Creative? Not at my level!

How Accenture Oracle Consulting can add more innovative value

Author: C.G. Wassenaar
Student number: 0065285
Date: 06-08-2009

Supervisor: Dr. Ir. H.G.A. Middel
Second Supervisor: Dr. M.J.T. van Velzen
Company Supervisor: J.M. Knuiman

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Master Research

"Never forget that only dead fish swim with the stream"

Malcolm Muggeridge

General information

Author

Name: C.G. Wassenaar
Student number: s0065285
E-mail: carlawassenaar@gmail.com

Supervisory committee

First supervisor: Dr. Ir. H.G.A. Middel
Second supervisor: Dr. M.J.T. van Velzen
Company supervisor: J.M Knuiman

Project information

Website: www.accenture.com

Preface

This master thesis presents the result of my master graduation project. With this thesis my master Business Administration at the University of Twente has come to an end. First of all I would like to show my appreciation to Judith Knuiman for her weekly guidance and advice. You really made me feel comfortable and trusted at Accenture which made the research much easier to perform. In addition, I would like to express my appreciation to all the employees of the Oracle Consulting Group for completing the questionnaire and cooperating during the interviews. I would like to thank them for all the coffee breaks, the good advices and pleasant work atmosphere. This made the time at Accenture very enjoyable. Third, I want to thank Rick Middel and Martijn van Velzen for their cooperation and advice while working on my graduation project. Finally I am very thankful for all the guidance my family and boyfriend gave me. Without them it would have been very difficult to finish this thesis.

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1.1 Research objectives & design

Research objective

"To get a better understanding on how the employees of the Oracle Consulting Group can add more innovative value to the whole organization"

Main research question

"What can Accenture do to improve the innovative value creation capabilities of its employees?"

Sub research questions

1. Which capabilities influence the creation of innovative value?
2. How does Accenture create innovative value?
3. What are the barriers and enablers for creating capabilities for creating innovative value?

Research design

To answer the main research question, a research design is set-up. In this research different methods are used to answer the sub-research questions and to finally answer the main question. The report is structured as follows: Chapter three will elaborate on the theoretical framework, which provides the basis for further analysis (answer to research question one). Chapter four will describe the methodology that is used in this research. Chapter five will give an overview of the results of the document study (answering research question two). Chapter six will give the results of the questionnaire that is conducted, and chapter seven will give the results of the conducted interviews (together answering research question three). Chapter eight will give an overview of the results recommendations and discussion points (answering the main research question).

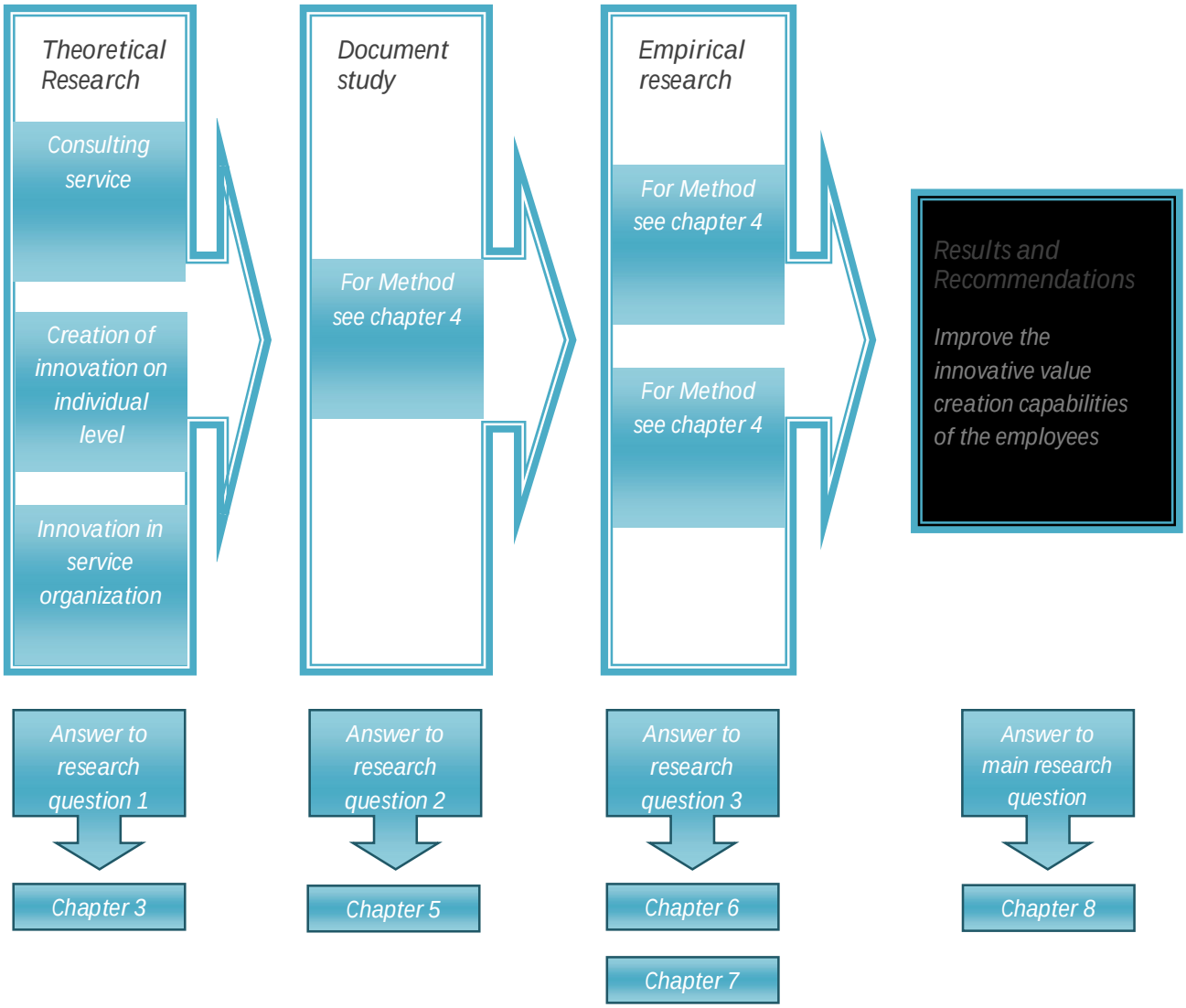

Figure 1: Research design

Theory

2. Theory

Innovation is very important for organizations. To survive and succeed, firms must innovate. Intensified global competition and an emphasis on rapidly changing technologies have reinforced this long held concept. To remain competitive, firms must develop and introduce new products or services to external markets. They do not only need to be innovative externally but also internally. Within their organizations they need to improve the efficiency of the ways in which input becomes outputs, how value is created and how work gets done (Cummings & Oldham, 1997). In this chapter we take a closer look at consulting organizations and how they can be innovative. This chapter will look at the product of consulting organizations and how they can deliver innovative value. A closer look is taken on how individual employees can be creative in a service organization. These different concepts will be combined in the theoretical framework.

2.1 The consulting services

There are many different kind of services. In this chapter a closer look is taken on how consulting services can be characterized, and how innovation is created within services and especially in consulting services.

2.1.1 Different services

Products and services are very different, they are both the 'products' for organizations but they are nothing alike. Services are intangible and do not have the same exteriority, while goods are tangible. Services are identical in substance for those who produce it and those who consume it. Service cannot be held in stock, it is not a given result, but a service package, a set of procedures and protocols, an 'act' (Gallouj & Weinstein, 1997). The processing operations of service is carried out by a service provider on behalf of a client , in a medium held by a client, and intended to bring about a change of state in the medium (Hill, 1977).

There are different kinds of services; the aim is to describe what kind of service consulting firm's offer. Gallouj and Weinstein (1997) describe three different parts of services. The first one is services that are competences to technical characteristics. Hill (1977) describes it as services affecting goods. The service is graphically shown in Figure 2. It is the combination of the utilisation technical characteristics (X) that are based on competencies, and the direct mobilisation of competencies (C). The final characteristics are made out of competencies combined with technical characteristics (Gallouj & Weinstein, 1997). The production of the service can in generally not be distinguished from the good by means of the technology that is used. This is strengthened by the fact that in most cases the producer of the service operates directly on the goods which in most cases already belongs to the customer (Hill, 1977).

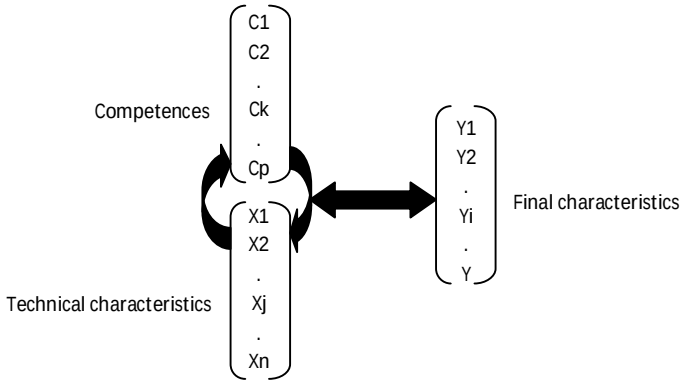

Figure 2: services affecting goods (Gallouj & Weinstein, 1997) (page 544)

The second type is a service where only the competencies are of importance to deliver the service. The quality of the service is only determent by the competencies of the deliverer of the service. This is a very pure service which is totally intangible (Gallouj & Weinstein, 1997). Hill (1977) describes it as services affecting people. He points out that in knowledge-intensive services the service is to pass knowledge to the customer. This is passing on a bit of relevant specialized knowledge. Doing this mostly means that participation is needed from the customer (Hill, 1977). This brings us to a different form of service that is the pure form of service but includes customer participation (C') (Gallouj & Weinstein, 1997). This is shown in Figure 3.

