qid=38308&ln=ned
(Als dit niet werkt kunt u de regel kopiëren in de adresbalk van uw internet browser)

Ik hoop van harte dat u uw medewerking wilt verlenen in mijn afstudeeronderzoek. Voor een succesvolle afronding heb ik namelijk voldoende respondenten nodig om valide conclusies te kunnen trekken voor mijn onderzoek. Als u nog vragen of opmerkingen heeft kunt u met mij contact opnemen door het sturen van een e-mail naar Ruud.deHaas@Wur.nl.

Ik wil u alvast bij voorbaat danken voor uw medewerking!

Met vriendelijke groet,

Ruud de Haas
Student Wageningen Universiteit

2.1 Letter for new contacted organizations

Geachte heer/mevrouw,

Mijn naam is Ruud de Haas, ik ben momenteel bezig met het uitvoeren van mijn afstudeeronderzoek voor mijn MSc Management Studies, afstudeerrichting Facility Management aan de Wageningen Universiteit. Bij dit onderzoek wordt ik begeleid door prof. dr. ir. A.F.G.M. van Wagenberg.

Het thema van het onderzoek is innovativiteit binnen kantooromgevingen bij bedrijven en organisaties in Nederland. Er wordt bij dit onderzoek gekeken of er een relatie is tussen diverse organisatiekenmerken (denk aan bedrijfscultuur, leiderschap, structuur etc.) en de mate van innovativiteit binnen de kantooromgevingen.

Onlangs heb ik met u (of een collega van u) gesproken met de vraag of er medewerking verleend zou kunnen worden in mijn afstudeeronderzoek. Op basis van dit gesprek stuur ik u nu deze mail.

De enquête is als proef getest bij enkele respondenten. Hieruit is gebleken dat het invullen van de vragen 15 tot 20 minuten van uw tijd in beslag zal nemen. De enquête wordt digitaal afgenomen en kan anoniem ingevuld worden. Ik kan de ingevulde resultaten dus niet koppelen aan uw organisatie als u besluit geen contactgegevens achter te laten. Discretie is dus gegarandeerd.

De enquête kunt u bereiken door op de volgende link te klikken:
http://www.thesistools.com/?qid=38308&ln=ned
(Als dit niet werkt kunt u de regel kopiëren in de adresbalk van uw internet browser)

Ik hoop van harte dat u uw medewerking wilt verlenen in mijn afstudeeronderzoek. Voor een succesvolle afronding heb ik namelijk voldoende respondenten nodig om valide conclusies te kunnen trekken voor mijn onderzoek. Als u nog vragen of opmerkingen heeft kunt u met mij contact opnemen door het sturen van een e-mail naar Ruud.deHaas@Wur.nl.

Ik wil u alvast bij voorbaat danken voor uw medewerking!

Met vriendelijke groet,

Ruud de Haas
Student Wageningen Universiteit

Appendix 3 Questionnaire

1. Hoeveel werknemers zijn er actief op deze locatie van uw organisatie?

O 0–50 **O** 50–100 **O** 100–200 **O** 200–500 **O** 500–1000
O 1000–1500 **O** 1500–2000 **O** 2000–3000 **O** 3000–5000 **O** 5000 en meer

2. Hoeveel werknemers zijn er actief op een kantoorwerkplek op deze locatie van uw organisatie?

O 0–50 **O** 50–100 **O** 100–200 **O** 200–500 **O** 500–1000
O 1000–1500 **O** 1500–2000 **O** 2000–3000 **O** 3000–5000 **O** 5000 en meer

3. Hoeveel medewerkers op dit kantoor werken op diverse plaatsen binnen het kantoor zonder dat men een eigen, vaste werkplek heeft?

O 0–20 % **O** 20–40 % **O** 40–60 % **O** 60–80 % **O** 80–100 %

4. Wat is de sector waarin uw onderneming werkzaam is?

O Vastgoed
O Electronica/Inf. Services/Communicatie
O Transport
O Energie
O Financiën / Verzekeringen
O Anders, namelijk ……………………………………………..
O Productie
O Chemie / Farmacie
O Overheid / publieke instelling
O Gezondheidszorg
O Voeding / consumentenzaken

5. Gelieve per onderstaande stelling aan te geven in hoeverre er wel of geen overeenkomsten zijn met uw eigen kantoorsituatie op deze locatie.

