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Employee- Driven Innovation;

The manager's guide to EDI

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Abstract

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The majority of great innovative ideas are not discovered in a laboratory by a group of brilliant minds, nor in the executive office by the top managers. It are the people that deal with the company's problems, analyze the competition and service the guests on a daily base, who come up with the great ideas. This fact is often overlooked by senior management who thinks that the people working under them do not understand what the company needs.

The main objective of this thesis is to highlight that the regular employees of an organization play a crucial role in the innovative process, in the form of employee- driven innovations. Furthermore, the need for change that comes with having an innovative company is emphasized.

The thesis in front of you isn't a conventional researched based thesis, but rather a product-oriented thesis, meaning that no qualitative or quantitative research is done. Instead the theoretical framework is the base of the product, supplemented with personal ideas, case examples and adapted views of industry professionals. The thesis product is a guide which helps managers in creating an environment where EDI can flourish, and it also contains practical tips.

As can be concluded, the majority of companies with the goal of being innovative have a big chance of succeeding, as long as they abandon most of the existing idea generating processes. The guide is a great starting point for managers who want to change their organization from the core and who are ready to change their existing behavior. Not only does the company of tomorrow need to promote self direction instead of management, but it also needs to loosen up and allow mistakes to be made.

Keywords
Innovation, Employee- Driven, EDI, Engagement, Culture, Change

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1 Introduction

You never know what you've got until you lose it, or until someone points out the mistakes you are making and the things you don't see. This does not only count for the regular employee, but also the managerial level within a company only sees what is consistent with their existing paradigm. Big companies like Google, 3M and Procter & Gamble understood this early on, which became one of the reasons of their success. Nowadays, more companies see the value in employee engagement, and employee-driven innovation is becoming a hot topic in the service industry. We live in an age where information is widely available, especially to anyone with a computer, and thus the 'ordinary' employees become a more valuable asset to the firm.

1.1 Background

So far, little effort has been dedicated to creativity and innovation in the service industry, and even less on employee- driven innovations. There is research with a focus on innovation, but these research projects mainly focus on the R&D department and special function teams within the company, while the 'ordinary' employee is left out. Also the corporate culture has been discussed in various research projects but also in this case, the focus is on the managerial side rather than the employee side. The only relevant research that has been done so far is by Kesting and Ulhøi (2008), all other studies that are available do not focus on the 'ordinary' employees but they look on the subject from a management point of view.
The service industry is a great place to start with EDI since the employees have a detailed view of the company and the guest contacts lead to a deeper understanding of the existing problems, failures and focus points.

This thesis focuses on the EDI in general, the corporate climate and culture that goes with an EDI company, employee empowerment, and further it gives practical tips for companies. This thesis isn't a conventional researched based thesis, but rather a product-oriented thesis, meaning that no qualitative or quantitative research is done. Instead the theoretical framework is the base of the product, supplemented with personal ideas, case examples and adapted views of industry professionals. The thesis product is

a guide which helps managers in creating an environment where EDI can flourish, and it also contains practical tips.

The guide is written in order for managers in the service industry to promote employee driven innovations. Not only does it describe the theoretical parts but it also gives practical examples and ideas to get you started. The focus is not only on the hospitality industry, because the knowledge can be used in almost all service industry related companies; from restaurant until online search companies and from tourism agencies until accounting companies.

1.2 Structure

Because innovation is a wide topic which could take years to fully cover, the thesis covers several important aspects which have an impact on the EDI of a company. Furthermore, the thesis follows the guidelines as set by Haaga-Helia University of Applied Sciences, regarding the bachelor thesis in Hotel, Restaurant and Tourism management.

For the making of the thesis, extensive research was done regarding the following topics:

- Innovation; a good understanding of what innovation is, is an important factor when someone wants to understand EDI. Knowing the different types and reasons for innovation is of vital importance because each type requires its own competencies and resources in order to be successful.
- The innovative process; when working with innovations, it is important to know which stages most innovative processes pass, so that appropriate action can be taken.
-EDI; the main topic of the guide is EDI so the literature review also covers a clear definition, it describes the product champion and it discusses the effects of EDI.
- The corporate culture and climate; in order to create a sustainable innovative environment, companies need to adapt their processes accordingly. This also covers the role of the HR department in creating this employee- driven innovative culture.
- Employee engagement and incentives; people do not work at their best when they do not feel valued and listened to. By empowering them and giving incentives for their innovative ideas, the productivity goes up and creativity starts flowing.

All the above aspects will be discussed in the product while using case examples, pictures and movies to make things clear, interesting and fun.

1.3 Scope and limitations

As mentioned earlier, the aim of this thesis is to discribe employee- driven innovation for the managerial level of a company in the service industry. The outcome is not only a theoretical part, but it also contains useful tips and pointer for the manager of today. The study does not only focus on what EDI is, but is also investigates how the corporate structure should look like in order for EDI to be successful.

The specific focus of the product will mostly lie with the change that companies have to make, when wanting to be successful regarding employee- driven innovation. Not only will be discussed what these changes are, but practical examples will be given of companies that already successfuly changed their business.

The limitations regarding this thesis mostly have their origin in the subjective nature of the subject. Employee- driven innovations are a product of a persons imagination, his existing thought patterns and paradigms which all contribute to this difficulty. A second limitations is the ability to test the product in real life, since the process of corporate change has proven to take many years. Testing the product would be difficult either way since measuring EDI is difficult and most managers trust their guts when it comes to the measurement of innovation. The third limitation is the ability to generalize the outcome since each corporate culture is different, leading to company specific results. The fourth limitation of the study is that the costs envolved in the implementation of the plan are not considered. This might be an interesting topic for further research since the costs play a vital role in the decision making process of a company.

2 Innovation

Innovation has been around for a long time, and although everyone has an idea on what it means, there is still no agreed-on and consistent definition used in the world today. One of the first people to define innovation was Schumpeter in 1947 when he stated that innovations are a new way of doing things and that they change the values of the existing system. According to Rogers (1983) and Kanter (1983), an innovation transforms an idea into something that can be used and which is grasped as new, either in the form of a process, product or service. Furthermore, an innovation can be seen as the opportunity to create an altered or new product or service and it should be implemented as such (Drucker 1985). One of the most complete definition is coined by Burgelmann and Maidique (1996) which states that an innovation is the payoff for going through the innovative process, and which is defined as the unified activities leading to new products or services that are marketable.

A clear, consistently used and agreed upon definition of innovation might never be phrased due to the subjective and complex nature. Why? Because paradigms are different for everyone based on personal experiences, level of education, ways of thinking and so on. What is new and crosses boundaries for one may be normal for another. In the most basic form, innovations relate to improvements or renewals. Regarding businesses, it means doing something new that, once implemented, creates value for the firm.

Then there is the difference between an invention and an innovation. According to Jan Fagerberg an invention is the appearance of a new product or process while an innovation is the original pursuit of carrying it out in practice. A good example of this is the iPod. Before the iPod came out, the mp3 player (invention) existed for years and all of them were basically the same. When Apple created the iPod, the truly innovative aspects were the design, the ergonomics and the user friendliness along with the creation of iTunes. The combination of these aspects is what made the iPod truly innovative.

Innovations can be the most frustrating part of a business but the sheer thrills and excitement of turning a new idea into something concrete makes it worth the trouble (Henry & Walker 1991).

2.1 The history of innovation

The first person to steer people in the direction of guided transformation and idea generation was Socrates, followed by his pupil Plato. From this time on, the process of innovation became part of the culture and it changed the ways of thinking around the world (Kalthoff, Nonaka & Nueno 1997). By influence of people like Marx and Weber, companies survived on the knowledge they gained by recognizing the potential profit of their research activities. The first R&D laboratory was built in the 1870's by a German chemical company after which people like Edison, General Electric and DuPont established theirs. Before this period most innovations were made by independent innovators, but in the beginning of the 1900s when R&D labs were raising it was a more collective effort. Needless to say the two world wars spiked the development of innovative effort even further and also the cold war boosted the collective.
More recently, product development and innovation activities have become global, leading to the fact that Europe and the USA have rapidly lost their advantageous competitive position (Jungblut & Meyer 1999).

The importance of innovations had been established well before the 50's when Schumpeter (1943) distinguished innovations as "creative destructions" with the ability to demolish monopolies and create entirely new industries. Technological innovations in particular have been widely accepted as major strategic advantages for companies, industries and governments. Studies by Pavitt (1990) have shown that a company's investment in technological innovations have great impact on its productivity and market share. Another study has shown that firms that use innovation to differentiate their products and services are twice as profitable on average (Tidd, Bessant & Pavitt 1997). This knowledge has skyrocketed the need for innovative ideas in order for firms to gain competitive advantages and to diminish this of well established organizations.

2.2 Research and Development

Finding a company that does not talk about innovation during their managerial meetings is hard to do. In fact, according to a recent study by the Boston Consulting Group, more than 66% of the interviewed CEO's list innovation in their top 3 priorities. And although most of these company also try to come up with innovative products and services, only few actually do. Research by Capon, Farley, Lehman and Hulburt in 1992 has shown that spending money on research & development leads to an increase in innovation. So most companies nowadays rely on their R&D department to come up with the innovative ideas and so occasionally resources are thrown their way, after which everyone forgets about it until the next meeting. (Ahmed 1998; De Bono 2008.)

While R&D is mostly associated with the task of a company to invent new products, the development of already existing product is equally important due to the ever changing customer wishes. The idea behind R&D is that the products and services of the company should meet the future needs of today's customers, this by improving the products, the processes and to provide customers and the company itself with expert advice. (The Times 100.)

Applied research, basic research and experimental development are three activities covered by the term R&D. Basic research is either theoretical or experimental and it is primarily done in order to get new knowledge regarding the groundwork of a subject, without any predetermined views or opinions. Applied research is in essence the same as basic research regarding the fact that it is focused on getting new knowledge. The difference however, is that applied research is done with a specific objective in mind. Experimental development is based on already existing knowledge about the subject, collected by practical experiences or research. This information is then used in order to created new products and services, or in order to improve existing products and services. (Jain et al. 2010; OECD 2008; Pelz & Andrews 1966.)

A company should first measure the expected impact of the innovation before starting to execute the idea. In their 2008 study on 'the impact of firms' R&D strategy on profit

and productivity', Börje Johansson and Hans Lööf concluded that i) firms that apply R&D on a persistent base, perform better then companies with little or no R&D, ii) occasional R&D is perceived as lower performance then companies with no R&D iii) the positive effect of R&D on a regular base is diminished when a company has a low productivity level, indicating a non-linear relationship.