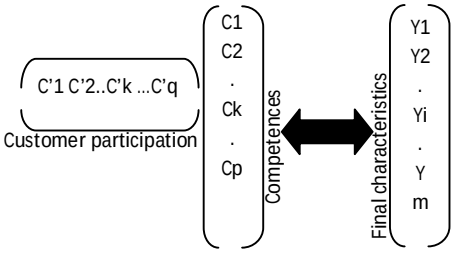

Figure 3: service affecting persons with customer participation (Gallouj & Weinstein, 1997) (page 546)

Within this third service type, the customer participation is not a one way direction. The consumer preferences are strongly influenced by the holder of the competencies. The probable outcomes created by competencies of the service deliverer will result in a greater demand in certain treatments whereas other are not (Hill, 1977). There are different ways of involving the customer in the provision of services. The first concept is interface; this is the physical of virtual point of contact between customer and service provider (or his technical systems). The second concept is interaction; this is the exchanges of information, knowledge and civilities, performance of repair/rectification tasks. The third element is co-production; the extensive and balanced interaction (essentially operational). The forth element is servuction; the process of creating a service by linking up various elements. The customer, the physical medium, contact personnel, the service, the system of internal organization and other customers. The fifth concept is socially regulated service relationship; manifestation of new forms of the social

regulation of relationships between producers and consumers. The last concept is service relationship; the mode of coordinating the actors on the supply and demand side for services or for goods. Operational relationships (co-production) and social relationships for the control and regulation of action programme (Gallouj & Weinstein, 1997).

These different models can be combined in one model for consulting services, the fourth service type. This model shows that competencies (C) can only affect the outcome (Y), but it can also be influenced by technical characteristics and customer participation. The technical characteristics (X) can influence the competencies and the outcome. The model for services can be applicable for services affecting goods and can be applicable for services affect persons (Gallouj & Weinstein, 1997). This is a total service which can be applied in different industries.

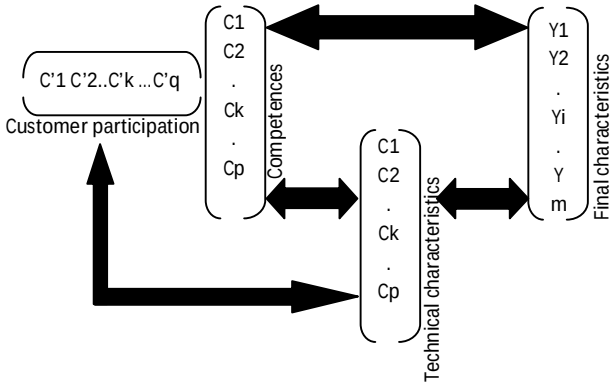

Figure 4: general model services (Gallouj & Weinstein, 1997) (page 546)

This model is also the model that characterizes consulting services. The service of a consulting firm is made-up by the competencies the consulting firms has. This is influenced and added by the competencies of the customers they deliver their competencies to. This service is strongly influenced by the technology that is most of the time bought by the customer. Therefore it is also controlled by the customer. The combination of the competencies of the service company, the competencies of the customer and the technology that is bought, will form the service for a consulting firm. For example, the service that is delivered by the Accenture Oracle Group Netherlands is influenced by the competencies of the customer. What is the existing knowledge and wishes of the customer? And by the technology they have bought, this can be HRM software but also Finance. Together will determine what kind of service they will deliver.

2.1.2 Consulting service

The service characteristics of consulting firms can be characterized as knowledge-intensive one, where client participation is of much importance. As shown in the previous section, the services delivered are a combination of customer participation, technical characteristics and the competencies of consulting firm. The products that they deliver can be seen as ad hoc (or customized) innovations. These are Innovations that are created at the customer. Gallouj and Weinstein (1997) point out that these ad hoc innovations are interactive (social) constructions to get a solution to a particular problem posed by a

given client. This innovation is a very important in consultancy services, where the available knowledge and experience accumulated over time are harnessed and put to work synergistically to produce fresh solutions and new knowledge that changes the client's situation in a positive and original way. It is at the client/provider interface that this form of innovation is mainly produced. In fact, ad hoc innovations are often produced jointly by the service provider and the client. These innovations usually appear during the normal process of delivering a service, and are often not recognised as innovations until after the service has been provided. From the point of view of the service provider, an ad hoc innovation helps to produce new knowledge and competences that have to be codified and formalised so that they might be reused in different circumstances. This codification and formalisation of certain elements of a solution is done so that it can or may be partially and indirectly reproduced. This is what distinguishes ad hoc innovation from the ad hoc nature of many service transactions. The differences between ad hoc innovation and the kind of change inherent in many service transactions is that the former constitutes are permanent, non-random change of state produced by the codification of accumulated experience and, in many cases, an expansion of the firm's organizational memory. This clearly distinguishes it from random changes in the configuration of the service (caused by changes in the external environment, in customers etc.). 'Corrective problems', in which the consultant's role is more curative, and 'progressive problems', in which the consultant is expected to improve a given situation that it is feared, might deteriorate, can also do so. And the opportunities for ad hoc innovations seem to increase with the size of the providing organization and that of their clients, i.e., as the range of possible interfaces increases both qualitatively and quantitatively. Finally, the actual emergence of an ad hoc innovation depends also on the quality of the professionals in the client organization involved in the interface. The knowledge, the experience (whether codified or not) and the unformulated, idiosyncratic techniques that emerge from practical experience, and the methods used to produce and transfer them can be reproduced. Ad hoc innovations are profitable, even if they are not reproducible, since they are based on an informational and cognitive input that can be transferred in part to other ad hoc situations. What is generally known as customised innovation can be included in both incremental and ad hoc modes of innovation (Gallouj & Weinstein, 1997).

2.2 Innovation within service organization

Innovations in service organizations are different then in manufacturing firms. Sundbo (1997) points out that most of the theories on innovation are develop in the light of manufacturing firms. Because of the big differences between service firms and manufacturing firms he raises the question: How should the innovation concept is defined when studying services? Most authors who are discussing innovation in service organizations do not discuss whether innovations in the services can be understood in terms of the innovation theories developed for the manufacturing sector (Sundbo, 1997). Also Gallouj and Weinstein (1997) point out that innovation theory is developed for technological innovation in manufacturing activities. Another problem is that the specific properties of service activities, particularly the analytically ‘fuzzy’ nature of their output, make it difficult to measure them by the traditional economic methods (productivity) and to detect improvement or change (on the qualitative level). Innovations in services do not follow a technological trajectory but rather ‘service-professional’ trajectories in which technologies are only one vector among several others (Gallouj & Weinstein, 1997). Gallouj and Weinstein (1997) point out that in each service transaction may give rise to a particular set

of characteristics in situations where there is production on demand or a response to a specific, not standard sable problem. In these cases, it may seem difficult to say for certain whether or not innovation has taken place. If a simple definition of product innovation is retained (with innovation being said to occur as soon as there is a new product), it would be necessary to consider innovation to have taken place in all these cases, which seems to defy common sense; this would suggest that a 'custom-made product' frequently requires little imagination or creativity (Gallouj & Weinstein, 1997). Lyons (2007) pointed out that service innovation as the following characteristics: consistent, coherent, and comprehensive presence of values and norms that promote fresh thinking and swift execution in service firms. Innovation in services tends to be more fluid and evolutionary, and thus top competitors are characterized more by their steady pace over time than by making gains with long-shots. Innovations are associated radical, disruptive, or game-changing. However service industries do not view the change as radical instead there are hundreds of small advances each month, across many different fronts, which over time become transformative with most improvements to service being incremental, non radical (Lyons, 2007). Innovation in service innovation is about adding new value to the service at the different levels of the organization (Berghman, Matthyssens, & Vandenbempt, 2006). How value can be added is elaborated in the next section.

2.2.1 Value creation

Different authors point out the importance of an innovation strategy as an instrument to be ahead of the competition. Within service organizations the main product is to add value to the customer. Service organizations who figure out how to create innovative value and can manage creativity will have crucial advantage in the ever-increasing competition for global talent (Florida & Goodnight, 2005). They are able to create innovate value to stay ahead of competition and deliver unique services.

2.2.1.1 Defining value innovation

Today's organizations need a constant flow of ideas while competing through added value factors. The most successful organizations will create environments that promote systematic creativity and innovation (Alves, Marques, Saur, & Marques, 2007b). Creating innovative value is important to outperform the competition for service organizations. There are different concepts to create innovative value. One of the ways that describe the adding of value is "value innovation". It is introduced by Kim and Mauborgne (1997) to explain why some organizations have successfully innovations in services and others don't. Value innovation is compliance to the concept "strategic innovation" introduced by Markides (1997). The idea of value innovation is: *"Value innovation makes the competition irrelevant by offering fundamental new and superior customer value in existing markets by enabling a quantum leap in buyer value with the creation of new markets"* (Kim & Mauborgne, 1997). It can be the creation of competitive advantage and/or superior value. The aim is to create new market space enabling companies 'out-competence' rather than 'out-performing' companies (Matthyssens, Vandenbempt, & Berghman, 2006). This concept can be used for adding value in consulting services as they are performing in an existing market trying to outperform their competition. Matthyssens et al. (2006) point out that many industries take their industry's conditions as given and set strategy accordingly. Value innovators don't. No matter how the rest of the industry is faring, value innovators look for blockbusters ideas and quantum leaps in value. Many companies let competitors set the parameters of their strategic

thinking. They compare their strengths and weaknesses with those of their competitors and focus on building advantages (Matthyssens et al., 2006). Conventional logic leads companies to compete at the margin for incremental share. The logic of value innovation starts with an ambition to dominate the market by offering a tremendous leap in value. Value innovators do not focus on competition; they distinguish the factors that deliver superior value from all the factors the industry competes on. Companies that follow the logic of value innovation will free up their resources to identify and deliver completely new sources of value. Value innovators do not set out to build advantages over the competition, but end up achieving the greatest competitive advantages (Kim & Mauborgne, 1997). Important is to point out that the market boundaries and industry structure are not given and can be reconstructed by the actions and beliefs of the players. These boundaries only exists in the minds of the mangers who fail to look further than their existing business (Kim, 2005). We define new value creation capacity as the capacity to: *1) create a fundamentally different and/or new business model (incl. market approach), and/or 2) change the roles and (power) relationships in industry/supply chain*.