	Helemaal niet overeenkomstig				Helemaal overeenkomstig
In het kantoorpand is een informeel trefpunt (bijvoorbeeld een Grand Café, een Lounge ruimte of een zithoek) aanwezig voor gemakkelijke, eventueel informele, communicatie.	O	O	O	O	O
Binnen de kantooromgeving worden ontspanningsfaciliteiten geboden zoals fitness, loungeruimte of sportfaciliteit.	O	O	O	O	O
Iedere persoon binnen de organisatie, van medewerker tot directeur, mag gebruik maken van alle werkplekken die beschikbaar zijn.	O	O	O	O	O
De mogelijkheid tot thuiswerken wordt ruimschoots geboden indien een medewerker hierom vraagt.	O	O	O	O	O
Alle medewerkers kunnen gebruik maken van een draadloos computernetwerk.	O	O	O	O	O
Alle medewerkers beschikken over een mobiele telefoon.	O	O	O	O	O

Iedere plaats binnen het gebouw (bv. koffiehoeken of kantine) is geschikt gemaakt om kantoortaken te kunnen uitvoeren, dus ook buiten de standaard kantoorwerkplekken.	O	O	O	O	O
Indien iemand zich wil afzonderen voor werk zijn daar stilteruimtes en/of werkcellen voor ingericht.	O	O	O	O	O

6. Zijn er publicaties geweest omtrent (innovatieve) kantoorinrichting binnen uw organisatie?

O Ja O Nee O Weet ik niet

7. Gelieve aan te geven of onderstaande opties van toepassing zijn op uw organisatie.

O De organisatie produceert kantoormeubilair of kantoorgerelateerde artikelen.
O De primaire activiteiten van de organisatie worden grotendeels uitgevoerd vanaf kantoorwerkplekken.
O Geen van beiden van toepassing.

8. Hoeveel initiatief neemt de ondernemingsraad met betrekking tot veranderingen in de organisatie die de manier van werken binnen de organisatie beïnvloeden.

Niet veel initiatief				Veel initiatief
O	O	O	O	O

9. Gelieve aan te geven in hoeverre u het wel of niet eens bent met de onderstaande stellingen, gerelateerd aan uw eigen organisatie.

	Helemaal niet mee eens				Helemaal mee eens
Er kan maar weinig actie ondernomen worden voordat een leidinggevende goedkeuring geeft aan het te nemen besluit.	O	O	O	O	O
Een persoon die zijn eigen beslissingen wil maken zal in deze organisatie snel ontmoedigd worden.	O	O	O	O	O
Zelfs kleine zaken dienen voorgelegd te worden aan iemand hoger in de organisatie voor een definitief antwoord.	O	O	O	O	O
De medewerkers moeten bijna alles vooraf vragen aan hun leidinggevende voor men iets gaat doen.	O	O	O	O	O
Iedere beslissing die door medewerkers genomen wordt dient goedgekeurd te worden door de leidinggevende.	O	O	O	O	O

10. Gelieve aan te geven in hoeverre u het wel of niet eens bent met de onderstaande stellingen, gerelateerd aan uw eigen organisatie.