Not all R&D is expected to be profitable in a short period, and that is why large companies outsource up to 1/10 of their budget to the development of new products with a potential pay-off in the distant future. Companies are generally hesitant when it comes to big changes or even entire new product due to the fair of failure. Although companies often come up with new and innovative ideas, the implementation takes quite a long time leading to a disbelief in the company. A lot of managers still think that change is bad; that it confuses and disinterest the public. They believe change often leads to worse business and a lot of headaches. By experimenting with the idea and monitoring the results, one is able to see what works and what not... fine tuning wherever possible or when complete failure is detected. By conducting a soft launch for a limited audience before expanding the offer to the general market, one is able to observe customer behavior, measure satisfaction, test the staff, and identify and correct any problems. (Kimes & Goodwin 2010.)

2.3 The different types of innovation

There are two types of innovations and each requires different core competencies and resources in order to be successful (O`conner 1998; Rice, O'conner, Pieters, Morone. 1998). The two types that Ottenbacher and Gnoth (2005) have identified are called true innovations and minor modifications. The first are completely new ideas, with a completely new market while the latter are simple modifications like switching from keys to swipe cards or ideas that provide added value. The widely used terms however are radical and incremental innovation.

Radical innovations are hard to copy and so have the potential to destroy the existing competition (Tushman & Anderson 1986). The competition will do whatever necessary to regain their market share and thus it is likely that the company should and has the opportunity to apply incremental improvements (Ettlie & Rubenstein 1987). Due

to the great risks and costs involved it is a risky business but the results on the long term are sufficient and may even change the existing market structure (Veryezer 1998). Barczak (1991) Green, Gavin and Aiman-Smith (1995) and Hage (1980) further break it down by dividing it into new-to-the-firm and new-to-the-world ideas, whereas the latter consists of pioneering breakthroughs or new technical combinations. Because radical innovations often tend to ignore the customer's wishes they have a bigger chance of failing (Gatignon & Robertson 1985).

Incremental innovations are most commonly adopted by companies since the costs and risk are fairly low and it only consists of modifications or extensions of existing products or services (Dosi 1988; Parameshwar 2008). Due to the fact that incremental innovations do not stray far from the existing core competencies and business practices of a company, they improve the internal competencies because the employee can build on the existing know-how (Tushman & Anderson 1986). Furthermore, they most likely happen in market orientated companies because of their ability to gather information and react swiftly on the intelligence (Kohli & Jaworski 1991).

In their study, Darroch and McNaughton (2002) identify three factors of innovation, being incremental innovations, innovations that change consumer's behavior and innovations that destroy business competencies. The first consist of minor changes regarding the existing products, and the restructuring of existing products or services. The second factor entails changes that are considered new-to-the-world innovations that provide greater advantages than existing products and require the change of customer behavior. The last one is new-to-the-firm innovations that may lead to the destruction of the competencies due to the lack of experience and technological support.

Zaltman, Duncan and Holbek (1973) have determined three dimensions of innovations, namely programmed-non-programmed, instrumental-ultimate, radicalness. Programmed innovations are the once that are scheduled pro-actively, sometimes with regard to other innovations. Non-programmed innovations are divided into slack innovations, which happen due to weak resources, distress innovations, which occur as a direct response to crisis, and proactive innovations that draw the company's attention

to areas where change is needed but not yet recognized (King 1990). The second dimension houses innovation that are the end product or service itself (ultimate), or means that reinforce further innovation (instrumental). The third of the dimension are the generally accepted and widely discussed radical innovation.

Although a lot of authors use their own definition and types of innovation, the general consensus is that radical and incremental cover practically all covers. Although the trend of renaming and redefining one's own definitions may lead to different insights, defining every little exception will only make the concept unclear.

2.4 The reasons for innovation

Now that we have established the two kinds of innovations, let's focus on why innovations are done. Although sometimes it seems that all innovations are completely fortuitous, this is mostly not the case. The best known example of serendipitous innovations is the invention of the post-it notes by 3M. One day, Art Fry, one of their employees, had enough of his bookmark papers falling out and he turned to Dr. Silvers who had invented a low-tack adhesive which he was not able to launch. Even today, 3M promotes the Post-it® as "invented as a solution without a problem" (Post-it 2011). Even though office-supply distribution companies did not believe in the idea, 3M was committed to the launch and eventually made them over $100 million (Peters & Waterman 1982).

According to Drucker (1985), most innovations are the result of a focused and conscious search for it. In contrast with Drucker's opinion, the observation by Rathmell (1974, 14) states that new services just happen, rather than that they are developed using a formal process. This statement is supported by Gummesson (1989, 84), Grönroos (1990, 57) and Langeard, Reiffait & Eiglier who conclude that new services happen due to luck, flair and a good portion of intuition. The difference between these two views can be explained by the fact that Drucker focused on technological innovations, and the latter on service innovation. For the purpose of the paper, the service related theory will be used.

A widely used term for these kinds of innovation is not in use, but due to their focused nature this paper will refer to them as being "imminent".

This author believes that the difficulty and subjective nature of innovation makes it hard enough to understand and so prefers simplicity when categorizing innovations. The terms that will be used for the remainder of this paper will be incremental- radical and serendipitous- imminent.

2.5 The innovative process

Serendipitous innovation process- There are numerous innovative processes on the market nowadays but they all share a common aim, being, to transform an idea from a mere concept to reality. This is done by converging the idea into a specific product that fills the market need. (Wheelwright & Clark 1992.) The previous authors also developed the so called development funnel which consists of the investigation-, development-, and market introduction phase.

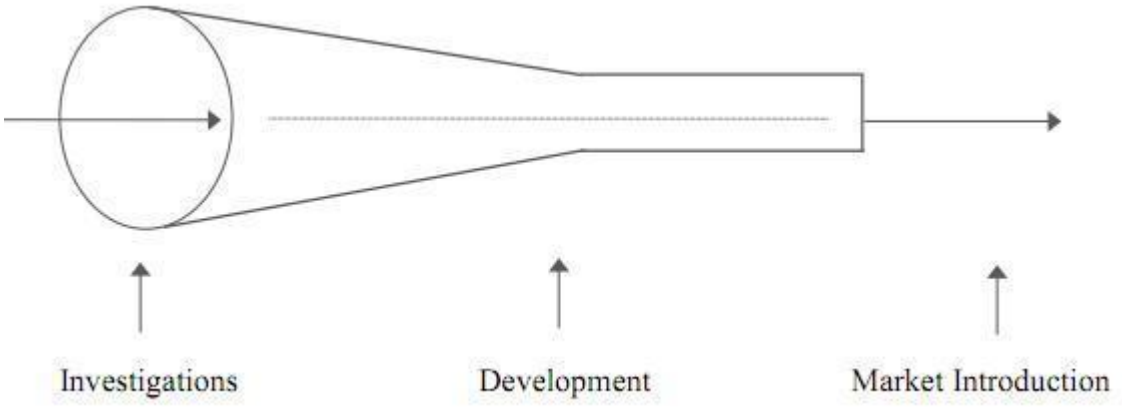

Figure 1. The development funnel (Wheelwright & Clark 1992).

In the beginning, the initial idea is analyzed by concept investigation and the acquisition of knowledge. After this the funnel is narrowed, allowing the company to assess the idea and concept by making a prototype. After this stage a soft launch is done and when this is successful the product is introduced in the market.
As can be seen in the development funnel, the innovative process begins with a broad view, a lot of knowledge gaps and a high number of variables. The funnel becomes narrower due to investigation and knowledge acquisition. The further down the process, the fewer variables and by building a prototype or conducting a soft launch,

the number of variables and knowledge gaps will reduce substantially. (Dean, Susman & Porter 1990; Gales & Mansour-Cole 1995.)
Likewise, in 1987 Roberts introduced a simple model which also consisted of three simple steps. 1: Discovery, where the idea is generated and is recognized by management. 2: Decision, where the idea is analyzed and where the concept development is created. 3: Development, which covers the ultimate design, production and marketing of the product.

Research has shown that consumer testing in every stage of the innovative process is recommended (Sommers 1979), while the most customer interaction takes place in the evaluation phase (Feldman & Page 1984, 13-55; Cooper & Kleinschmidt 1986, 71-85). Another successful factor is continual, in-depth and casual contact with major customers during the entire development process (Maidique & Zirger 1984, 192-203)

Imminent innovation process- Roger's innovation model is a more in depth model which consists of five stages, where the initial stage assumes that innovation is an intergraded part of the corporate culture.

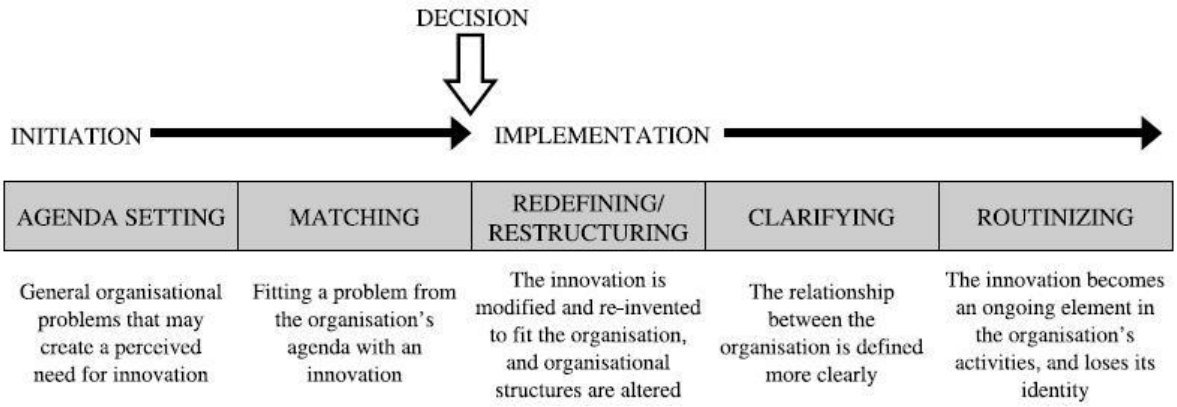

Figure 2. Roger's model of the innovation process (Rogers 2003)

The 'agenda setting' and 'matching' stages consist of the gathering of information, the conceptualization of the idea and the planning efforts that are necessary for the adaptation of the innovation. These stages go from a general view, where the problems that might need innovation are analyzed, to the matching of these problems with a possible innovation. After these first stages a decision is made on whether or not to go through

with the process. The last three stages all focus on putting the innovation in use. (Rogers 2003.)

Product improvement innovative process- More based on the innovation of existing products but which may also be applicable for services, are the three steps proposed by Hauptly (2008). The first step asks the question where the product is really used for. By analyzing how the product or service is used for by the customers, intriguing aspects may come to light which did not show due to the existing paradigm. The second step asks the question if any steps can be taken out of the process. In easy example of this in the hospitality industry is the multipurpose television. Instead of only watching tv, you are now also able to hook up your laptop or iPad and make video calls. The third and final step in the process focuses on what the next steps of the consumer are after using the product. The refrigerator with ice cube maker is a perfect example; after pouring your drink, you just hold your glass under the dispenser and you have a cold refreshing drink.