2.2.1.2 Customer

Many companies seek growth through retaining and expanding their customer bases. This often leads to finer segmentation and greater customization of offerings to meet specialized needs. Value innovation follows a different logic, they build on the powerful commonalities in the features that customers value. Customers' differences often prevent you from seeing what is most important. Value innovators believe that most people will put their differences aside if they are offered a considerable increase in value (Kim & Mauborgne, 1997). 'Hearing the voice of the customer' might lead companies to merely adapt their offerings, while forgetting to also proactively reshape customer preferences (Berghman et al., 2006). Matthyssen et al. (2006) point out that cut-throat competition and sustain competitive advantage is through launching new value concepts and continuously re-invent the way customers value is created and delivered. At the same time, successful value innovation should be firmly embedded in a company's entire network relationships; it implies the cooperation and commitment of external parties too, like a company's suppliers and its other network partners. (Matthyssens et al., 2006). Customer value has at least two dimensions: (a) the total value of goods and services and (b) the relationship value, which is composed of direct and indirect functions of a customer relation. It is important to ad benefits to the customer (Berghman et al., 2006).

2.2.1.3 Business Opportunities

Many companies view business opportunities through the lens of their existing assets and capabilities. Value innovators ask the question, what if we start anew. This means not that value innovators never leverage their existing assets and capabilities. They often do. But, more important, they assess business opportunities without being biased or constrained by where they are at a given moment. For that reason, value innovators not only have more insight into where value for buyers reside, and how it is changing, but also are much more likely to act on that insight. Value innovators think about the total solution buyers seek. They often cross the boundaries that are set by conventional competition (Kim & Mauborgne, 1997). Rule makers and rule takers are the industry. Rule breakers set out to redefine the industry, to invent the new by challenging the old (Hamel, 1996). It is not on the technological aspects, but rather on the reconceptualization of the industry/business model in order to create fundamentally

new and superior value. There are two different ways to use value innovation for business opportunities. This can take the form of (1) new ways of cooperation or integration within the chain (e.g., parties start doing tasks which normally were done by another level in the chain, or parties make exclusive cooperative ventures based on different ways of dealing with each other) or (2) combining different value chains (e.g. of adjacent industries) to make a broader solution offering to customers (Matthyssens et al., 2006). Proactive approaches will lead to more innovative products and services, and to more new product success (Berghman et al., 2006).

How does the logic of value innovation translate into a company's offerings in the marketplace? You need to ask yourself the following questions:

- Which of the factors that our industry takes for granted should be *eliminated*?
- Which factors should be *reduced* well below the industry's standard?
- Which factor should be *raised* well above the industry's standard?
- Which factors should be *created* that the industry has never offered?

Answering the questions a new value curve can be created that is total new for the industry offering new and superior value. According to the conventional logic of competition an industry's value curve follows one basic shape. Rivals try to improve value by offering a little more for little less, but most don't challenge the shape of the curve. An example of the value curves of the hotel industry is given in comparison with the total new value curve of the formula 1 concept. This is shown in Figure 5 (Kim, 2005; Kim & Mauborgne, 1997).

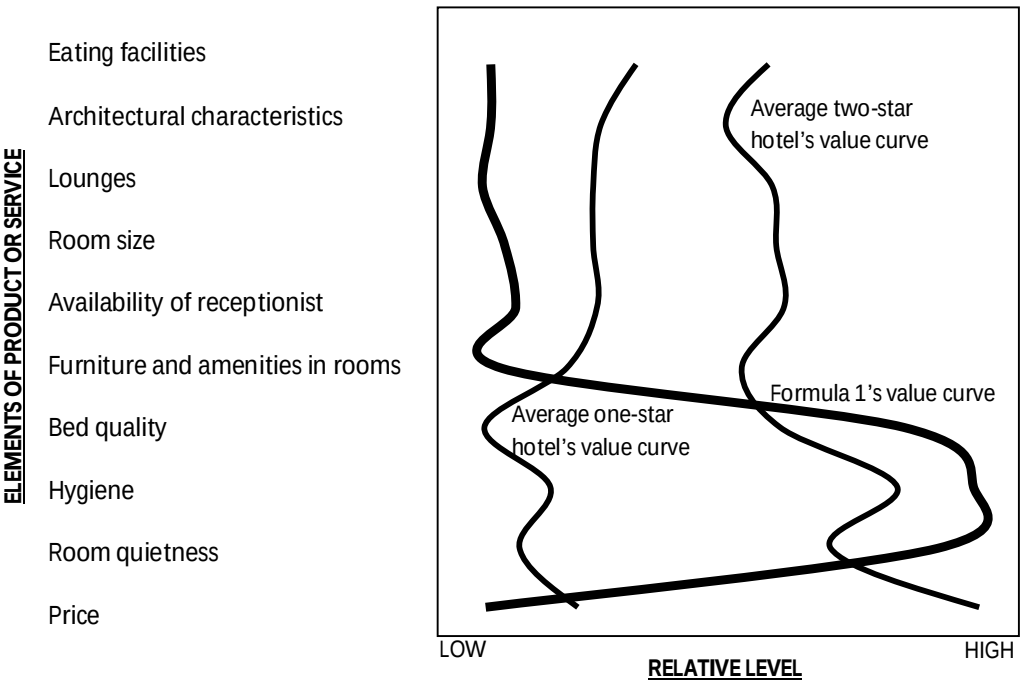

Figure 5: Example value Curve Formula 1 (Kim & Mauborgne, 1997) (page:108)

Companies are most successful if they take advantage of the three places where value innovation can occur: product, service and delivery. Too often, managers try to create value at only one of the three platforms, forgetting the other platforms. This will end up in not being as successful as they could be. Value innovation can be used to identify the most promising possibilities for growing across a portfolio of businesses (Kim & Mauborgne, 1997). Creating value is the main service of a consulting organization. Value innovation is about creating innovative value for your customers, the organization or the service as a whole. It is not about the competition but about what you can do to add new value (Kim & Mauborgne, 2004). Therefore creating innovative value is important and needs to be done in the whole organization. This means that it can be done at all levels.

2.3 Creation of innovative value on individual level

The primary source of innovation starts with creative thinking of the individual employees. Creativity of employees forms a source of new ideas, which in their turn create the starting point for innovation (Amabile, 1997; Dijk & Ende, 2002). Creativity is the generation of new and useful ideas or the combination of existing ideas into new and useful concepts to satisfy a need (Flynn, Dooley, O'Sullivan, & Cormican, 2003). Creativity is identified with ideas generation, while innovation implies ideas transformation into new products or services. Innovation is the implementation of creativity results. Creativity is part of innovation process (Alves et al., 2007b). Mumford et al. (2002) stated that creativity is not only the generation of ideas, but also the implementation of the ideas. This also calls for much creativity, to see new process and recombining and reinventing how things are done (Mumford, Scott, Gaddis, & Strange, 2002). In this section a closer look is taken on how creativity is develop at the individual level. Individual creativity mechanisms refer to activities undertaken by individual employees within an organization to enhances their capability for developing something which is meaningful and novel within their work environment (Bharadwaj, 2000). Creativity is the production of novel and useful ideas. It is doing something for the first time anywhere or creating new knowledge. Individual innovation starts with problem recognition and the generating of ideas or solutions (Scott & Bruce, 1994). Cummings & Oldham (1997) describe creativities as when an employee generates a product/service or process that is both novel and useful with respect to the firm. Contributions are novel when they offer something original or unique relative to what is already available within the organization repertoire of products, services, or practices. However the contribution also needs to be useful, it must be directly relevant for the goals of the organization and it must be something from which the firm can reasonably expect to create some value in either the short term or the long term (Cummings & Oldham, 1997). Creativity has been conceptualized as:

- The individual personality traits that facilitate the generation of new ideas,
- The process of generating new ideas,
- Outcomes of creative processes, and
- Environments conducive to new ideas and behaviour

(Alves et al., 2007b)

Alves et al. (2007b) describes creativity as: the capacity to generate new valuable ideas for products, services, processes and procedures. It is the ability to produce work that is both novel and appropriate, and the set of qualities of products/responses that are judged to be creative by appropriate observers. Creativity is a complex and diffuse construct, difficult to define consensually. But is very important to stimulate this creativity because the greater the number of ideas at the start of the new product development process, the greater the probability of successful products or services (Alves et al., 2007b). If creativity can be improved, then more alternatives, novel approaches or unique solutions are likely to emerge in response to a problem (Roffe, 1999). Flynn et al. (2003) argues that there are three different kinds of creativity. These are normative creativity, exploratory creativity and creativity by serendipity. Normative creativity focuses on generating ideas to solve specific needs, problems and objectives. Exploratory creativity is about generating a broad spectrum of ideas, which may not necessarily be related to known requirements or demands. The difference between normative and exploratory is that exploratory creativity reveals opportunities, which are not always exploitable in commercial terms, whereas normative creativity is results orientated. Creativity by serendipity is about the generation of ideas by accident. This is a not with malice aforethought idea, but a found solution just by arbitrariness (Flynn et al., 2003). In this research the focus will be how these three forms of creativity ordinate out of individuals. These three different forms are combined in the definition of creativity of this paper. Creativity is conceptualized as: "*The individual development of new and useful ideas (this can also be the recombination of existing ideas) which creates value to the organization. This can be within the organization or outside the organization at the level of the customer or the service."*

Figure 6 shows the model of creativity and how it is related to innovation (Amabile, 1997). Employee creativity is the birth of innovations at the organization, it feeds innovation. At the organizational level the idea of the employee is influenced by resources of the organization, management practices and organizational motivation. Together this will determine if the creative idea will become an innovation. This research focus on the individual process of creativity, what will determine if a person is creative?