	Helemaal niet mee eens				Helemaal mee eens
Communicatie tussen de medewerkers is subliem in deze organisatie.	O	O	O	O	O
Leidinggevenden in deze organisatie zijn bereid relevante informatie te delen met ondergeschikten.	O	O	O	O	O
Er is erg weinig opwaartse communicatie van ondergeschikten naar leidinggevenden in deze organisatie. **(r)**	O	O	O	O	O
De richting van de informatiestroom in deze organisatie is hoofdzakelijk neerwaarts, van leidinggevenden naar ondergeschikten. **(r)**	O	O	O	O	O
Er zijn voor junior leidinggevenden maar weinig mogelijkheden om informele gesprekken te hebben met senior medewerkers. **(r)**	O	O	O	O	O

11. Gelieve de onderstaande vragen met ja of nee te beantwoorden.

	Ja	Nee
Worden er binnen de organisatie informatieboekjes uitgereikt aan de medewerkers met onderwerpen zoals veiligheid, werkomstandigheden e.d.?	O	O
Is er een geschreven handleiding betreffende procedures en vastgestelde regels?	O	O
Zijn er geschreven instructies voor de medewerkers omtrent bewerkingen gerelateerd aan hun taken?	O	O
Zijn er geschreven functieomschrijvingen aanwezig binnen de organisatie?	O	O

12. Gelieve aan te geven in hoeverre u het wel of niet eens bent met de onderstaande stellingen, gerelateerd aan uw eigen organisatie.

	Helemaal niet mee eens				Helemaal mee eens
Voor het goed functioneren van de organisatie dienen de medewerkers die werkzaam zijn op kantoor te beschikken over een vaste werkplek. **(r)**	O	O	O	O	O
Voor het goed functioneren van de organisatie dienen de medewerkers die werkzaam zijn op kantoor mobiel bereikbaar te zijn.	O	O	O	O	O
Voor het goed functioneren van de organisatie dienen de medewerkers die werkzaam zijn op kantoor persoonlijke archiefruimte te hebben. **(r)**	O	O	O	O	O
Voor het goed functioneren van de organisatie dienen de medewerkers die werkzaam zijn op kantoor vrij te zijn in hoe en waar men zijn taken ten uitvoer brengt.	O	O	O	O	O

Bij de volgende 20 vragen wordt in het kort een situatie geschetst. Gelieve het antwoord te kiezen zoals in uw organisatie gehandeld zal worden in deze situatie.

13. C Als iemand in uw organisatie een verschil van mening heeft met een collega, dan:
A. Ontstaat er een discussie, waarbij de beste wint.
B. Leggen zij het conflict voor aan hun chef, die dan een beslissing neemt.
C. Gaan ze samen na wat het beste voor de organisatie is en doen dat.
D. Discussiëren zij erover, waarna ieder doet wat hem het beste lijkt.

14. C Als er voor uw organisatie een voordeel met risico's te behalen is, maar er moeten daarvoor enkele regels en procedures tijdelijk buiten werking worden gesteld, dan:
A. Beslist de directie en zegt vervolgens aan allen wat men moet doen en laten.
B. Doet men het alleen als het kan zonder de regels overboord te zetten
C. Gaat iedereen die ermee te maken heeft snel informatie verzamelen om de haalbaarheid na te gaan; als alles positief lijkt doet men het.
D. Is er meestal alleen belangstelling van de hele groep als men het een interessante uitdaging vindt, overigens heeft natuurlijk niemand er bezwaar tegen als één of enkele mensen het aanpakken.

15. C De redenen waarom mensen in uw organisatie zich inspannen zijn voornamelijk:
A. Omdat men in de organisatie alleen wat bereikt als je er hard tegenaan gaat; bovendien krijgt men de baas op de nek als men er niet aan trekt.
B. Omdat van men verwacht wordt dat men goed doorwerkt en prestaties levert
C. Omdat de klus klaar moet en men daar met z'n allen voor staat.
D. Omdat het werk de belangstelling heeft en het een stuk van men zelf is geworden.

16. C Als iemand in uw organisatie ruzie heeft met de leidinggevende, dan:
A. Zal hij / zij misschien proberen de chef er onder te krijgen maar meestal geeft hij / zij toe.
B. Is er een beroepsprocedure die hij / zij kan volgen om een bindende uitspraak te krijgen.
C. Is het de vraag of dat voor het werk belangrijk is; zo nee, dan is het niet zo interessant; zo ja, dan zorgt men ervoor dat de ruzie wordt bijgelegd.
D. Zal men met hen praten en hen helpen de zaak op te lossen. Als dat niet lukt, zullen ze wel ruzie houden en elkaar voortaan ontlopen (of de betrokkene zoekt een andere baan).