In short- The general conclusion that can be drawn is that most innovative process starts with the idea generating, followed by the tweaking phase after which it is designed and put into the market. This is also the same for innovations that come from the companies employees, but the extra phase that is often necessary consists of convincing the rest of the innovation.

2.6 Change and innovation

Change is often initialized in a company when innovative ideas become interesting for the company. Over the last few years, the following triggers have been the reason for change in a lot of companies; i) Cross sector innovation with regard to products and services, ii) use of one specific element of an existing product, in order to create a new one, iii) the use of new technological inventions. When it comes to assessing the product or service innovation, a company can use the innovation matrix in order to assess the risks and costs involved.

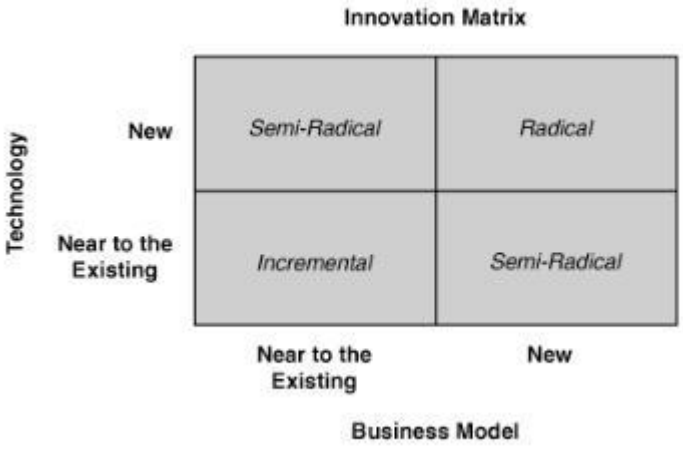

Figure 3. The innovation matrix (Parameshwar 2008)

The figure above shows that incremental innovations have a low innovation rate and low risks involved, while radical innovations have high risks and the costs involved are high. Most innovations taking place today are incremental innovations, which mean that the impact is also incremental. On the other hand, radical innovations have a high financial risk so when it goes bad, the consequences might be catastrophic for the company. (Parameshwar 2008)

3 Employee-Driven Innovation

The majority of great innovative ideas are not discovered in a laboratory by a group of brilliant minds, nor in the executive office by the top managers. People who deal with the company's problems, analyze the competition and service the guests are the ones with the great ideas. This fact is often overlooked by senior management who thinks that the people working under them do not understand what the company needs. Without trust in the company's own people, consultants need to be called in which shows a lack of courage and insight from the company. (Spender & Strong 2010)

Many good arguments can be given why companies should encourage employee innovations, the first being that more and more firms divide and outsource various activities so that they can focus on their core competencies. Secondly, the increase in highly skilled knowledge industries has let to continuous pressure on companies to innovate constantly. This because large companies outsource their expensive, in-house R&D activities and use the aforementioned industries at lower costs, leading to increased competition and economical volatility. (Kesting & Ulhøi 2008.)

An employee innovation is an innovation that is driven from all employees of the company, not just the management, and thus is often indicated as employee-driven innovation (EDI). In this case, the employee works for the organization but is not in a position with a lot of control. The Danish confederation of Trade Unions, or LO, defined EDI by stating that the employees should contribute actively and systematically in the process. In other words, it comes from the bottom up instead of from the top down (LO 2005).

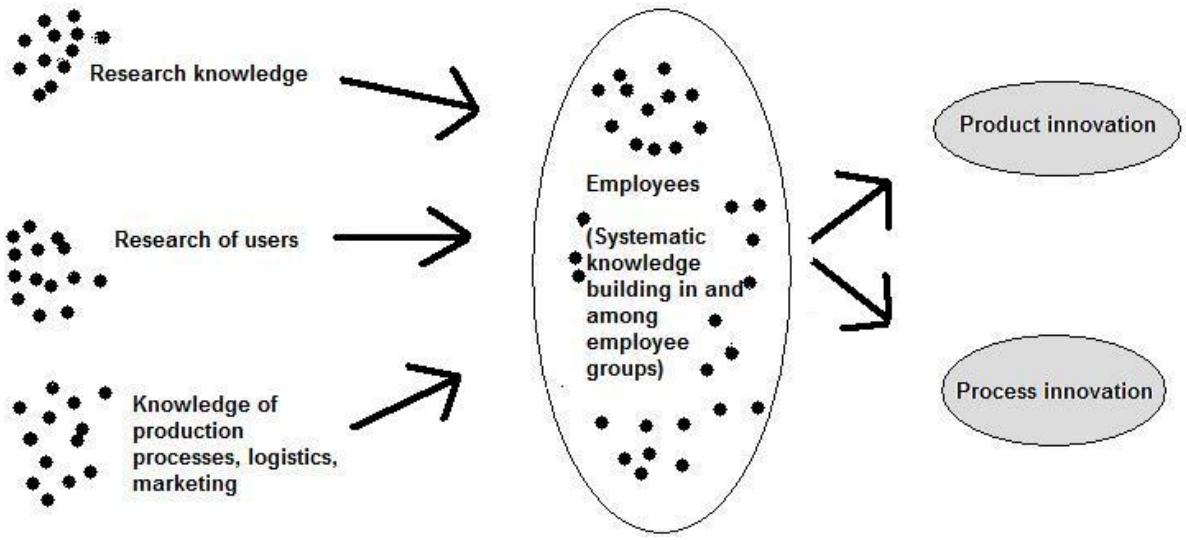

Figure 4 Converging knowledge into innovation (LO 2005)

The figure above shows how different types of knowledge are absorbed, analyzed and shared among employees after which the relevant knowledge is converted into product or process innovations.

A clear definition of EDI is important because not every innovation initiated by and employee should be attributed to the EDI concept. Employees that are considered professional innovators, such as marketing and R&D personnel, and decision makers are expected to be innovative and so their ideas do not count as EDIs. There is a big 'however' though, when the above mentioned employees come up with innovative idea outside of their primary field, it *should* be considered and EDI. For example, when a marketing employee comes up with an innovative idea regarding the complaint handling procedures, than this can be considered an EDI. In summary, an idea is considered an EDI when the employee works on it outside the boundaries of his primary job.

The types of innovations that are considered EDI are open to interpretation, especially regarding the aforementioned definition regarding business. The part of it being 'new' calls the questions; what is new, how new it is and for whom is it new? Regarding 'value', the question is what kind of value is created?
All types of innovations (product, service, technology, and market) and all types of newness (radical- incremental) are considered EDI as long as they meet the criteria regarding who did them, and as long as they breach the existing paradigm and routines.

Kesting and Ulhøi (2008) acknowledge that EDI research is still in the beginning but they argument that 'regular' employees have a positive impact due to their knowledge of the operative processes and their creative capabilities.

EDI is a subdivision of the concept "non-R&D innovation" as proposed in the European innovation scoreboard (2007). This report furthermore states that many companies and even countries apply non-R&D innovations, more and more.
Employee driven innovation also incorporates so called 'open innovations' (Chesbrough 2003), which mean that companies can no longer solely rely on their own research and so use external knowledge. External knowledge encompasses apprehension gained through networking (firm-to- firm (to-knowledge institution)) and other forms of intentional in/outflow of knowledge.

3.1 Champion

Because so many people believe that innovation is not their job in the company, very little gets actually done. Research by Enz and Sigauw showed that innovations were positively affected by people who stood out in the process, the so called 'champions'. This is also supported by other studies which show a positive connection between the success of the innovation and the existence of a champion (Rubenstein & Schreder 1976; Cooper 1986, 51; Easingwood 1986, 264-275). Two crucial success factors for champions are their success and power in the organization, as well as access to a broad communication network so that they can function well as a liaison (Frost & Egri 1990). Senior staff members for the lower level of line management are the most suitable for these since they possess a more credible and extensive network than the newer employees (Dougherty & Hardy 1996; Martin & Horne 1992, 25-38). Other skills that champions possess are their leadership qualities, they are problem-solving oriented, and they are capable of supporting the project.
The task of the champion is to guide the idea through the first stages up until the initial testing. Internal marketing by the champion regarding the innovation and himself, clearly reduces the risk involved. The next step for the champion is to convince the higher level management of the need and feasibility of the idea, where after the champion drops or develops the idea. This is probably the most important phase since once

declined; there is nowhere to appeal the decision of the higher management. When the higher management is convinced of the idea, the champion starts gathering intel to support the formal decision to proceed (Martin & Horne 1993, 49-65). At this point, most data comes from customers, personnel, competitive analysis and the secondary intel that is available, according to research by Martin and Horne (1992). The initial outcome of their research showed no clear difference in the involvement of a champion regarding successfulness of the innovation. After re-examining their results, they came to the conclusion that when champions stay during the launch phase of the innovation, the rate of success is clearly higher.

3.2 Effects of EDI

New products and services are oftentimes measure by the financial performance such as profit, revenue, sales and market share (Griffin & Page 1993, 291-308). Research by the LO via a survey and case studies shows that EDI have an overall positive effect on the company's performance regarding profit. This shows that the participation of both skilled and unskilled staff members have a supportive and stimulative effect on the company's innovative products and processes.
This conclusion is drawn by assessing the bottom-line profit to the innovative process, regarding companies that use EDI and companies that do not use EDI. 58% of companies that use EDI have assessed their financial performance as better than before the use of employee innovation. In comparison, companies that do not use EDI but a centralized approach only saw their bottom line performance increase with 41%.
There is however, a segment of conventionally arranges companies that use a centralized approach which also perform good financially. This might be because of the technological based innovations that have no use for EDI due to the complexity and acquired educational level.

Although financial measures are the primary evaluation base for most companies, research has shown that there are also indirect benefits such as customer loyalty, an enhanced image and possible new clients (Easingwood & Percival 1990) Other 'soft effects' by EDI are reduced stress, lower absence rate, greater job satisfaction, happy employees and thus a higher retention rate. The stress that comes with more responsi-

bilities and influence due to employee innovation, is describes as 'good' stress, where deadlines are made and performance is up.