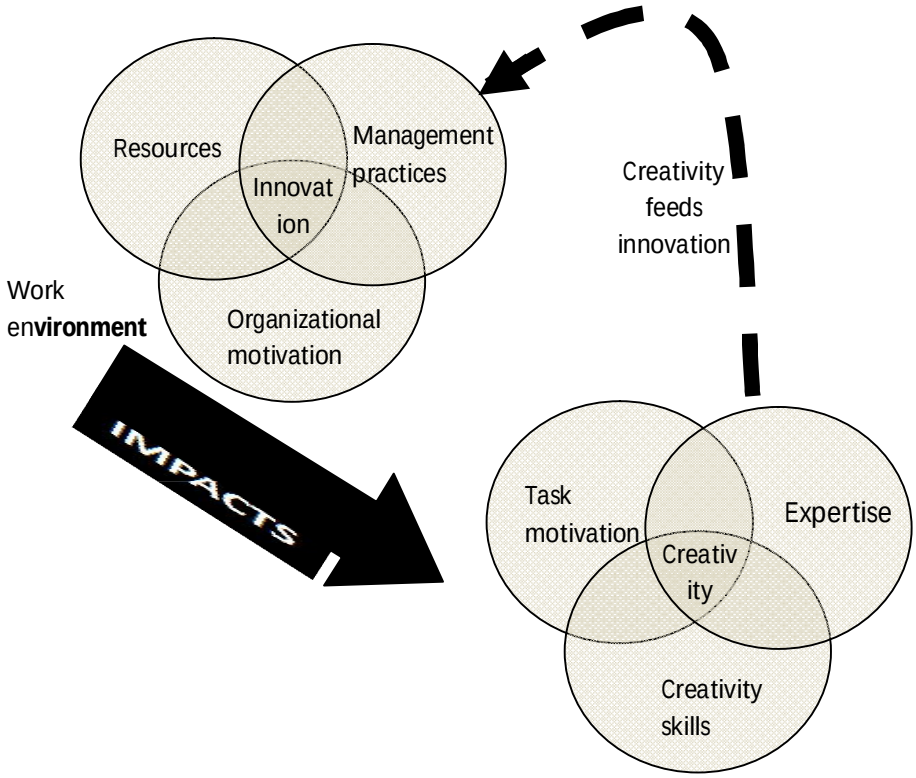

Figure 6: Correlation between individual creativity and work environment (Amabile, 1997) (page53)

Amabile (1997) stated that individual creativity will be influenced by the work environment. The work environment will determine if creativity will lead to innovation, therefore influencing the creativity. Individual creativity is formed by task motivation, expertise and creativity skills. Task motivation is the expertise of the employee is the knowledge this person has. This will determine where the person will be creative about. Everybody will be creative in a different discipline, determent on the expertise. The creativity skills are important to be able to think 'outside the box'. The final factor is how motivated an employee is to be creative (Amabile, 1997). These are the four main factor of individuals to be creative, the next part will be elaborated these different aspects.

2.3.1 Expertise

Expertise is the foundation for all creative work. The expertise component is the memory of factual knowledge, technical proficiency and special talents in the work domain (Amabile, 1997). Expertise is a flux mix of frames knowledge, values, contextual information and expert insight that provides a framework for evaluating and incorporating new experiences and information. It originates and is applied in the minds of knower's. In organizations, it often becomes embedded not only in documents or repositories but also in organizational routines, processes practices and norms (Tsoukas, 2001). Roffe (1999) point out that creative people have in general a higher intelligence, information storage, information recall and information analysing skills (Roffe, 1999). Domain specific knowledge is a necessary perquisite for creative thinking. Essential knowledge and information is often embedded in

social networks, which become important components in facilitating individual knowledge (Diliello & Houghton, 2008). Quinn et al. (1996) made a split-up in four dimensions of the **individual intellect.** It is divided into cognitive knowledge, advanced skills, system understanding and self-motivating creativity. Cognitive knowledge is the basic mastery of a discipline that professionals achieve through extensive training and certification. This knowledge is essential, but far from sufficient, for commercial success. Advanced skills are about how to translate "book learning" into effective execution. The ability to apply the rules of a discipline to complex real-world problems is the most widespread value-creating professional skill level. System understanding is deep knowledge of the web of cause-and-effect relationships underlying a discipline. It allows professionals to move beyond the execution of tasks to solve lager and more complex problems (Quinn, Anderson, & Finkelstein, 1996). Roffe (1999) highlights that creative people have a wide interest and will be pioneers in their technology and fanatics at problem solving (Roffe, 1999). The final dimension is self-motivated creativity. This is the will, motivation, and adaptability for success. Highly motivated and creative groups often outperform groups with greater physical or financial resources. Without self-motivated creativity, intellectual leaders can lose their knowledge advantage through complacencies (Quinn et al., 1996). Sternberg et al. (1997) point out that creativity is made out of different characteristics; basic knowledge is one of them. It is important to know basic knowledge in one field to be able to go beyond the status quo; people need to know what the current status quo is to go beyond it. Creativity has been shown to be fairly domain specific, people are not general creative but in specific areas. But too much knowledge is also not good. There needs to be a balance in the amount of knowledge a person has to be able to be creative. There is the saying that when someone is knowledgeable about one specific area they are getting to know more and more about less, until they know everything about nothing. Creativity is about combining seemingly unrelated things into something new. To be to knowledgeable can enable a person to make these "unrelated" connections. People assuming that they know how things work, when in fact they now too much and are not able to make new connections. Creative people do not get locked by what they know; they are able to move in to the next idea (Sternberg, O'Haram, & Lubart, 1997). Andriopoulos (2003) points out that organization knowledge can also be an important source of knowledge and expertise. Knowledge of the organization can prevent mistakes from reoccurring and reminds people of the regular 'traps' of the creative process. **Organizational knowledge** is the knowledge that is embedded in the organization. This is not only knowledge that is embedded in documents or repositories but also in organizational routines, processes practices and norms (Tsoukas, 2001). But employees should constantly question the organizational knowledge than to take it for granted. Their experimentation and research need to be used to reorganize current knowledge into new forms, shapes and processes. Employees must see existing knowledge as an opportunity to further exploit what is all ready known (Andriopoulos, 2003).

Frohman (1999) argues that creative people are driven by internal forces to **learn**, and what is learned will be focused on solving critical business problems and pushing the innovation. Creative people will learn new knowledge if they are driven to make their idea a success. They learn knowledge to solve problems in creative ways seeking the help of others. Their growth and learning is driven by their need to make a difference (Frohman, 1999). Vicenzi (2000) also highlights the importance of continuous learning. This can be in the field of knowledge, or outside the field to get information linkages. Creating

and sustaining an environment where learning and knowledge generation is a valued activity stimulates creativity (Vicenzi, 2000). Quinn et al. (1996) stated that not only the internal force is of importance to learn but also the external. Sharing information and learning from it will grow the knowledge and expertise of the employees. If two people exchange knowledge and experience them will both gain information and experience linear growth. If they share their new knowledge with others, which will feedback questions, amplifications, and modifications the benefits come exponential. When employees learn from outsiders like customers they can reap even greater benefits (Quinn et al., 1996). The network of the employee gives information and enable employees to know more and see where the problems and opportunities are (Kijkuit & Ende, 2007).

Florida & Goodnight (2005) point out that stimulating mental work leads to superior performance and, ultimate better products. The most fitting thanks for a good job well done are an even more **challenging job**. Learning and being challenged motivates workers more than money or fear of disciplinarian bosses. Employees react to frequently updating their tool and gathering more knowledge and expertise (Florida & Goodnight, 2005). Andriopoulos (2003) points out that identifying challenging projects is only part of the creativity equation. It is also essential to match employees to the challenging projects that utilise and at the same time stretch their skills, passion and capabilities. This is important because there is a thin line between challenging people and creating a culture of fear and insecurity. Employees need to be challenged by the work they do, not have a fear of losing control. People should be motivated and nurtured to believe in their self and making them more comfortable to implement their own new ideas (Andriopoulos, 2003).