17. C Als men niet tevreden is over de functie zal men gewoonlijk:
A. Voor een promotie vechten.
B. Een verzoek om verandering of overplaatsing doen aan de leidinggevende of personeelszaken.
C. Een andere bijdrage gaan leveren binnen het totale pakket aan te verrichten werk.
D. Ander werk gaan doen of een andere baan zoeken.

18. Een leidinggevende heeft een van de medewerkers gevraagd een voorstel te maken. Met enige ondersteuning van de leidinggevende voert deze medewerker gewoonlijk zijn opdrachten binnen de afgesproken tijd uit. Het voorstel dreigt nu te laat gereed te komen.
A. Men vertelt hem dat men het voorstel nodig heeft, legt hem uit wat erin moet staan en controleert zijn vorderingen dagelijks
B. Men vertelt hem wat men van hem verwacht: wanneer het voorstel gereed moet zijn en men gaat samen met hem de oorzaken van de huidige vertraging na.
C. Men praat met hem en moedigt hem aan het voorstel af te maken.
D. Men geeft hem meer tijd om het voorstel af te maken.

19. Een groep werkt gewoonlijk effectief wanneer men haar aanmoedigt en stuurt. De laatste paar weken presteert de groep aanzienlijk minder. Afspraken worden niet meer nagekomen en de kwaliteit van het werk is beneden peil.
A. Men vertelt de groep precies wat men van haar verwacht en op welke termijn en men volgt het werk op de voet.
B. Men zorgt ervoor dat de afspraken worden nagekomen en dat de kwaliteit van het werk goed is en men geeft de groep minder ruimte om met eigen verbeteringsvoorstellen te komen.
C. Men helpt de groep te bepalen wat er gedaan moet worden en men moedigt de groep aan om de nodige acties te ondernemen.
D. Men laat de groep zelf de problemen oplossen en de leidinggevende toont af en toe zijn belangstelling.

20. Een zeer productieve en effectieve medewerker heeft zijn/haar leidinggevende om hulp gevraagd. Normaal is hij/zij gewend om zeer zelfstandig te werken, maar onlangs zijn er wat problemen gerezen die hij niet alleen denkt te kunnen oplossen.

A. Men analyseert de problemen en stelt voorschriften op hoe te handelen en vertelt hem/haar dat men verwacht dat ze overeenkomstig zal gaan werken.
B. Men bedenkt en kiest de oplossing zelf en men betrekt hem/haar bij het vinden ervan.
C. Men bespreekt de problemen met hem/haar en ondersteunt haar bij het zoeken naar de juiste oplossing.
D. Men blijft hem/haar toestaan om de goede oplossingen zelf uit te zoeken.

21. Men heeft aan een van de seniormedewerkers gevraagd om een nieuwe taak op zich te nemen, die voor een totale afdeling belangrijk is. Eerder werkte hij, met enige ondersteuning en hulp van zijn leidinggevende, naar tevredenheid. Nu is hij echter onzeker en twijfelt of hij de nieuwe opdracht wel aankan.

A. Men bepaalt welke activiteiten nodig zijn om de opdracht succesvol af te ronden en volgt zijn werkzaamheden op de voet.
B. Men geeft expliciet aan wat hij moet doen, maar houdt rekening met mogelijke ideeën die hij inbrengt.
C. In een gesprek geeft men hem de gelegenheid om zijn twijfels en onzekerheden toe te lichten en men helpt hem bij het zoeken naar een eigen aanpak.
D. Men laat hen zelf uitmaken hoe hij het werk zal aanpakken.

22. Een van de medewerkers voelt zich onzeker over een door zijn leidinggevende aan hem op te dragen taak. Hij is zeer competent en men weet dat hij de taak met succes kan uitvoeren.