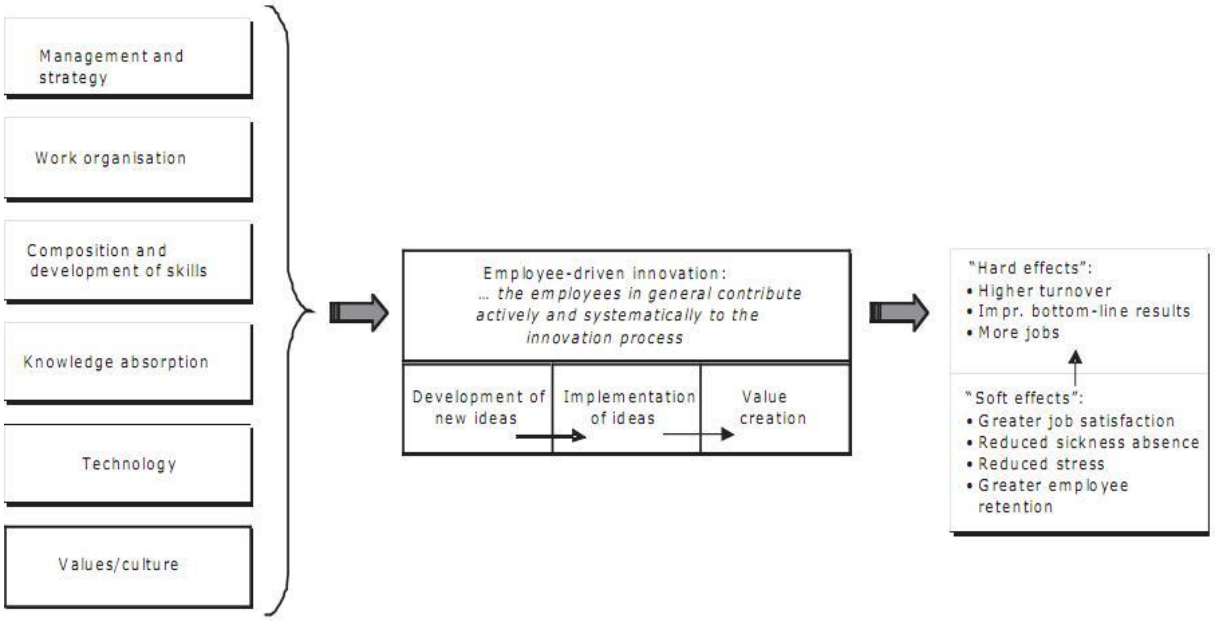

Figure 5. Analytical EDI framework (LO 2005)

The figure above shows the framework of EDI according to the Danish confederation of Trade Unions. The benefits for the company are clear and the employees are happier and motivated.

In summary, EDI leads to the fact that the employees do not only focus on their own duties, but they also analyze and consider changes regarding performance. Furthermore, the educational background of the employees does not seem to matter with regard to working with specialist groups. Finally, the management pays attention to the employee ideas and they motivate them to act in the innovative process.

4 Internal environment

The most successful innovative companies have an organizational structure that is entirely focused on innovation. This has effect on several parts of the culture like the hiring process, the reward system and employee empowerment.
As discussed before, the first step in facilitating ongoing innovations is creating a culture that allows innovations to take place. This will be an open culture that allows ideas to be fostered and innovations to grow. This has to come from the top because the "normal" corporate culture does not encourage the employees to do so. The second step is to adapt the habits and processes accordingly. The employees should become used to being creative, and when new employees are hired they should understand this flow. This can be done by building innovation into the companies human resource policies, meaning that a systematic approach needs to be created to run the business, with innovations foremost in mind.

4.1 Corporate climate and culture

Already in the 80s there was a shift from corporate structures and employee characteristics to more intangible factors like culture and climate. Gareth Morgan (1986, 138) noticed that cultural change is needed for effective organizational change and with regard to an innovative climate, this includes openness to change, disagreements, the taking of risk and playfulness (West 1990; Nyström 1990; Ekvall 1996). Research has shown that the social environment of a company has influence on the creative behavior (Amabile, Conti, Coon, Lazenby & Heron 1996), but an organization cannot simply decide to become innovative unless they create an environment where the employees feel comfortable regarding innovation creation. The culture is an important part in this since it has to ability to enhance the innovative tendencies of the employees. The climate can be defined as the company's true priorities, encompassing the procedures, practices, incentive system and daily operation. The culture normally refers to the beliefs and values of the company and in some way is the same as climate, but at a deeper level. A company that is able to create a strong culture has staff members which truly believe in the processes, products and customers (Ahmed 1998).

Most companies have a heterogeneous decisions making style, meaning that only a small group of people is allowed to make decisions about innovation. This is one of the fundamental criteria for EDI since if there was a homogeneous decision making structure, everyone would be responsible which undermines the 'who' part of employee driven innovations. People that have the power to make decisions are called managers, and those who not are called employees. It is of course not so that the employees have absolutely no decision making rights, but the extend and level of these rights is what makes the difference (Kesting & Ulhoi 2010, 65-84).
The problem with a heterogeneous structure without employee driven innovation in the firm is that the management does not know everything regarding the day-to-day routines on the floor. Without the help of EDI, managerial decisions would lack detail because they do not get all informal data from either the employees or customers and suppliers (Reber & Lewis 1977).

Factors such as motivation, skills, knowledge and character have shown to influence individuals in a company, but on the other hand culture and climate have shown to influence the collective level (McLean 2005). The question if the corporate culture enhances the innovative process strongly depends on the norms, set by the company. Without a good, strong and companywide culture, it does not matter how strong the desire to innovate is and few ideas will be generated (Ahmed 1998). Researchers like Andrew (1996), O'Reilly (1989) and Pinchot and Pinchot (1996) have established a list of norms that promote innovations and the most important ones are presented below.

- Challenge and belief in action; employee involvement in daily routines
- Freedom and risk taking; the degree of decision making responsibilities
- Dynamism and future orientation; attitude towards change
- Trust and openness; regarding working relationships
- Debates; the degree of sharing ideas and truthfulness
- Cross- functional interaction and freedom; degree of departmental exchange and teamwork
- Leadership commitment and involvement; degree of managers leading by example and actions

- Awards and rewards; the way failure and success is handled
- Innovation time and training; the time employees have for new ideas

According to Ahmed (1998) there are two factors which leaders should accomplish in order to create a successful and endurable innovative culture. The first is that leaders should be aware of their environment and the impact which they have on it, so that they are able to communicate properly without the gap of management and operational level. The second factor is that the leader should be able to accept the ambiguity that occurs when working with innovations. Without ambiguity, only routine actions will be produced, undermining the entire innovative concept. Another factor which should be taken into consideration is what happens when innovations succeed or fail, but this will be discussed in detail in the chapter Employee engagement.

Top management plays a crucial role with regard to the innovative culture and they are responsible for the characteristics that make the organization highly innovative. These characteristics are the commitment and support for innovation, together with the appointment of champions. Also, there should be good assessments in place regarding the markets and the potential demand. Furthermore, support should be given from all levels of management and all departments due to the cross-departmental nature of most innovations. And finally, each and every innovation should be screened and analyzed thoroughly before implementation.
In addition, actions speak louder than words and thus the management has to show how it should be done. When the employees see what is happening around them, they are more inclined to participate in employee driven innovation. (Ahmed 1998.)

Dominating companies in the future won't be the ones that solely focus on product and service innovations, but they are the ones that manage to create a sustainable environment focused on innovation, via an appropriate culture and climate (Ahmed 1998, 43).

4.2 Human resources

The company's internal resources are an important asset regarding competitive advantages due to the specific and hard to copy nature. The human resources are viewed as a source of value and thus deserve the necessary attention (Bae & Lawler 2000, 502-517; Pfeffer 1994). Strategic human resource management has become an increasingly important subject since it allows the organization the reach it goals, by planned deployment and focused activities (Wright & McMahan 1992, 298).
The success of a project will depend on the human resource practices of the company and needs to be superior to the competition. Furthermore, they have to play a role in new service developments, they need to be part of the strategic business planning and they have to be able to change according to market needs. This will make it difficult to copy, along with the fact that valuable staff members will be attracted, making the employees a competitive advantage rather than a cost factor (Ottenbacher & Gnoth 2005, 214-215).

The human resource department plays an important role in the innovative process since they are responsible for the recruitment of the right people for the job while creating the ideal mix of skills. By using for example the Myers-Briggs type indicator test, the HR department is able to measure psychological preferences in how people perceive the world and make decisions. Together with the Belbin team role inventory, which differentiates 9 different types of roles, an ideal mix of employees can be formed. Another task of the HR department is the training of employees since this is one of the key success factors in employee driven innovation. By implementing innovation and creativity training programs, the skills and performance of the employees are increased. (Phillips 2008.) Giving trainings is a good start, but the employees also need to understand and support the idea behind it, leading to total commitment (Cooper 1993). At this stage internal marketing is critical because it support the entire process, leading to motivation, commitment and personal engagement.

4.3 Employee engagement

The biggest success factor of employee driven innovation is of course the participation of the employees. In his book "Make us more innovative" Jeffrey Phillips (2008) concludes that high employee engagement, along with easy employee recruitment and retention, are some of the perks of being an innovative firm. Furthermore he states that motivated, engaged and active personnel are the key success factor of innovative companies since they are involved in all the stages.

But how do you engage you staff?
Several personal factors are of influence regarding innovative involvement and creative production being, intrinsic versus extrinsic motivation, challenging individuals, and skills and knowledge.
Intrinsic versus extrinsic motivation- Research by Amabile (1990) Baron and Harrington (1981) and Dan Pink (2009) has shown that extrinsic motivation (like rewards and evaluations) have an adverse affect on innovation motivation due to the fact that they lead to follow-the-rules thinking. When evaluation of the employee is part of the innovative process, than the employees are more likely to play by the rules and avoid risks so that they do not get a bad review. In contrast, the factors that lead to better performance are autonomy, mastery and purpose. Employees need freedom in order to take risks and work on the edge, they have the urge to master something that is fun, and they want to have a purpose when doing so.
Even though intrinsic motivations are more powerful, extrinsic motivational factors such as rewards need to be at a certain level. The best extrinsic motivator is therefore paying people enough so that the issue of money is of the table (Dan Pink 2009; Ahmed 1998, 42).
Challenging individuals- Freedom in the innovative process leads to higher creativity than when the job is narrow. This because people work better and with higher productivity when they are challenged and feel supported. Not the level of creativity of an individual but rather the organizational expectations have a crippling effect on the employee's innovative drive. (Shalley & Oldham, 1985.)
Godin (2004) reports that companies that allow employees to judge situations themselves, are more successful than companies that keep their employees on a short leash

with little to no leeway. Especially in the service industry, it is almost unavoidable to empower employees to make decision because they constantly need to change their behavior regarding each service encounter, in order to meet the customer's need. (Hartline, Maxham & McKee 2000, 35-50.) In line with this, Bae and Lawler (2000) propose employee empowerment when the service involves a relationship with the customer. Employee empowerment does not only take pressure off the manager, but also shows trust in the employees, leading to an increase in engagement.