2.3.2 Creativity skills

Creative skills depend on some extent on **personality characteristics**. Under the same conditions, some people are likely to be more creative than others; and these differences are likely to show up in other situations and at other times. A small percentage of employees is responsible for a large share of the total creative ideas (G. A. Steiner, 1971). It is about being able to take new perspective on problems, an application of techniques for the exploration of new cognitive pathways, and a working style conductive to persistent. This is related to personal characteristics as independence, self-discipline, orientation toward risk-taking, tolerance for ambiguity, perseverance in the face of frustration, and a relative lack of concern for social approval. These skills are related to the ability to be flexible and intellectual independent (Amabile, 1997). Oldham and Cummings (1996) point out that personal characteristics including: broad interests, attraction to complexity, intuition, aesthetic sensitivity, toleration of ambiguity and self-confidence relate positively with the creative performance (Oldham & Cummings, 1996). Steiner (1971) points out that some personal characteristics have a positive relationship with creativity. The first characteristic is the independence of judgement. Creative people will make their own opinion about situations and make their own judgement and try to confine the subordinate (G. A. Steiner, 1971). Frohman (1999) point out that innovators are people who like to have an impact in the business, they look for problems and opportunities for the organization. They see problems (like not getting approval from the leader) not as permanent roadblocks but they move around it, believing that the performance of their idea. Important is to stay open for new information, viewing people from the outside as potential to learn (Frohman, 1999). The second characteristic that Steiner (1971) points out

is deviance; they feel like they are an exception and differ from other people. The third characteristic is how creative people view authority; they see authority not as a final judgement but as temporary. As mentions before, they will make their own judgements. The fourth and final characteristic is that creative people are acceptance to impulses. They will express more personal whims and impulses and can sometimes be lead by this (G. A. Steiner, 1971). Frohman (1999) also highlights the importance for creative people to be independent. They also have strong self-expression and self-esteem. Creative people will respect the norms and policies of an organization but will question them to be able to improve them. They will use their own skills to reach the goals of the organization (Frohman, 1999). Sternberg et al. (1997) argues that being creative, it is important that someone has a risk-taking personality, someone who can take a stand and be a contrarian. Being creative means that you will stand on your own, this is of course risky. Therefore people being creative need to be risk-taken persons (Sternberg et al., 1997). Frohman (1999) points out that people need to be self directing in their own actions. They need to self-confidence to be "self-authorizing"; the approval to act need to come from within (Frohman, 1999). But Steiner (1999) argues that it is important that they learn not to be totally self directed. Creative people need to develop skills to communicated out-side their discipline; technical innovators in business must appreciate the full complexity of the holistic world and afford to exist as a race apart from their non-technical colleagues. They need to overcome the technical communication problem (C. J. Steiner, 1999). Gough (1979) points out that there are different characteristics that stimulate creativity and that others don't. Most characteristics are discussed in this section, for the total list see Annex C (Gough, 1979).

A second part of creative skills is the intellectual abilities of a person. Sternberg et al. (1997) point out that there are three different intellectual abilities: synthetic, analytic and practical abilities. **Synthetic** is the ability to see connections and redefine problems. People vary in the capacity to make these connections and redefine problems, but people can improve these capabilities by training (Sternberg et al., 1997). Frohman (1999) also highlights that creative people have the skill to see problems and have the drive to solve them. They will be frustrated if they see problems that are not being addressed and that opportunities are lost. They are willing to spend time on finding solutions to the problems. They have the ability to think outside their job description (Frohman, 1999). Roffe (1999) confirms that creative people need to be achievement orientated. They need to have a high degree of independence and self-sufficiency. They need to have autonomy of judgement and resilience to peer pressure on conformity in thinking. They will have an ability to draw attention to the unrecognised or unobserved. Creative people will have a particular interest in achievement on problems where their own ability can be a deciding factor (Roffe, 1999). Scott and Bruce (1994) stated that problem solving style is important for the innovation behaviour of employees. There are two different problem solving styles, these are systematic and intuitive problem solving. Intuitive problems solvers are more innovative that systematic problem solvers. People use both styles at different moments. Perhaps the true innovators are people who van use a style that is appropriate to the stage of the innovation cycle in which they are involved (Scott & Bruce, 1994).

The second intellectual ability that Sternberg et al. (1997) point out is **analytic**. This is the skill to judge the potential of an idea. Depending on task, it is sometimes better to postpone using this ability. Getting

more idea's to evaluate to come to the best option to solve the problem (Sternberg et al., 1997). Crossan (1998) argues that to be able to judge the potential of an idea, it is important to realize that you cannot control the environment but you need to learn from it. Learning from the environment often requires that individuals break out of their traditional frames of reference to see the environment in its full richness and complexity. Organizations are often plagued by the inability of their members to break out of familiar patterns of interpreting customer needs, or competitive responses. Important is to be able to risk the four C's: the desire to be consistent, comfortable, confident and competent. Creativity puts the four C's at risk, but gives the employee the opportunity to see how the idea can be used en needs to be developed (Crossan, 1998). Roffe (1999) point out that to be able to break out of the environment creative people need to have a prolonged curiosity, observation and listening skills. They need to be dedicated, committed and hard-working. They need to tolerate the unpredictable interactions between the discoverer and the outside world, and cope well with unencumbered and informal development. This will make them able to analyse the environment en see what idea works and which not (Roffe, 1999).

The final intellectual ability that Sternberg et al (1997) points out is **practical**. This is about the ability to present your idea and to "sell" it to other people to convince them of the idea. The value of the idea is not always so visible to people as it is for the person who came up with it. The idea needs to be presented to other, also how it can be filled in to make it an innovation (how it can be implemented). These three intellectual abilities are important to be able to be successfully creative. Unfortunately being excellent in one of the three skills does not mean that a person is also good in another. This means that some potential good ideas are lost (Sternberg et al., 1997).

Sternberg et al. (1997) argues that another important part of creativity skills is the **thinking style** preferences. People vary in the way they prefer to use their intellectual abilities. They have a certain style or characteristic way of acting. Style preferences can also be understood as habits with a particular intellectual ability. There are different styles: inventing style, implementing style and evaluating style. Inventing style is about doing thing you own way. Implementing style is about following the established way, the implementation of ideas of others. The last style, the evaluating style is about sitting back and analyze what is happing around them. They act typically as critics or judges. Every person possesses every style to some degree, what differs across individuals is the strength of preferences and the kind of tasks and situations that advocate various preferences. Creative people need to have a preference for inventing thinking. A person who has the ability to think in novel ways but do not have the preference for it will not be a creative person. The other way around is also possible, someone who likes to think in novel ways but do not has the capabilities. Style preference is therefore an important part to be able to be creative (Sternberg et al., 1997).

Innovation in an organization is significant influenced by the extent of creativity-relevant skills are owned by its employees, but these skills need to be developed, sustained, and enhanced through formal and informal mechanism such as training and education. Creativity training for individuals will enable them to improve their problem-solving skills, leading to more innovative solutions for existing problems. Creativity is not an innate phenomenon, but can also be inculcated, encouraged, and trained (Bharadwaj, 2000).

2.3.3 Motivation

Motivation will determine what a person finally will do. Task motivation makes the difference of what a person can do and what it finally will do (Amabile, 1997). People are generally creative in tasks that they enjoy. If they don't enjoy an activity they will probably not spend much time and energy on it, to make it a success. Because a person can have all the knowledge that is needed, noting will happen when the person is not motivated to do the job. A powerful idea can kick around unused in a company for years, not because its merits are not recognized, but because no one have taken responsibility to use the idea (Sternberg et al., 1997). Amabile (1997) point out that motivation can be intrinsic or extrinsic. **Intrinsic** is the motivation someone has by deep interest and involvement in the work, by curiosity, enjoyment, or a personal sense of challenge. **Extrinsic** is the motivation someone has by the goal that can be attaint that is apart from the work itself. Although combinations of intrinsic and extrinsic motivation are common, one is likely to be primary for the given person doing a given task.

Intrinsic motivation will be more conductive to creativity than extrinsic motivation. To some extent, intrinsic motivation can make up for a deficiency of expertise or creative thinking skills. When the intrinsic motivation is high, employees are more likely to draw expertise from other domains or apply great effort in attaining the right skills (Amabile, 1997). Frohman (1999) point out that it is important that someone has the motivation to identify problems and opportunities outside of area of responsibility. Creative people do not wait for direction but actively sought for new opportunities or indentify problems. The key behaviour in this part is, asking question at every step of the process (Frohman, 1999). When the level of intrinsic motivation is high, employees are expected to be more creative. This is when employees are excited about a work activity and interested in engaging in it for the sake of the activity itself. They are free from extraneous concerns and are likely to take risks and explore new ways of doing things. They are likely to stay focused on the internal nature of the task and to work longer on ideas or problem that they have found (Oldham & Cummings, 1996).

Oldham and Cummings (1996) stated that the *design of the job* is a big contributor to the employee's intrinsic motivation and therefore the creative performance. Specifically, complex and challenging jobs that are characterized by high levels of autonomy, skill variety, individuality, significance and provided feedback will have higher levels of intrinsic motivation than people who have routine jobs. When jobs are challenging and complex, individuals are likely to be excited about their work activities and interested in completing these activities in the absence of external controls or constraints. *Complex jobs* may demand creative outcomes by encouraging employees to focus simultaneously on multiple dimensions of their work, whereas highly simple or routine jobs may inhibit such a focus (Oldham & Cummings, 1996). Mumford et al. (2002) also highlights that creative work can occur when the tasks presented involve complex, ill-defined problems where performance requires the generation of novel, useful solutions. This creativity can occur in different of disciplines and is not only the generation of ideas but also the implementation of the idea in the organisation. This also calls for creative thinking (Mumford et al., 2002).

Intrinsic motivation and extinct motivation can have an antagonism, when extrinsic motivation increases, intrinsic motivation decreases. But under certain conditions extrinsic motivation can be combined with intrinsic motivation. To get these conditions there are three important determinants for **extrinsic motivation**; the person's initial motivational state, the type of extrinsic motivator used, and the timing of the extrinsic motivation (Amabile, 1997).

The first element is the person's *initial motivational state* (intrinsic motivation). This level is of crucial importance because when the level is high, the person's intrinsic motivation is high, the effect of the extrinsic motivation will be undermined. Research shows that when internal motivation is vague and ambiguous the person will be most subject to external factors. But when high, the effect of intrinsic motivation will be that high that it will relatively be immune to negative effects of extrinsic motivation and the creativity (Amabile, 1997). When intrinsically motivated people are able to work in an environment that allows them autonomy and includes challenging activities, they are likely to be more involved and creative (Diliello & Houghton, 2008).