A. Men vertelt hem precies wat hij moet doen en controleert zijn werk dagelijks.
B. Men geeft aan waarom en op welke wijze men de taak uitgevoerd wil hebben. Men betrekt hem er zoveel mogelijk bij.
C. Men luistert naar zijn twijfels en stimuleert zijn denken over de voor hem liggende taak.
D. Men laat het hem zelf uitzoeken; af en toe gaat men eens bij hem langs.

23. C Als er om een bepaald doel te bereiken iemand in uw organisatie "een veer moet laten" of een stapje terug moet doen, dan:

A. Hangt het ervan af of het een hoge of een lage functionaris betreft. Bij een hoog en machtig iemand gebeurt dat niet zo gauw, bij iemand met weinig invloed gebeurt het eerder.
B. Wordt er nagegaan wat er in vorige gevallen is gedaan, hoe dat is aangepakt en of er tegemoetkomingen zijn gegeven; afhankelijk daarvan wordt al of niet iets gedaan.
C. Moet de persoon in kwestie maar door de zure appel heen bijten.
D. Helpt men zo iemand dat te accepteren; als dat niet kan is dat jammer of anders zal hij / zij wel weggaan.

24. C Mensen die het goed doen binnen de organisatie:

A. Zijn slimme, op wedijver ingestelde mensen die uit zijn op macht binnen de organisatie.
B. Zijn plichtsgetrouw, hebben verantwoordelijkheidsgevoel en hebben een loyale instelling ten opzichte van de organisatie.
C. Zijn vakbekwaam, efficiënt en wijden zich met volledige inzet aan hun taak.
D. Zijn efficiënt in hun contact met anderen.

25. C Als iemand in uw organisatie niet zo goed meer mee kan:

A. Zal hij / zij zich verschansen, een sterke positie proberen te vinden en terugvechten.
B. Zal hij / zij gewoonlijk worden overgeplaatst of weggepromoveerd.
C. Krijgt iemand anders zijn / haar functie en gaat hij / zij ander werk doen als dat er is.
D. Accepteert men dat en helpen hem / haar dat te aanvaarden.

26. C Als er plotseling een leidende functionaris uitvalt en die moet worden vervangen, dan:

A. Wijst de directie iemand aan die zij geschikt en competent acht.
B. Wordt gewoonlijk de plaatsvervangende leidinggevende benoemd, die er het langste is; die moet dan natuurlijk wel de juiste papieren hebben en goede beoordelingen.
C. Zoekt men iemand die deze functie goed aankan en die de zaak goed bij elkaar kan houden.
D. Moet men iemand kiezen, die als leider qua kunde en als persoon het vertrouwen van de mensen heeft.

27. C Als er sprake is van de invoering van een verandering in de werkomstandigheden, dan:

A. Hangt het er van af wat de directie vindt; als zij het schadelijk acht probeert ze de invoering tegen te houden of te beperken; als zij het niet schadelijk acht staat zij het binnen redelijke grenzen toe.
B. Wordt er overlegd; waarschijnlijk wordt er een commissie ingesteld die een voorstel doet.
C. Gaat men na wat het inhoudt en wat de gevolgen ervan voor het werk zijn; als het werk het toestaat doet men het, terwijl men onderling een regeling maakt voor het opvangen van de problemen.
D. Is de vraag of mensen daardoor beter uit de voeten kunnen; zij die dat vinden zullen er gebruik van maken, anderen hoeven niet.

28. Een lid van een groep staat bekend om zijn/haar goede prestaties zonder daarbij al te veel ondersteuning en aanmoediging van zijn/haar leidinggevende nodig te hebben. In het functioneringsgesprek heeft de leidinggevende t.a.v. nieuwe opdrachten afspraken gemaakt voor het komende jaar.

A. Men benadrukt het belang van het nakomen van afspraken en instrueert hem/haar met betrekking tot het uitvoeren van deze nieuwe opdrachten.
B. Men bespreekt met hem/haar de doelstellingen en resultaten van deze opdrachten en maakt daarbij gebruik van haar suggesties ter zake.
C. Men geeft zoveel mogelijk ruimte om hem/haar mening over werkwijze en uitvoering naar voren te brengen en laat haar zelf aangeven welke ondersteuning zij van haar leidinggevende verwacht.
D. Men laat hem/haar geheel zelfstandig werken en laat haar zelf zorgen voor haar eigen sturing en ondersteuning.