Skills and knowledge- These two factors can both have a positive as a negative effect on the employee driven innovations. The positive effect is that knowledge can create new understandings, but the negative effect is that domain-relevant skills lead to routine thinking and thus inhibits thinking that circumvents the existing paradigms. (Ahmed 1998, 35-36)

As in every business aspect, communication is also of vital importance regarding employee driven innovations. According to a study from De Jong and Den Hartog (2007), it is one of the key factors in reinforcing employee innovation. An easy way of doing this, is sharing external feedback (customers, suppliers etc.) and the result from new product trials with the employees. Not only communication from manager to employee, but also from employee to employee and department to department is important. By arranging, for example, cross-departmental meetings with both analytic and creative employees may lead to a spark in creative thinking. Technological innovations such as blogs and online creativity communities also enable employees to share their thoughts on company products or services.

4.4 Incentives

Employee driven innovations and incentives are a tough combination, mostly because there is insufficient data regarding the success or failure of innovations. Also, the majority of innovations in the hospitality industry are intangible, making them difficult to monitor and evaluate. Most managers rely on their own experience and gut feeling when measuring the success of innovations and so the incentives rely on the subjective opinion. (Ottenbacher & Gnoth 2005, 206.)

Although the earlier mentioned employee engagement factors, there is no such thing as a free lunch (except when you work at Google). Taking into account that four out of ten new innovations fail (Griffin 1997, 429-58), it is a challenge to reward only successful innovations because after a while, employees will stop putting energy into a bottomless well. This situation is even more difficult if failed innovations are punished, being official or unofficial.

It is therefore important to acknowledge innovative staff members by rewarding them, giving them recognition and giving them enough time and money to implement the idea. At Google they even go a step further; according to CIO Douglass Merrill in his presentation regarding innovation at Google (2007), you should not compensate the employees on execution alone. When a company does this and the risk takers see that people who play it save are getting promoted or receive other incentives, they will stop taking risk and thus stop being innovative.

Innovation is the rule, not the exception (Merrill 2007).

5 How people learn

The right mix of employee needed for innovation has the consequence that there is a clash of learning styles. The learning style index by Felder and Silverman (1988) is a commonly used model to determine which learning style an individual has.

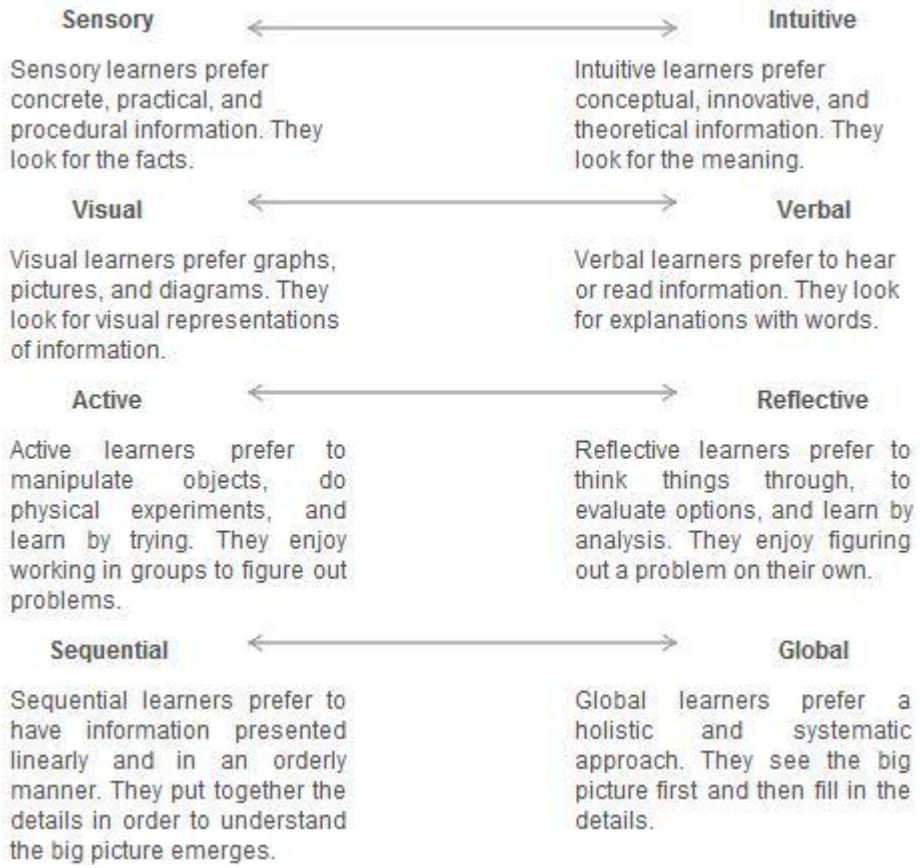

Figure 6. Index of learning styles (Felder & Silverman 1988)

As can be seen in the figure above, there are four dimensions, each with two extreme preferences which counterbalance each other. The index is used by determining which preferences you have, after which a balanced learning approach is established. An important aspect is that one does not lean too much on one preference since this causes the inability to process information in a quick, accurate and effective manner.

According to R. Dunn (1983) and Reinert (1976), there are three learning styles that are most commonly used, being visual, auditory, and kinesthetic. People with a visual learning style learn best when seeing a picture, video or presentation while people with an auditory style learn through talking, listening and discussing. Then there are the

people with a kinesthetic style which learn by active participation and exploration. (Reid 1987, 88-91; Oregon ED 2008.) Everyone has different preferences how they learn things, so communication towards your employees is done best when all learning styles are covered (MindTools.) It might be that employee X learns best when listening to a presentation, while employee Y learns best when the new approach is explained in an illustrative model.

5.1 E-learning

In order to cover all three learning styles, a teaching method is necessary which addresses all the needs. The Danish professor Dircknick-Holmfield (2004, 28) describes e-learning as a tool that is getting a strong position in the European market, and it is capable of reaching a wide variety of employees on a massive scale, leading to mass education. Recent developments have driven e-learning from the relatively simple training of employees, to a more sophisticated collaboration and communication infrastructure. Nowadays it is used to build an informal learning environment where the employees are able to learn the various subjects on their own, leading to a motivational structure. (Dircknick-Holmfield 2004, 28.)

One of the great advantages of e-learning is the possible incorporation of audiovisual learning aids, making it more appealing for both people with a visual and auditory learning style. Just as all other learning possibilities, e-learning does not only depend on introducing the training, but the corporate culture and climate need to be adjusted accordingly, as shown in the under mentioned figure by Åberg and Svensson (2004).

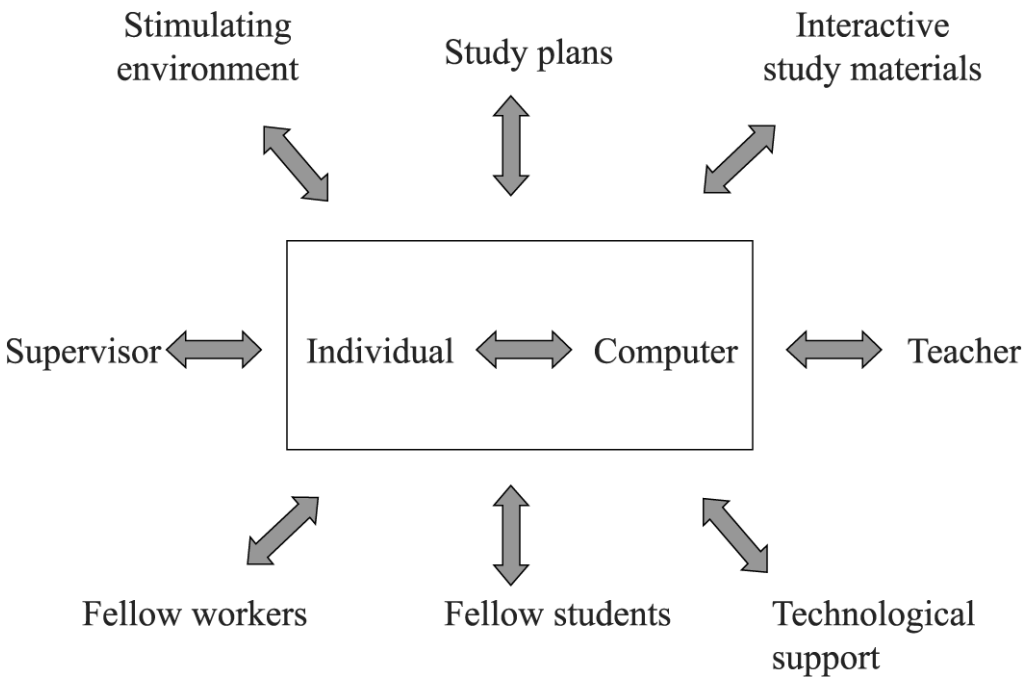

Figure 7. E-learning in the workplace (Åberg and Svensson 2004).

Over the last 50 years, the up march of audio-visual media has led to a wide variety of information transfer products such as the television and the internet. The internet is the host of various other products like a website, apps, presentations (video or text) or e-books. The advantage of e-learning methods is that it does not have the same restraints that printed products have, being the inability to host anything other than text, illustration and pictures.

There are three ways that can support a learning environment, and they are augmentive teaching, virtual learning and progressive applications. The first means that the educator can enrich the product with one or multiple ICT activities like e-mail, web pages or e-books. Virtual learning refers to learning without face-to-face interactions, being for example, e-mail or Skype. The third refers to the type of teaching where technology is used as a "just-in-time" learning method where the product is accessed when someone needs to learn about the subject. (French, Hale, Johnson, & Farr 1999.)

The positive aspects of e-learning are the flexibility and convenience, the interaction with the instructor, better performance, a collaborative learning environment and a positive learning experience. This while the negative aspects are the limitations on the interactions, possible technological problems and the possible high costs.

One of the most popular e-learning resources is a website. A decisive advantage over a normal book is the simultaneous combination of textual, visual and audio elements, and the possibility to incorporate interactions. These advantages lead to the fact that a website does not have to keep the lay-out and rules of a normal book in mind. The possibility to create a new, exciting and unique form for the readers, make a website an attractive alternative. One of the key success factors is the use of a website in a community since the collective reading leads to new interactions. Additionally, Books and other media do not have the same interaction possibilities as multimedia elements. Websites should embrace this advantage and create a unique form or new and different experiences for its readers, by creating communication experiences. When applying this strategy, a community of users is required who have experience in new practices of reading, viewing and interacting. From this point of view, websites should focus on the collective or communal readings, since this is essential to create individualized self-experiences. (Polsani 2003.)

The technological age we're in at the moment, where almost everyone in the western world has access to the internet at any time, is the start of a future full of e-learning possibilities. The ability to view websites on your mobile, iPad or palmtop makes it accessible whenever and wherever you want.

5.2 Success factors

There are several critical factors which determine the success of a website, although the outcome of this also depends on the two different stakeholders. These stakeholders are the user of the website, and the company behind the website. The former defines the website as a success when their expectations are met and when the experience is positive, while the latter finds it successful when the previously set goals and objectives are met. (Chaupp, Fan & Belanger 2006, 2)

The factors below describe the factors that the previous authors find to be the most critical and important when measuring the website's success.