The second element is the *type of extrinsic motivation*. Synergistic extrinsic motivators do not necessarily undermine intrinsic motivation; they can even enhance some aspects of performance. The outcome can result from reward, recognition and feedback that either confirm competencies or provide important information on how to improve performance. These are called informational extrinsic motivators. There can also be positive outcomes that result from reward, recognition and feedback that directly increases the person's involvement in the work. These are called enabling extrinsic motivators. There are also non-synergistic extrinsic motivators that have a negative effect on intrinsic motivation. These are called controlling extrinsic motivators. These will have a negative effect on intrinsic motivation because it undermines the person's sense of self-determination. Controlling extrinsic motivators can make an employee feel like he or she is under strict control on how to approach the project because the rewards try to control his behaviour. This will have a negative on intrinsic motivation and therefore on creativity (Amabile, 1997). Quinn et al. (1996) point out that new form of extrinsic motivation often does not work. Only when field-people determine their "support people's" wages, promotions and organizational progress. Without those changes, people will continue to perform according to traditional measures (Quinn et al., 1996). Diliello and Houghton (2008) also highlights that people tend to produce more creative work when they perceive support and encouragement from management (Diliello & Houghton, 2008). Marx (2006) point out those employees cannot be forced into suggesting new ideas. Therefore it is of importance to recognize and reward employees who come with good ideas to improve the organization. This is a form of enabling extrinsic motivators; this reward can be financial or non-financial. Non-financial can even be more effective than financial because this can interfere with the instinct motivation. Non-financial rewards can be lunches with the manager to discuss the ideas. It is about the recognition the employees will receive (Marx, 2006). Mumford et al. (2002) also confirms that professional achievement and recognition is very important for employees. Extrinsic motivation that gives this recognition and professional achievement can strengthen the instinct motivation, because work can be a source of identity for employees (Mumford et al., 2002). Management-instituted mechanisms like the development of formal processes, programs, structures, and budgets for facilitating creativity affects employees by signalling the importance of creativity and innovation (Bharadwaj, 2000).

Van Dijk and van den Ende (2002) also highlights that encouragement is very important. This informational and enabling form of extrinsic motivation can be made of different elements. This encouragement is made out of the three elements: alignment, possibility of reflection and emanation of idea-receptiveness. An alignment environment envelops employees, bombarding them with a consistent set if signals so that the companies ideology and its attitude towards creativity cannot be misunderstood. Possibility of reflection is the possibilities to find sounding board for the ideas of the employees. The final element is the emanation of idea-receptiveness. This is the clarity which organizations welcome creative ideas. It is the image of innovation that a company communicates towards the employees. These factors have influences on the motivation of the employees (Dijk & Ende, 2002).

The final element is *timing of the extrinsic motivation*. Innovations are always novel and appropriate to the market. There are different stages to the creative thinking process; there are times when it is important to determine if the ideas are novel and appropriate. At other times the degree of novelty is not in play, such as gathering information to validate the idea. Extrinsic motivation is at best at play when novelty is not at play because at these times some form of outward focuses is engendered by extrinsic motivation. This extrinsic motivation can give an indication to the problem-solver of the appropriateness of certain kinds of information or the workability of the final solution. Extrinsic motivation has a bad timing when it is used novelty is at play like generating ideas (Amabile, 1997).

Intrinsic and extrinsic motivation together will resolve into the final motivation of the employee to be creative. This motivation is very important element in the individual employee creativity, without it, people are not creative (Amabile, 1997).

2.3.4 Environment

Although a person's development of expertise and practice of creative thinking skills are influenced by the environment. The work environment is of high influence on all the three different disciplines of creativity but the most direct influence of the environment is probably on motivation. Certainly, a person starts out with a level of intrinsic motivation that depends on his or her basic enjoyment of the work. But experiments have shown how a person's basic motivational orientation for a task, and resulting creativity on that task, can be influenced by even momentary alterations in the work environment (Amabile, 1997). Organizations can stimulate creative behaviour within the organization with formal approaches and tools, with providing resources and encourage novel behaviour (Bharadwaj, 2000). People respond to the organizational behaviour by regulating their own behaviour in order to realize positive self-evaluation consequences (Scott & Bruce, 1994).

Amabile (1997) argues that there are different elements important in the work environment that has positive impact on creative work outcome. These are freedom, positive challenges, supervision encouragement, work group supports, organizational encouragement, independence, and sufficient resources. Factors that have negative influence on the creative behaviour are organizational impediments and excessive workload pressure. Research shows that of less prominent role on creativity is freedom, resources and workload pressure (Amabile, 1997). A bigger influence on creativity is positive challenge in the work, organizational encouragement, work group support, supervisory encouragement,

independence and organizational impediments. Also innovation norms are important to be successful in the innovation strategy (Amabile, 1997). Scott and Bruce (1994) stated that research shows that environmental factors as performance-reward dependency, freedom, rewards given in recognition, organization willingness to experiment with new ideas, resources available (like equipment & facilities) and time are of importance in stimulating innovative behaviour. They have also showed that supervisory and organizational support is positively related to innovation. Innovation support may always be better than less. This creates a climate for innovation which stimulates innovative behaviour (Scott & Bruce, 1994). Alves et al. (2007) argues that the work environment is influenced by the shared visions and missions. It is also important how the availability is of resources like time, money and people to allocate the ideas. Do people get the support in creative problem solving and idea generation activities? This is stimulated by the shared cultural elements like routine behaviours, shared values and believes which influence the level and frequency of creative occurrences and impact on free flow of ideas that favour innovation (Alves et al., 2007b). In this section the important factors are elaborated on: the culture of the organization, the perceived risk in an organization to give idea, the network within an organization, group interaction and leadership support.

Alves et al. (2007) also argues that **cultural aspects** influence workers knowledge and satisfaction and their ability to adopt change. Openness and dynamic contact within the culture of an organization stimulates the acceptance of new perspective on problems and will stimulate the creativity of the individual. Also the structure of the organization is of importance, the flexibility and freedom in autonomy, empowerment and decisions in organizations are highly regarded values and practises if it comes to creativity. Working teams and interacting groups will have positive impact on the ability of organizations to stimulate creativity and innovation (Alves et al., 2007b). Van Dijk and Van den Ende (2002) point out that the culture of the organization will determine if employees are willing to share their ideas. If the culture environment will stimulate the communication of ideas surrounds the individual this will stimulates the sharing of ideas (Dijk & Ende, 2002). Andriopoulos (2003) also argues that culture is very important in nurturing creativity in the organization. Organizational culture that stimulates empowerment, self-development and diversity within the work environment will be more creative. Employees must feel comfortable within their working environment and within the work that they are doing. Therefore organizational culture should cherish diversity and non-conformism by valuing each employee's individual skills, abilities, expertise and personality. Employees who feel comfortable in such environment will be able to show their real selves and abilities and will be therefore be more creative (Andriopoulos, 2003). Diversity is very important because discussions between among like-minded individuals increases both the extremeness of the views and the confidence in them. After discussion, risky groups become more risky and caution groups become more cautious (Nemeth, 1997). Roffe (1999) point out that a culture open for creativity has certain features: it is open-minded to encourage flexibility and group involvement, perceptive in seeing things from the employees' point of view, respects everyone for the diversity each brings, stimulate the expression of ideas, encourages employees to find answers creatively, and gives clear objectives and specific feedback (Roffe, 1999). An organizational culture that encourages creativity through the fair & constructive judgement of ideas, reward and recognition for creative work, mechanisms for developing new ideas & active flow of ideas, and a shared vision of what the organization is trying to do, will create a positive environment for

creativity (Diliello & Houghton, 2008). Flynn et al. (2003) also highlights that a supportive culture is of much importance to stimulate the employees to be creative. Important aspects of this culture are:

- Supportive (financial and psychological) leadership that is visionary and enthusiastic.
- Where communication is stimulated, and top management communicates the visions and decisions.
- Flexibility towards new thinking and behaviour patterns which will encourage searching for new ways of doing things.
- To have a culture outwardly; looking for ideas among competitors, customers, academe, suppliers and industries with different focus.
- Treating everybody equal when they come-up with new ideas. (Flynn et al., 2003)

Alves et al. (2007) points out that organizational strategy reflects the priorities and values of organizations and consequently impacts on creativity and innovation. The explicit incorporation of innovation in the goals and objectives of an organization is the first step in the creation of attitudes to creativity. Time, money and people allocated to new ideas and innovative projects contribute to the effective application of the strategy which will lead to a creative culture (Alves, Marques, Saur, & Marques, 2007a).

Another part of the environment that has an influence on creativity is how large the **perceived risk** is that is taken. Creativity often occurs when conventional routes are challenged and this implicitly involves an element of risk-taking (Andriopoulos, 2003). Sternberg et al. (1997) highlights that research have shown that people are risk seeking when they choose between potential loss and risk avoiding when they need to choose between potential gains. Another part of the risk taking is that there are differences between employees to go with something novel. Employees with longer experience will have more to lose (status) and less to gain with developing new ideas. Creative ideas may involve risks that can seem too great and/or contradicting what is “known” to be true. Employees with less working experience have less to lose and more to win, and are therefore more willing to take the risk. People fear change, despite the fact that people claim to value new ideas, people like it when they are more familiar with things (Sternberg et al., 1997). Alves et al. (2007) point out that it is important how the risk taking is managed. How idea’s are evaluated, how mistakes are handled, how changed is dealt with, how communication is supported, how reward systems are established and how idea’s are indentified (Alves et al., 2007b). An employee will not be very eager to suggest another idea if his or her previous work is not used. The employee has taking a risk to communicate the idea, and when not used, the risk taken was not useful and will not be done again. The organization need to support the idea and need to commit its resources to the idea’s generated by its employees (Dijk & Ende, 2002). Risk taking and change needs to be promoted. Tolerating mistakes and stimulating creativity by the social form culture instate of formal controls. Continuous innovation occurs largely because top managers appreciate innovation and manage their companies’ value system and climate to support it (Roffe, 1999).