29. Men heeft er onlangs een nieuwe medewerker bij gekregen. Hoewel hij/zij onervaren is en gebrek aan zelfvertrouwen heeft, gelooft de leidinggevende dat hij wel de capaciteiten heeft om het werk te doen.

A. Men vertelt hem/haar precies wat het werk inhoudt, wat men van hem/haar verwacht en men volgt zijn vorderingen op de voet.
B. Men vertelt hem/haar hoe hij volgens de leidinggevende het werk moet doen en men wacht daarbij af of hij/zij met vragen en suggesties komt.
C. Men geeft hem/haar de gelegenheid om met ideeën en voorstellen te komen en de leidinggevende steunt hem/haar daarbij.
D. Men laat hem/haar zelf bepalen wat er gedaan moet worden en toont belangstelling voor hem/haar voortgang.

30. Een van de medewerkers heeft een wijzigingsvoorstel gemaakt waarin de leidinggevende wel wat ziet. In het verleden heeft hij/zij meer zinvolle en nuttige voorstellen gedaan en die ook zelf met enige steun van de kant van de leidinggevende weten in te voeren. Men heeft vertrouwen in zijn/haar capaciteiten.

A. Men geeft aan op welke wijze het voorstel moet worden ingevoerd.
B. Men stelt een werkwijze op voor de invoering en maakt daarbij gebruik van zijn/haar suggesties.
C. Men bespreekt het voorstel met hem/haar en men steunt hem/haar bij de invoering ervan.
D. Men geeft hem/haar de verantwoordelijkheid voor de invoering van het voorstel en men bemoeit zich er verder nauwelijks mee.

31. Een groep is zeer competent en in staat zelfstandig te werken. Men heeft dat ook gestimuleerd en men heeft aan sommige groepsleden deelverantwoordelijkheden gedelegeerd. De resultaten van deze mensen zijn zeer goed.

A. Men stuurt het groepswerk meer direct en men volgt de verrichtingen op de voet.
B. Men stuurt het groepswerk en werkt nauw met de groep samen, om hun ideeën optimaal naar voren te laten komen.
C. Men gaat door met het (individueel) ondersteunen en aanmoedigen.
D. Men laat de groep haar eigen werk blijven regelen.

32. Een van de medewerkers wil erg graag een nieuwe opdracht op zich nemen. Hij/zij heeft daarin weliswaar nog maar weinig ervaring, maar hij/zij heeft altijd goed werk geleverd.

A. De leidinggevende vertelt hem/haar precies wat zij moet doen om zijn/haar nieuwe taak goed te kunnen volbrengen en men volgt haar verrichtingen op de voet.
B. Men legt zijn/haar uit wat het nieuwe werk inhoudt en steunt hem/haar in zijn/haar enthousiasme voor de nieuwe taak.
C. Men moedigt hem/haar aan om het nieuwe werkgebied te proberen en de leidinggevende ondersteunt hem/haar daarbij.
D. Men geeft hem/haar de nieuwe opdracht en laat hem/haar zelf bepalen hoe ze deze het beste kan aanpakken.

33. Wij stellen het op prijs wanneer u uw adresgegevens hieronder wil achterlaten, dit is echter niet noodzakelijk.

Naam organisatie: ………………………………………..
Naam contactpersoon: ………………………………………..
E-mail adres: …………………………………………..