The information quality refers to how relevant, complete and accurate the information on the website is. This factor also turned out to be a compelling predictor of satisfaction when looking at the website's context (McKinney, Yoon & Zahedi 2002, 296-315).

The degree to which the system is user friendly and easy to use when accomplishing the task for hand is called the system quality and plays an important role so that the user do not switch to another website. The perceived effectiveness relates to the users perspective on how effective the website will help him to accomplish the task. The last factor is the social influence which reflects on how the individual user perceives, how others should use the website.

As can be seen in the figure below, these four critical success factors make up the web-site's satisfaction, which ultimately leads to the (non-) reuse of the website.

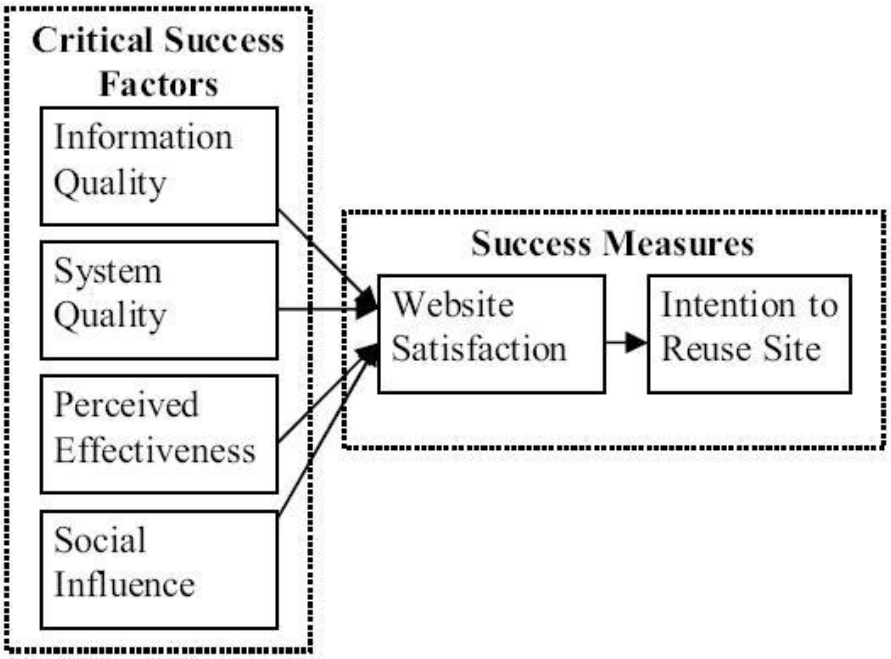

Figure 8. Website measurement model (McKinney, Yoon & Zahedi 2002)

6 The results

This part describes the results of the thesis and it includes the project plan, the project process and the product itself.

6.1 Project plan

The outcome of this thesis is a guide dedicated to employee- driven innovation, with a focus on the service industry. The guide is in the form of a website which is not only designed for the managers within a company, but also for the regular employees.

Once an organization starts using the guide by changing the corporate culture and improving employee engagement, the company has the ability to become (even more) innovative. The guide gives the managers an understanding of how they should act and what an important asset their employees are. It also helps the regular employee understand which changes in attitude they should make, and which way of thinking is needed to become innovative.

6.1.1 Objectives

The main objective of this thesis is to highlight that the regular employees of an organization play a crucial role in the innovative process, in the form of employee- driven innovations. Furthermore, the need for change that comes with having an innovative company is emphasized.

Using the lay-out of the website, I will clearly describe the objective of each topic while keeping the end-goal in mind.

- Innovation; the objective of this chapter is to clearly describe what innovations are, what types of innovations there are, the reasons for innovations, and the innovative process. This is done so that a basic knowledge is established from which the rest of the guide becomes a logical continuation.

- The innovative company; this is one of the most important chapters when it comes to corporate change. Without the right internal environment and focus on innovation, the level of skills and imagination of the employees does not matter since the change that something is done with their ideas, is slim. The objective of this chapter is therefore to explain the imperative need for the right corporate culture and climate where employee- driven innovations can foster.
- Employee- driven innovation; since the main topic of the guide is EDI, a clear understanding of the subject is required. Due to the relatively new nature for most individuals, a clear definition is given of what EDI is, and when something falls under this heading. This page further describes the EDI process together with the importance of a champion, and the effects of EDI are described so that the management sees the usefulness and overall necessity.
- Employee empowerment & Incentives; as you might have guessed, satisfied employees perform better and engagement is an important part in this. The objective of this chapter is to explain the employees' need to think for themselves and it clearly states the advantages of employees that feel valued and inspired. The chapter on incentives is meant to show the management that the 'normal' approach does no longer work, especially in an innovative environment, and how they should do it.
- From idea to USP; in six simple and clear steps, the process is described from the initial idea until it become an innovation or even a unique selling point (USP) for the company. The main objective is to give a concise picture, or a summary as it may, regarding the above mentioned process. Furthermore, the iterative nature of the process is raised since regular evaluation affirms a long life.

Ideas that get you thinking; the objective can be derived from the title, since the sole purpose is to get both management and employees to think about employee- driven innovations. The chapter is based on the authors own saying 'Innovative ideas, lead to innovative thoughts', meaning that when one sees examples of innovative ideas, his own mind starts thinking about the subject at hand. Or in other words: monkey see, monkey do.

Online community; the online community is a place where people can share their innovative ideas. As mentioned before, the author believes that sharing ideas can only have a positive impact, since two people know more than one. The objective of the

forum is to creative a platform where innovations are created and perfected with the help of interested individuals.

The personal goals that I have set are to master the subject of employee- driven innovations in a professional way. Not only do I want to know the most important theory but I also want to familiarize myself with existing practices and case examples. By doing research and creative thinking, I want to become experienced in creating innovative solutions for imminent and serendipitous problems.
Additionally, I want to improve myself in professional and business-like writing of reports since this will help me tremendously in both my professional and personal life.

6.1.2 Planning description

My general planning was to work with a funnel in mind, where I start by collecting broad data and narrowing it down further down the path. The planning was that I started gathering data during which I already wrote down ideas for the actual guide. Since I do my work according to Parkinson's law- which states that the time pressure of a deadline forces you to focus on execution, and you have no other choice but to do only the bare essentials- I did not start with an elaborate time planning. This because I believe that a planning only disctracts you from the task at hand. Instead, I made short-term plans when the opportunity presented itself, leading to the fact that I was able to excel on different parts of the project. My focus first went out to the background information on the topic, meaning that I collected information from professionals and experts in the field of innovation and employee engagement. When I had enough data, I focused my attention to writing the theoretical framework.
After having the necessary information I started writing the actual product which I planned to finish in little over a week, due to the short deadline. When it turned out that the deadline had shifted, I adjusted the planning so that the quality of the product improved.

In the beginning of the process, the main problem that I was facing was the short deadline of only two and a half months due to the graduation deadlines. Near the end

of the project I found out that the previous deadline did not necessarily belong to me, which gave me an extra two weeks.
Another problem was the need to be an opponent and to be present during four thesis presentations. The lack of theses in English turned out to be a major problem for which a suitable solution still needs to be found.

6.2 Project process

The writing of the project was a delicate process in which every aspect needed to be substantiated with relevant data. This did not only count for the topics of the guide, but every aspect of the project had to be backed up by relevant information.

6.2.1 Format and layout

When I decided to write a guide, I had no idea what type it would be and so I did some research regarding how people learn, e-learning and the success factors of e-learning. During this I came to the conclusion that most people have either a visual or auditory learning style and thus I thought that it would be wise to create an electronic guide-book, since this offers the possibility to combine both in an interactive way. At first I wanted to write an eBook but this turned out not to be much more than a converted .PDF file and thus I switched my focus to building a website.

This thesis report is written according to the guidelines as set by Haaga-Helia University of Applied Sciences, regarding the bachelor thesis in Hotel, Restaurant and Tourism management.
While writing the product, I had complete control on how I wanted to design it which was the perfect opportunity for me to be creative. The layout from the website is based on the theoretical framework although not per se in that order. The design of the centre of the website is quite business-like, while the outer layer is bright orange/yellow. I choose for this so that the websites looks fun, interesting and attractive on first glance, but while reading the professional nature of the product comes forward.
Throughout the website, I used various images and videos in order to illustrate my point or in order to clarify the topic in an interactive, fun and recognizable fashion.

6.2.2 Process description

Table 1. Project schedule

Starting date	Action
10.12.2010	Choosing a topic
18.03.2011	Gathering data, refining thesis topic & writing down scribbles
14.04.2011	Writing of theoretical framework
22.04.2011	Choosing media for guide
25.05.2011	Start with writing of the website
12.05.2011	Starting with the end-phase, writing thesis report
16.05.2011	Thesis deadline

Already in December 2010 I started working on my thesis in the form of an assignment for the research methods course. During this assignment I started thinking about what topic really interested me, and I quickly realized that Imagineering and innovation are my real passion. Two months went by until the thesis seminar begun and then I started reading about the topics. My attention soon shifted to incremental innovations and shortly after I decided that I wanted to focus on employee innovations. Due to other obligations I spend sporadic attention to my thesis until the intensive week which started at the 18th of March. From this point on I started reading books and articles but mostly I watched video presentations of industry professionals on websites such as TED.com and Youtube. I decided to base my product rather on videos than on books since most authors do not only publish a book, but they also discuss their most important points during a presentation regarding the book or the subjects involved. Furthermore, I have a more visual learning style, meaning that I understand things better when I not only hear about them but also see them, and a good and well given presentation makes learning much easier than reading a book. I first got this idea during a presentation of Geoff Maree when he showed a presentation of Dan Pink regarding motivation.

The information gathered from these media, got written down in a file called Scribbles, where I put all my thought regarding these topics. The chapter "Things that get you started" is the direct result of these scribbles and consists of existing ideas, to which I

gave my own twist. I also combined the views of different experts in order to get a more clear but detailed picture.
After I gathered a substantial amount of intel, I started putting thought on paper regarding the actual product and I soon came to the conclusion that I was going to write an e-learning book since this has more technological possibilities and it combines the different learning styles.
On April the 14th I started writing my theoretical framework since I figured that I had enough information and sources to do so. After 5 days of hard working I finished the entire theoretical part after which I planned a meeting with my supervisor to discuss the further steps. During this meeting I came to the conclusion that I had to write another part on why I chose for an e-learning method, which I did on the following two day. From this point on I started doing research on which media I was going to use, and after some careful considerations I decided to build a website. From this point on I worked on it for four days which accounted for about eighty percent of the total work I put in the website. After a little break, I put everything together and at Thursday the 12th of May, I finished the product after which I started working on finishing the thesis report. The agreed upon deadline for the thesis is the 16th of may, giving me another 3 days to rap it all up.