Sternberg et al. (1997) indicates that creativity will decrease in meetings or other **group interactions** when negative bias is given when evaluating others. Critics are presided as more intelligent than praise givers. This results in the fact that people feel more intelligent if they give critics on someone’s idea than

generating own ideas. Resulting in a negative effect to generate ideas because of the negative attention it can draw. Even in brainstorm sessions where ideas cannot be criticized, people are still more productive in generating ideas when they do it alone. The final negative effect in meetings is the facts that research show that business people tend to believe that it is unwise to be creative. Creative people are often viewed as oddballs and are viewed as outsiders (Sternberg et al., 1997). Nemeth (1997) argue that people are worried about being different and not accepted. When a person differs especially when the group is cohesive and is of importance to the members, that "deviate" can be certain of receiving the most communication, usually aimed at changing their opinion. If this is unsuccessful a person can be disliked and untimely rejected from the group. But a single dissenter can break the power of the majority. Because of the dissenter the majority can be broken, fragmented and divided. The deserter can be of important value to stimulate creativity, because it stimulates more complex thinking and better problem solving. It stimulates to combine all relevant information and use creativity to come with better solutions, therefore groups can stimulate creativity (Nemeth, 1997).

Alves et al. (2007) also argue that **group work** can stimulate creativity. Important is the diversity, coherence and interactivity of the group. These characteristics maximize the benefits of cooperation and guarantee that learning effects and level of inventiveness are enhanced, due to higher cultural, technical and knowledge differences between the actors involved. This will result in knowledge creation and competency development. The creation and strengthening of common innovation support structures and the alteration of organizations cultures and behaviours towards continuous innovation. This can result in higher levels of interconnectedness and mobilization of resources to execute more complex research and new product development projects (Alves et al., 2007b). Florida and Goodnight (2005) stated that forming these workgroups is an important job for the management. Groups correctly put together can facilitated the exchange of ideas and can encourage innovation (Florida & Goodnight, 2005). Zhou and George (2009) point out that the stimulation of groups on creativity is dependent on the support and feedback of co-workers. This support and feedback can give employees the confidents that they are interested in improvements and change. The employees who receive useful feedback from co-workers believe that there is likelihood that his or her idea will be supported by the organization. But without this support the employee will feel discouraged in his creativity process and will provided fewer ideas (Zhou & George, 2009).

Leadership is of much importance when addressing creativity. Important is that leaders will have good relationship with their subordinates. If this relationship is build out of high levels of support, trust and autonomy, employees will feel a support for innovation within the organization. The supervisor can influence individual innovative behaviour by their expectation. This can create an environment which is supportive for innovation (Scott & Bruce, 1994). Important is to realize that people are unwilling to challenge persons of higher status. A strong directive leader who seeks for uniformity can suffer under the illusion that there is uniformity while there is actually not, because people keep silence. Managers need to be aware of the fact most employees are quite fragile when it comes to expressing "different" views. People may unwittingly censor their own thoughts as well as their verbal expression. Strong leaders with strong cultures can ruin creativity though the expression of a conflicting view (Nemeth, 1997). Florida & Goodnight (2005) point out that knowing that your boss thoroughly understands and

respects the work an employee does, employees will be less hesitant to ask questions and to come with creative suggestions. Employees will have faith in the decision of their boss (Florida & Goodnight, 2005). Goal clarity and open interaction between supervisors and subordinates help employees to adjust their attitudes to the organization's objectives and to act in a creatively manner (Alves et al., 2007a). Managers should be able to protect, exploit and appropriate innovation and create time for individuals and groups to consider change. It is also important to fund the staff resources, familiarisation and training needed to turn ideas into implementation (Roffe, 1999). When supervisors are supportive they shown concerns for employees' feelings and personal initiative in their work, employees will be more creative. They are supported and provide feedback and facilitated employee skill development, they will feel the autonomy to be creative. In contrast, supervisors who are controlling and closely monitor employee behaviour and make decisions without consulting employees and pressure employees to think. They will discourage employees to be creative (Oldham & Cummings, 1996). Mumford et al. (2002) stated that the best predictors for creativity for employees are the leadership qualities of the subordinate. First of all it is of importance that the leader has the same technical skills as the employees. This is of importance to be able to give a good evaluation on the ideas given by the employees. To be able to be supportive and give right feedback not only the knowledge is of importance but also the own creativity skills of the leader. This is of importance because creative people seek contact with their leaders when they are seeking for evaluation about project work and its implications and when they are initially defining, or constructing, a problem. It is important that leaders support and have open communication with their employees to discuss creative ideas. This will make them speak up and be able to take the perceived risk, which is related with creativity. Leadership is a very important factor in the creation of an effective work environment for creativity (Mumford et al., 2002).

Kijkuit and van den Ende (2004) argue that **networks** are of great importance in developing creativity. Good-ideas are the result of having non-redundant, heterogeneous contacts that enable a person to generate ideas by combining diverse information. Non-redundant contacts are contacts that are only connected to the individual in question and not to each other. Heterogeneous contacts are contacts that represent different functional backgrounds or levels of tenure. The underling idea is that non-redundant and heterogeneous contacts increase the range of skill, knowledge and perspectives available to an individual, positively impacting creativity. The network is not only of importance for generating solutions but also important to see the problems and opportunities that fit the organization (Kijkuit & Ende, 2007). Burt (2000) point out that networks give you access to information. There are three important elements which are: access, timing and referrals. Access is about the information that can reach you. Seeing problems and opportunities is about who brings them to you. The second element is timing. This is also important, when the information reaches you. If you are the first one to see the problems and opportunities you will be the first to deal with it. Then the final element is referrals. When problems are occurring, people need to remember you, and mention your name at the right time. This combination will make people be able to benefit from information that is surrounding them (Burt, 2000).

Dissatisfaction at the work environment can lead to more creativity but can also decrease creativity. Amabile (1997) point out that during significant organizational events the work environment changes. When the economic times are not very positive and companies are forced to downsize this has a

negative effect on the environmental stimulation to creativity. The elements that became weaker were challenge in the work, work group support and organizational encouragement. These three elements are of much importance to stimulating creativity. Creativity and productivity will decline during downsizing (Amabile, 1997). This organizational change can lead to job dissatisfaction which can result in different outcome like Zhou and George (2009) point out. They argue that job dissatisfaction can lead to four different outcomes:

- Exit the job or organization. Employees will leave without making any changes or suggestions.
- Loyalty to the organization which means that the employee will not changes the behaviour. They respond passively to their job dissatisfaction by accepting the status quo without raising any objectives or making any suggestions for improvement.
- People can give their voice to the organization. The employee is making suggestions and speaking their mind about the dissatisfaction and/or how it can be improved. This voice can lead to more job satisfaction in the future.
- The final reaction is that employees can neglect their job. They will put less effort in doing their job, which will result in dissatisfied results.

This voicing action can lead to creative solutions to improve the job and/or the organization. Voice behaviour includes the “propose of ways of doing things” and “making suggestions on how to improve things” which is closely related to employee creativity. It can help organizations to correct current problems and to make improvements. But when do employees choice to voice and not to exit the organisation or to neglect the job? Important is to look at the exit costs. If employees find them to high, they will decide to stay in the organization. But this does not mean that they will voice. This is dependent of organizational support to bring about intended changes. The employee needs to take a risk to voice about the job dissatisfaction, which can lead to negative consequences for the employee. Therefore the perceived support from co-workers and the organization is of much importance. This will probably determine if the employee will choice voice over the other options which can be chosen. But there are more factors that can be of importance. For example employees with a higher self-esteem are more likely to voice because they believe that their actions will be influential and effective (Zhou & George, 2009)

Important is to understand that organizations who provide a supportive environment and context for innovation tend to reap greater benefits from individual employees who are innately creative (Bharadwaj, 2000). The degree to which organizational members perceived an organizational climate as supportive of innovation affects the innovation behaviour of the employee (Scott & Bruce, 1994). The work environment, as perceived by the individuals in the workplace, is perhaps the most critical influence in final output of the ultimate creativity of the employees (Diliello & Houghton, 2008).

2.4 Framework

The consulting service is about providing value to the customer. The service is divided in different aspects; these are technology, customer and the competencies from the company (Hill, 1977). Together they are the service of the consulting firm. Innovation within the consulting service is about adding new innovative value. This innovative value is about the ambition to dominate the market by offering a tremendous leap in value (Kim & Mauborgne, 1997). Making this applicable for the consulting service, this means the value innovation can be about all the different aspects of the service; competences of the customer, technology and the competences of the service organization. This can be done at the individual level of the elements, but it is also possible to look at the service as a whole. This will change the total value chain, this will include all the different elements of the service (Kim & Mauborgne, 1999). The value adding ability of the organization can be found at the level of the employees. The innovation process starts with the individual employee who has an idea to change the way things are done (Amabile, 1997). The production of ideas is depended on the individual employee on all levels. If employees are more creative they will produce more and better ideas. Creativity of the employees exists out of: expertise, skills and motivation. This will be influenced by the environment. The main connection found in the literature is that the *higher the creativity factors are the more innovative value employees will create.* In this framework an overview will be given of the main aspects that influence the expertise, skills, motivation, environment and the influence of that on value innovation. The main connections founded are:

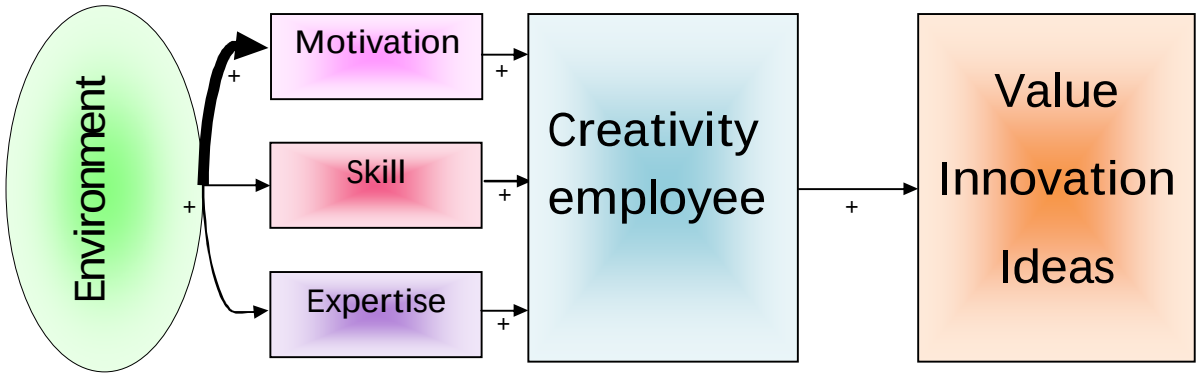

Figure 7: Testing hypotheses

2.4.1 Expertise

The expertise of an employee will be positively influenced by different factors: Challenging job, learning and organizational knowledge.* Learning can be politely influences by the network of the employee and organizational learning can be influenced negatively if employees do not try to improve it but positively if people try to learn from it. The theoretical relations are shown in the next figure.