Appendix 4 Remarks of respondents

Some remarks are given by the respondents. These are shown below (in Dutch):

- *"Veel vragen gaan over de organisatie; maar vragen een beoordeling hoe men in een specifieke situatie zal reageren. Dat is nooit organisatiegebonden; maar altijd afhankelijk van manager; medewerker; aard van het probleem (uitvoerend; tactisch; strategisch)ik sluit niet uit dat de beantwoording van deze vragen voor een deel sociaal gewenste antwoorden zijn (en dus mijn mening/ verwachting betreffen; niet die over de organisatie."*
- *"Er wordt uitgegaan van een grote eenvormigheid in typen werkzaamheden en medewerkers; terwijl de gemiddelde organisatie een vorm van pluriformiteit kent. Niet alle gedrag is relevant voor alle medewerkers."*
- *"Het eerste gedeelte zijn mijn ervaringen binnen de organisatie. Het tweede gedeelte is mijn manier van leidinggeven; maar dat is zeker niet van toepassing op de gehele organisatie."*
- *"De laatste 20 vragen zijn eigenlijk niet goed te beantwoorden. Het is niet mogelijk deze voor de gehele organisatie te beantwoorden omdat iedere afdeling uniek is. In alle antwoorden zit een kern van waarheid en het is moeilijk om 1 antwoord te kiezen waar ik 100% achter sta."*

Appendix 5 Organizational culture tables

Organizational Culture	Traditional	Innovative	Total
Power culture	6 **7.7%**	1 **3.8%**	7 **6.7%**
Role culture	16 **20.5%**	3 **11.5%**	19 **18.3%**
Persons culture	48 **61.5%**	20 **76.9%**	68 **65.4%**
Task culture	8 **10.3%**	2 **7.7%**	10 **9.6%**
Total	78 **100.0%**	26 **100.0%**	104 **100.0%**

3 cells (**37.5%**) have expected count less than 5. The minimum expected count is **1.75**.

Organizational Culture	Traditional	Innovative	Total
Power	1 **1.1%**	0 **0.0%**	1 **0.8%**
Role	7 **7.9%**	3 **10.0%**	10 **8.4%**
Person	28 **31.5%**	15 **50.0%**	43 **36.1%**
Task	3 **3.4%**	0 **0.0%**	3 **2.5%**
Power / Role	4 **4.5%**	0 **0.0%**	4 **3.4%**
Power / Person	3 **3.4%**	1 **3.3%**	4 **3.4%**
Power / Task	6 **6.7%**	1 **3.3%**	7 **5.9%**
Role / Person	24 **27.0%**	6 **20.0%**	30 **25.2%**
Role / Task	5 **5.6%**	0 **0.0%**	5 **4.2%**
Person / Task	8 **9.0%**	4 **13.3%**	12 **10.1%**
Total	89 **100.0%**	30 **100.0%**	119 **100.0%**

13 cells (**65.0%**) have expected count less than 5. The minimum expected count is **0.25**.

Appendix 6 Organizational leadership tables

Leadership style	Traditional	Innovative	Total
Telling	1 **1.2%**	0 **0.0%**	1 **0.9%**
Selling	11 **13.6%**	0 **0.0%**	11 **9.9%**
Participating	66 **81.5%**	29 **96.7%**	95 **85.6%**
Delegating	3 **3.7%**	1 **3.3%**	4 **3.6%**
Total	81 **100.0%**	30 **100.0%**	111 **100.0%**

5 cells (**62.5%**) have expected count less than 5. The minimum expected count is **0.27**.

Leadership style	Traditional	Innovative	Total
Telling	1 **1.1%**	0 **0.0%**	1 **0.8%**
Selling	7 **7.7%**	0 **0.0%**	7 **5.7%**
Participating	57 **62.6%**	21 **67.7%**	78 **63.9%**
Delegating	2 **2.2%**	0 **0.0%**	2 **1.6%**
Telling / Selling	0 **0.0%**	1 **3.2%**	1 **0.8%**
Telling / Participating	2 **2.2%**	1 **3.2%**	3 **2.5%**
Selling / Participating	15 **16.5%**	6 **19.4%**	21 **17.2%**
Selling / Delegating	1 **1.1%**	0 **0.0%**	1 **0.8%**
Participating / Delegating	6 **6.6%**	2 **6.5%**	8 **6.6%**
Total	91 **100.0%**	31 **100.0%**	122 **100.0%**

12 cells (**66.7%**) have expected count less than 5. The minimum expected count is **0.25**.