6.3 Product

The result of the thesis is a guide on employee- driven innovations with a focus on the service industry. The guide is performed as a website which can be found at http://employee-driven-innovation.weebly.com
The website clearly describes innovation and its processes so that individuals who are relatively new to the topic, understand what the guide is meant for. After the initial introduction to innovation and the internal environment of an innovative company, employee- driven innovation is discussed in detail. Once the reader has a thorough understanding of EDI, the employee engagement and incentives are discussed which complement the internal environment as discussed earlier. Not only does the website contain information of existing company processes, but new ideas are introduced and existing ideas are adjusted in accordance with EDI. Additionally, the Roderkerken In-

novation model is presented, although still in its design phase, which helps specify what type of innovation one is dealing with.

As mentioned before, the theoretical framework is the base of the guide and furthermore practical examples play a big role. The most discussed company is without a doubt Google since I reckon this to be one of the leading companies regarding employee- driven innovation today.

Furthermore, the online community preached for throughout the guide gives companies and individuals the opportunity to share their innovative ideas. The biggest problem with the online community might be the limited space because the forum, on which it is build, has a topic limit of five when free of charge. Another difficulty might be to gather enough members to get an interactive environment.

6.3.1 Reflection

Regarding the product, I am satisfied with the outcome and I feel that I have met all the objectives stated before. I strongly believe that the guide can help companies to become more innovative while using their employees as an important asset. The use of the guide is easy since it first introduces the topics after which it gets more detailed. The use of case examples will make it easy to understand and they take some of the tediousness away.

One of the points on which the guide is lacking, is a more detailed description from initial idea to market introduction. Even though the product itself deals with this extensively and the process is describes in a step-by-step manner, some individuals would prefer a take-my-hand-and-show-me-how approach. I deliberately did not do this since this would undermine innovative thinking and the need the challenge the existing climate and procedures.

Another point of criticism might be the scarcity of concrete examples and a more detailed description on certain topics, but this can be resolved by viewing the presentations of the industry professionals, listed under About: Sources.

7 Discussion

The main conclusions that can be drawn are that companies talk about innovation, but only a small percentage of these companies actually do something with it. The reason for this is the existing corporate culture where the management and R&D department are responsibile for innovations. Due to their broad scope and limited practical work experience, most innovations do not reflect the existing problems that customers and regular employees deal with on a daily base.
By changing the corporate culture and climate into an open and innovation friendly culture the regular employees can be involved , leading to a highly innovative company with satisfied and empowered employees.

7.1 Key results

After the general conclusion above, I will now present and discuss the key results per topic.

Although innovation has been around for a very long time and most companies pay attention to it during managerial meetings, the actual amount of innovations produced is low. This result is not surprising since the perceived risks involved (short-term) often transcend the perceived benefits (long-run). Additionally, most companies rely on their research and development department to come up with the innovations, and thus they often forget their most valuable asset; the regular employees. It is the authors believe that companies should stop waiting for innovations to happen, but instead actively promote innovations within the organization.

The innovative process is pretty much straight forward since it starts with the idea generating, followed by the tweaking phase after which the product or service is designed and put into the market. There is nothing wrong with this process but often the ideas are killed to quickly when the data isn't as impressive as was hoped for. By keeping the option open as long as possible, incremental changes can be made which may make the idea a success.

It is the authors believe that employees are the most valuable assets of the company since they know best what is going on in the organization. What may come as a surprise, is that the most innovative and successful companies like Google and Attlassian are driven by employee- driven innovations. The data that the employees gather during their normal work, being via customer contact or personal experience, has the highest potential to become an innovation.

The positive effects of EDI, such as customer loyalty, enhanced image, greater job satisfaction, and a high retention rate, are often unknown to the company. In addition, EDI leads to the fact that the employees do not only focus on their own duties, but they also analyze and consider changes regarding performance. Because of the unfamiliarity among managers, chances are missed to improve the company results and to have motivated, happy and eager employees.

Maybe one of the most important factors regarding EDI is a company culture that allows innovations to take place. A company cannot just decide to become innovative and thus it needs to create a sustainable environment in which the employees feel comfortable regarding innovation creation. The author believes that companies should start with creating an innovative culture in their HR policies, since the ideal mix of skills and personalities lead to a company where innovative ideas can foster.

As one might guess, employees are of vital importance regarding employee- driven innovations. The luck you have as an innovative company is that it is easy to attract employees. One interesting finding is that extrinsic incentives have an adverse effect when it comes to innovation motivation, but intrinsic incentives have an overall positive effect. This is because extrinsic motivation leads to follow-the-rules behavior and thus intrinsic motivations fits best into an innovative culture. My personal conclusion is that a company that pays top dollar for their employees is not necessarily the best one, and in most occasions performs worse than average. I find this surprising since the existing culture works according to the "more money equals better performance" principle, as can be seen in the following quote of Steve Jobs. "Innovation has nothing to do with how many R&D dollars you have. When Apple came up with the Mac, IBM

was spending at least 100 times more on R&D. It's not about money. It's about the people you have, how you're led, and how much you get it"

As can be concluded, the majority of companies with the goal of being innovative have a big chance of succeeding, as long as they abandon most of the existing idea generating processes. The guide is a great starting point for managers who want to change their organization from the core and who are ready to change their existing behavior. Not only does the company of tomorrow need to promote self direction instead of management, but it also needs to loosen up and allow mistakes to be made.

7.2 Recommendations for further research

Since this thesis does not cover every aspect of employee- driven innovation, there are some aspects which could use further research.
In order to fully understand the applicability of this guide, further research is recommended to determine the positive impact on different companies or even different industries. Just like an employee- driven innovation, the guide needs a soft launch after which incremental changes can be made, leading to a positive or negative recommendation regarding its use.

Due to the company and even idea specific costs, and because it is virtually impossible to determine the financial factors per EDI, further research might be done regarding the implementation costs from existing to desired company culture. In line with the previous comment, the design of a timeline in regard with change management is recommended.

As already stated in the introduction, measuring the impact of EDIs on the company's financial and non-financial aspects is needed. This so that companies can determine how to incentivize their employee on the subjective matter of employee- driven innovations. A second reason is so that the data gathered during the soft-launches can be weighed against each other, leading to a well substantiated reason to pursue, adapt or drop the innovative idea.

7.3 Personal reflection

During the initial phase of the thesis I had some trouble with finding the motivation to actually write something on paper. At one point, I knew that I gathered enough information but I still was anxious to find out different points of view, which could ultimately lead to paralysis by over- analysis. I had this problem in the past and only until my supervisor told me to 'just get started', I started writing. Due to the long period till the deadline, I did not feel so much pressure which I need to perform. Maybe I should have started writing earlier but that is not the way I deliver the best work, which is evident since I work according to Parkinson's Law.

The points on which I could have paid more attention are the costs involved and the transformation from idea to market product. One of the reasons I chose not to do this is because I wanted to focus on the company itself instead of the innovations that might foster. Another reason is that the intangible and company specific characteristics make it difficult to give industry wide examples and estimates.

The fact that this thesis project has had no absolute failures may mean that I did not try, but I would rather see it as the first step in looking for the edge of unavoidable failures in my future career.

In conclusion, I wrote this thesis with the following quote by William Pollard in mind.

"Without change there is no innovation, creativity, or incentive for improvement. Those who initiate change will have a better opportunity to manage the change that is inevitable."

Bibliography

Åberg, C. & Svensson, L. 2004. The workplace: an arena for education and learning? Roskilde University Press. Copenhagen.

Ahmed, P.K. 1998. Culture and climate for innovation. European journal of Innovation Management, 1,1, pp.30-43.

Amabile, T.M. 1990. Within you, without you: the social psychology of creativity and beyond. Sage. Newbury Park.

Amabile, T.M., Conti, R., Coon, H., Lazenby, J. & Heron, M. 1996. Assessing the work environment for creativity. Academy of management journal, 39, 5, pp. 1154-1184.

Amabile, T.M., Conti, R., Coon, H., Lazenby, J. & Heron, M. 1996. Assessing the work environment for creativity. Academy of management journal, 39, 5, pp. 1154-1184.

Bae, J. & Lawler, E. 2000. Organizational and HRM strategies in Korea. Academy of management journal, 43, 3, pp. 502-517.

Barczak, G. 1991. Communication patterns of new product development team leaders. IEEE transactions on engineering management, 38, 2, pp. 101-109.

Barron, F.B. & Harrington, D.M. 1981. Creativity, intelligence and personality. Annuel review of psychology, 32, pp. 439-476.

Burgelmann, R.A. & Maidique, M.A. 1996. Strategic Management of Technology and Innovation. Irwin. Chicago.

Capon, N., Farley, J.U., Lehman, D.R. & Hulbert, J.M. 1992. Profiles of product innovators among large U.S. manufacturers. Management Science, 38, 2, pp. 157-68.

Schaupp, C.L., Fan, W. & Belanger, F. 2006. Determining success for different website goals. Hawaii International Conference on System Science, 39,.

Chesbrough, H. 2003. Open Innovation: The new imperative for creating and Profiting from Technology. Harvard Business School Press. Boston.

Cooper, R.G. & Kleinschmidt, E.J. 1986. An investigation into the new product process: Steps, deficiencies and impact. Journal of product innovation management, June, pp.71-85.

Cooper, R.G. 1986. Winning at new products. Addison-Wesley. Reading.

Cooper, R.G. 1993. Winning at new products: accelerating the process from idea to launch Addison Wesley. Reading.

Darroch, J. & McNaughton, R. 2001. Knowledge management and innovation. Department of Marketing, University of Otago, Dunedin.

De Bono, E. 2008. Creativity in management: developing creative thinking skills. URL: http://www.thinkingmanagers.com/management/creativity-in-management. Quoted: 03.11.2011

De Jong, J.P.J. & Den Hartog, D.N. 2007. How leaders influence employees' innovative behaviour. European Journal of Innovation Management, 10, 1, pp. 41–63.

Dean, J.W. Jr., Susman, G.I. & Porter, P.S. 1990. Technical, economic, and political factors in advanced manufacturing technology implementation. Journal of Engineering and Technology Management, 7, pp. 129-14.

Dircknick-Holmfield, L. 2004. A European persective on e-learning at work. Roskilde University Press. Copenhagen

Dosi, G. 1988. Sources, procedures and microeconomic effects of innovations. Journal of economic literature, 26, September, 1120-1171.

Dougherty, D. & Hardy, C. 1996. Sustained product innovation in large mature organizations. Academy of management journal, 39, 5, 1120-1153

Drucker, P.F. 1985. Innovation and Entrepreneurship: Practice and Principles. Heinemann. London.

Dunn, R. 1983. Learning style and its relation to exceptionality at both ends of the spectrum. Exceptional Children, 49, pp. 496-50.

Easingwood, C. & Percival, J. 1990. Evaluation of new financial services. International journal of bank marketing, 8, 6, pp. 3-8.

Easingwood, C.J. 1986. New product development for service companies. Journal of product innovation management, 3, pp. 264.75.

Ekvall, G. 1996. Organizational climate for creativity and innovation. European journal of work and organizational psychology, 5, 1, pp. 105-123.

EOCD, 2008. EOCD fact book 2008.
http://puck.sourceoecd.org/vl=14900297/cl=14/nw=1/ rpsv/factbook/070101.htm
quoted: 03.12.2010

Ettlie, J.E. & Rubenstein, A.H. 1987. Firm size and product innovation. Journal of Product Innovation Management, 4, pp. 89-108.

European innovation scoreboard. 2007. Comparative analysis of innovation performance. URL: http://www.proinno-europe.eu/page/european-innovation-scoreboard-2007. Quoted: 16.04.2011

Fagerberg, J. 2004. Innovation: A Guide to the Literature. Oxford University Press. Oxford.

Feldman, L.P. & Page, A.L. 1984. Principles versus practice in new product planning. The journal of product innovation management. January, pp. 13-55.

French, D., Hale, C., Johnson, C. & Farr, G. 1999. Internet based learning: An introduction and framework for higher education and business. Kogan page. London.

Frost, P.J. & Egri, C.P. 1990. Influence of political action on innovation part 1. Leadership and organization development journal, 11, 1, pp. 17-25.

Gales, L. & Mansour-Cole, D. 1995. User involvement in innovation projects: Toward information processing model. Journal of Engineering and Technology Management, 12, pp. 77-109.

Gatignon, H. & Robbertsen, T.S. 1985. A propositional inventory for new diffusion research. Journal of Consumer research, 11, pp. 849-876.

Godin, S. 2004. Free prize inside: The next big marketing idea. Portfolio Hardcover. New York.

Green, S.G., Gavin, M.B & Aiman-Smith, L. Assessing a multidimensional measure of radical innovation. IEEE transactions on engineering management, 42, 3, pp. 203-214.

Griffin, A. 1997. Drivers of NPD Success: The 1997 PDMA Report. University of Illinois. Urbana-Champaign

Griffin, A. Page, A.L. 1993. An interim report on measuring product development success and failure. Journal of product innovation management, 10, pp. 291-308.

Grönroos, C. 1990. Service management and marketing. Lexinton Books, Lexington.

Gummesson, E. 1989. Nine lessons on service quality. Total quality management, February.

Hage, J. 1980. Theories of Organization; Form, Process and Transformation. Wiley. New York.

Hartline, M.D., Maxham, J.G. & McKee, D.O. 2000.Corridors of influence in the dissemination of customer-oriented strategy to customer contact service employees. Journal of marketing, 64, 35-50.

Hauptly, D.J. 2008. Something really new. AMACOM. New York.

Henry, J. & Walker, D. 1991. Managing innovation. SAGE Publications. London.

Jain, R., Fondas, N., Triandis, H.C. & Weick. C.W. 2010. Managing research, development and innovation. John Wiley and Sons. Hoboken, New Jersey

Johansson, B. & Lööf, H. 2008. The impact of firm's R&D strategy on profit and productivity. The royal institute of technology. Stockholm

Jungblut, S. & Meyer, H. 1999. Globalization, economic growth and innovation dynamics. Springer. Berlin.

Kalthoff, O., Nonaka, J. & Nueno, P. 1997. The light and the shadow: How breakthrough innovation is shaping European business. Capstone. Oxford.

Kanter, R.M. 1983. The Change Masters. Simon & Schuster. New York.

Kesting, P. & Ulhøi, J.P. 2008. Employee-Driven innovation: The discovery of hidden treasure. URL: https://mail.sssup.it/~l.marengo/ENEFfinal/Kesting.pdf. Quoted: 16.04.2011

Kesting, P. & Ulhøi, J.P. 2010. Employee-driven innovation: extending the license to foster innovation. Management Decision, 48, 1, pp.65 – 84.

Kimes, S.E. & Goodwin, N. 2010. Cases in innovative practices in hospitality and related services. Cornell hospitality report

King, N. 1990. Innovation at work: The research literature. John Wiley. Chichester.

Kohli, A.K. & Jaworski, B.J. 1990. Market orientation; the construct, research propositions and managerial implications. Journal of marketing, 54, pp. 1-18.

Langeard, E., Reiffait, P. & Eiglier, P. 1986. Developing new services. American Marketing Association. Chicago.

LO. 2005. Employee- driven innovation. URL: http://www.lo.dk/English%20version/Congress2007/~/media/LO/English/Congress2007/2007_1114_1227_Employee_driven_innovation.ashx. Quoted: 16.04.2011

Maidique, M.A. & Zirger, B.J. 1984. A Study of success and failure in product innovation: The case of the US Electronics industry. IEEE Transactions on engineering management, November, pp. 34-44.

Martin, C.R. jr & Horne, D.A. 1992. Restrucuting toward a service orientation: The strategic challenges. International journal of service industry management, 3, 1, pp. 25-38.

Martin, C.R. jr & Horne, D.A. 1993. Service innovation: Successful versus unsuccessful firms. International journal of service industry management, 4, 1, pp. 49-65.

McKinney, V., Yoon, K., & Zahedi, F. 2002. The measurement of Web-Customer satisfaction: An expectation and disconfirmation approach. Information Systems Research, 13, pp. 296-315.
McLean, L.D. 2005. Organizational culture's influence on creativity and innovation: A review of the literature and implications of human resource management. Advances in developing human resources, 7, pp. 226-246.

Merrill, D. 2007. Innovation at Google- video.
http://www.youtube.com/watch?v=2GtgSkmDnbQ&feature=related. Watched 04.04.2011/

Mindtools. Learning styles; understanding your learning preferences. URL: http://www.mindtools.com/mnemlsty.html. Quoted: 21.04.2011.
Morgan, E. 1986. Image of organization. Sage. Beverly Hills.

Nystrom, H. 1990. Organizational innovation. Wiley. Chichester.

O'Conner, G.C. 1998. Market learning and radical innovation: a cross-case comparison of eight radical innovation projects. Journal of Product Innovation Management, 15, pp. 151-66.

Oregon ED. 2008. Oregon consolidated annual report. URL: http://cte.ed.gov/Docs/CARNarrative/OR_narrative_2007-2008.pdf. Quoted: 21.04.2011

Ottenbacher, M. & Gnoth, J. 2005. How to develop successful hospitality innovation. Cornell Hotel and Restaurant Administration Quarterly, 46, 2, pp 205-222.

Parameshwar, 2008. Innovation matrix. URL: http://www.slideshare.net/piyeriisc/role-of-innovation-and-creativity-in-rd-presentation. Quoted: 03.12.2010

Pavitt, K. 1990. Technology, innovation and Strategic management. Strategic Management Research: A European Perspective. John Willey & Sons Ltd. West Susses

Pelz, D.C. & Andrews. F.M. 1966. Scientists in Organizations. Wiley. New York

Peters, T.J. & Waterman, R.H. jr. 1982. Search for excellence: lessons from Americans best-run companies. Harper and Row. New York

Phillips, J. 2008. Make us more innovative. iUniverse Inc. Bloomington.

Pinchot, E. & Pinchot, G. 1996. Seeding a climate for innovation. Executive excellence, 6, pp. 17-18.

Pink, D.H. 2009. Drive: The Surprising Truth About What Motivates Us. Riverhead Trade. New York.

Polsani, R.P. 2003. Use and Abuse of Reusable Learning Objects. Journal of digital information, 3, 4.

Post-it. 2011. About Post-it Brand. URL: http://www.post-it.com/wps/portal/3M/en_US/Post_It/Global/Home/About/. Quoted: 16.04.2011.

Rathmell, J.R. 1974. Marketing in the service sector. Winthrop. Cambridge.

Reber, A.S. & Lewis, S. 1977. Implicit learning: an analysis of the forma and structure of a body of tacit knowledge. Cognition, 5, 4, pp. 333-361.

Reid, J.M. 1987. The learning style preferences of ESL students. Tesol quarterly, 21, 1.

Reinert, H. 1976. One picture is worth a thousand words? Not necessarily. Modern language journal, 60, pp. 160-168.

Rice, M.P., O'conner, G.C, Pieters, L.S. & Morone, J.G. 1998. Managing discontinuous innovation. Research-Technology Managament, 41, 3, pp. 51-58.

Roberts, E.B. 1987. Generating Technological Innovation. Oxford University Press. Oxford.

Rogers E.M. 1983. Diffusion of Innovations. 3rd edition. Free Press. New York

Rogers, E.M. 2003. Diffusion of innovation. The free press. New York.

Rubenstein, A.H & Schreder, H. 1976. Factors indluencing innovation success at the project level. Research management, May, pp, 15-20.

Schumpeter, J.A. 1934. The Theory of Economic Development. Harvard University Press. Cambridge. Massachusetts.

Schumpeter, J.A. 1947. Capitalism, Socialism and Democracy. 2nd edition. Harper & Row. New York

Shalley, C.E. & Oldham, G.R. 1985. Effects of goal difficulty and expected evaluation on intrinsic motivation: a laboratory study. Academay of management journal, 28, pp. 625-640.

Sommers, W.P. 1979. Product development: New approaches in the 1980s. Booz, Allen and Hamilton. New York.

Spender, J.C. & Strong, B. 2010. Who have innovative idea? Employees. URL: http://online.wsj.com/article/SB10001424052748704100604575146083310500518.html. Quoted: 17.04.2011

The times 100. Research and development. URL: http://www.thetimes100.co.uk/theory/theory--research-development--276.php Quoted: 03.12.2010

Tidd, J., Bessant, J. & Pavitt, H. 1997. Managing innovation. John Wiley. Chichester.

Tushman, M. & Andersen, P. 1986. Technological discontinuities and organizational environments. Administrative Science Quarterly, 31, pp. 439- 65.

Veryzer, R.W. jr. 1998. Discontinuous innovation and the new product development process. Journal of Product Innovation Management, 15, pp. 304-21.

West, M.A. 1990. The social psychology of innovation in groups. Wiley. Chichester.

Wheelwright, S.C. & Clark, K.B. 1992. Revolutionizing Product Development: Quantum Leaps in Speed, Efficiency, and Quality. The free press. New York.

Wright, P.M. & McMahan, G.C. 1992. Theoretical perspective of strategic human resource management. Journal of management, 18, 2, pp. 298.

Zaltman, G., Duncan, R. & Holbek, J. 1973. Innovations and organizations. John Wiley & Sons, New York