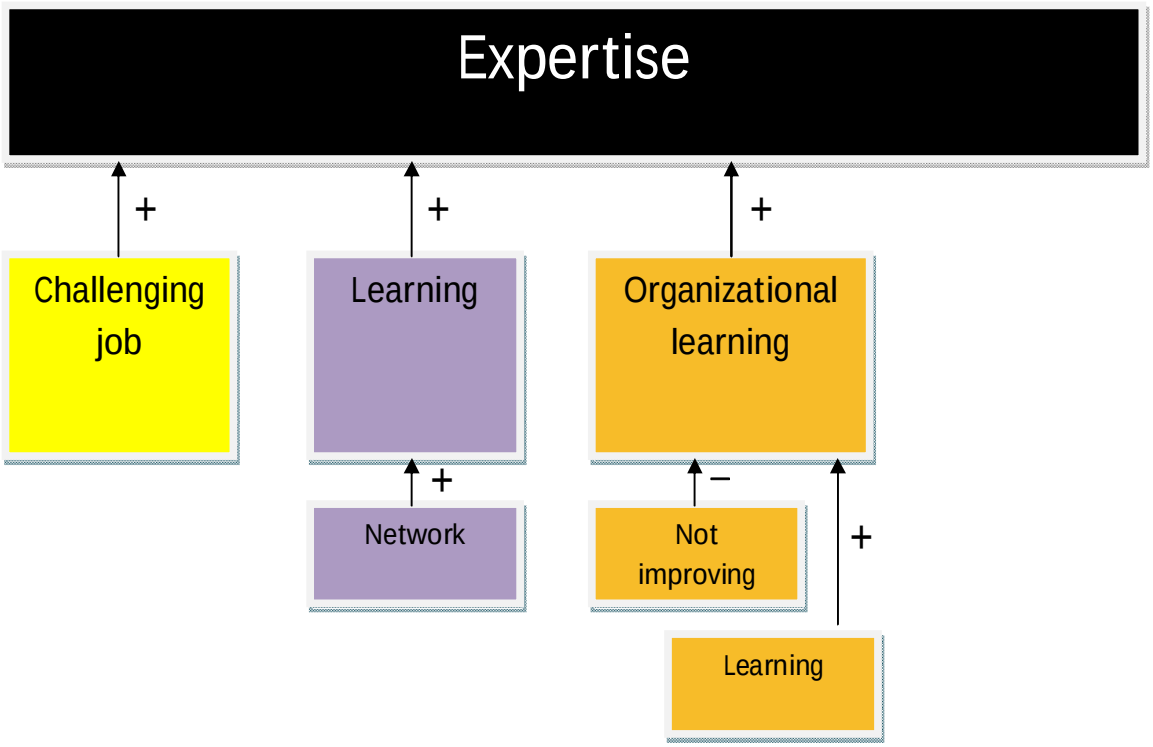

Figure 8: Relations expertise

* The fourth factor is individual intellect is also of importance but to difficult/time consuming to test and therefore left out of the framework. The assumption is made that everybody has a high intellect because everybody working on the Oracle Consulting Groups has a high educational level.

2.4.2 Creative skills

The creativity skills are influenced positivity influenced by: the personal characteristics, analytics, synthetic, practical and thinking style. The personal characteristics are influenced by al lot of different factors these are shown in Annex D by the scale of Gough. Added factors that are found are: impulsive, deviance, risk taking and independent judgement. Analytic made up from how well a person can see the potential of an idea. Synthetic is positively influenced by: seeing problems, seeing connections, redefine problems and looking outside the job description. Practical is positively influenced by how well you can sell an idea and thinking style is positively influenced by thinking in an inventing and intuitive way. Thinking in an evaluating and implementing way will have a negative influence on the thinking style. The theoretical relations are shown in the next figure.

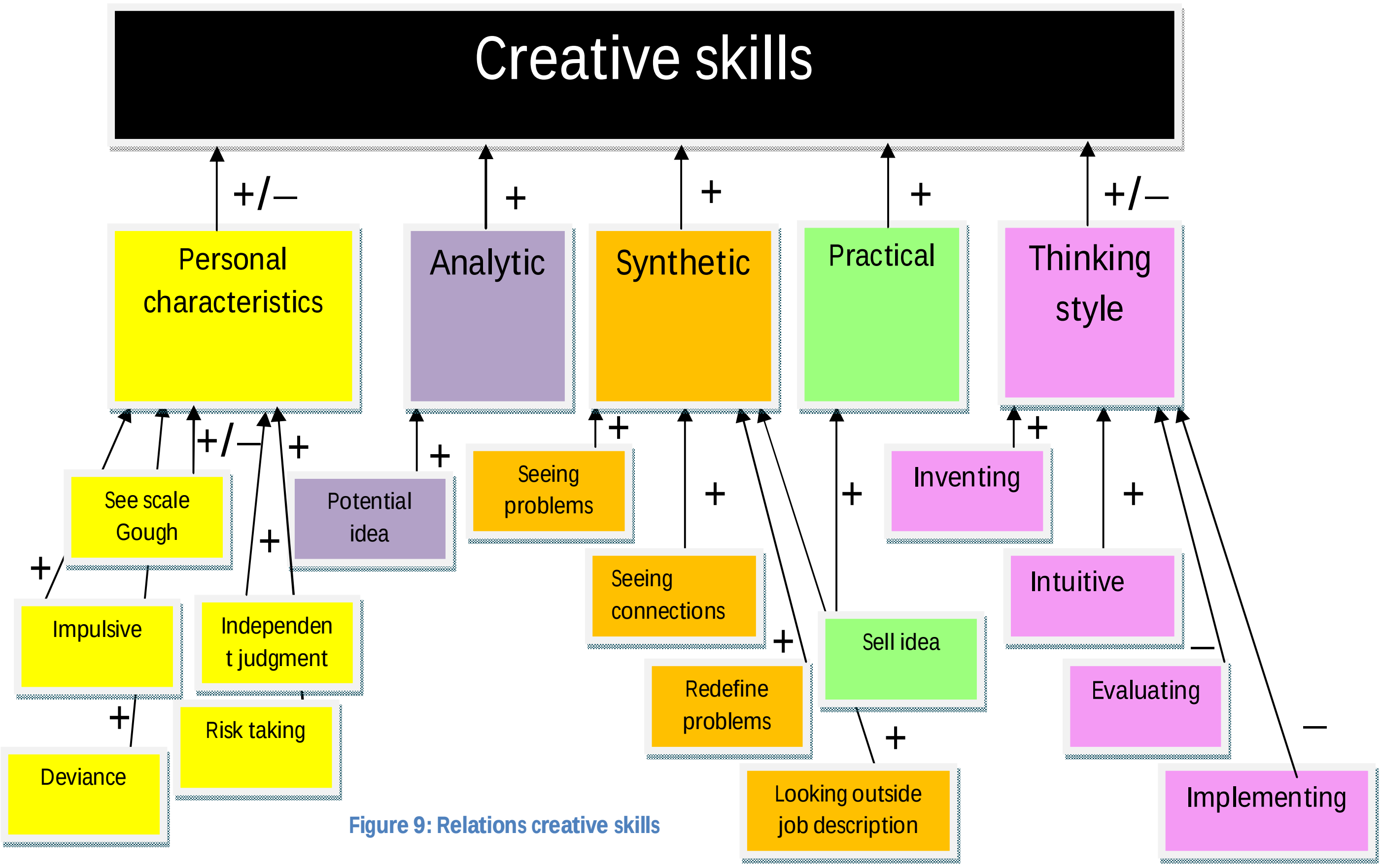

Figure 9: Relations creative skills

2.4.3 Motivation

Motivation is made up by two different factors, intrinsic and extrinsic motivation. Intrinsic motivation will have a positive influence on motivation. Intrinsic motivation is influenced by the job design. This can be positive if the job is complex and will have many challenges. This will be negative when it is a very routine job. Intrinsic motivation and extrinsic motivation can have a positive and negative influence on each other. Extrinsic motivation can have also a positive or negative influence on motivation as a whole. This is de pendent on the type of extrinsic motivation and the timing of the extrinsic motivation. The timing is positively influenced by feedback and commitment. When it comes on a moment when it is still in a very novel stage it will be negatively influenced. The type of extrinsic motivation is positively influenced when it is enabling and informal. Negatively it will be influence by a controlling type. The theoretical relations are shown in the next figure.

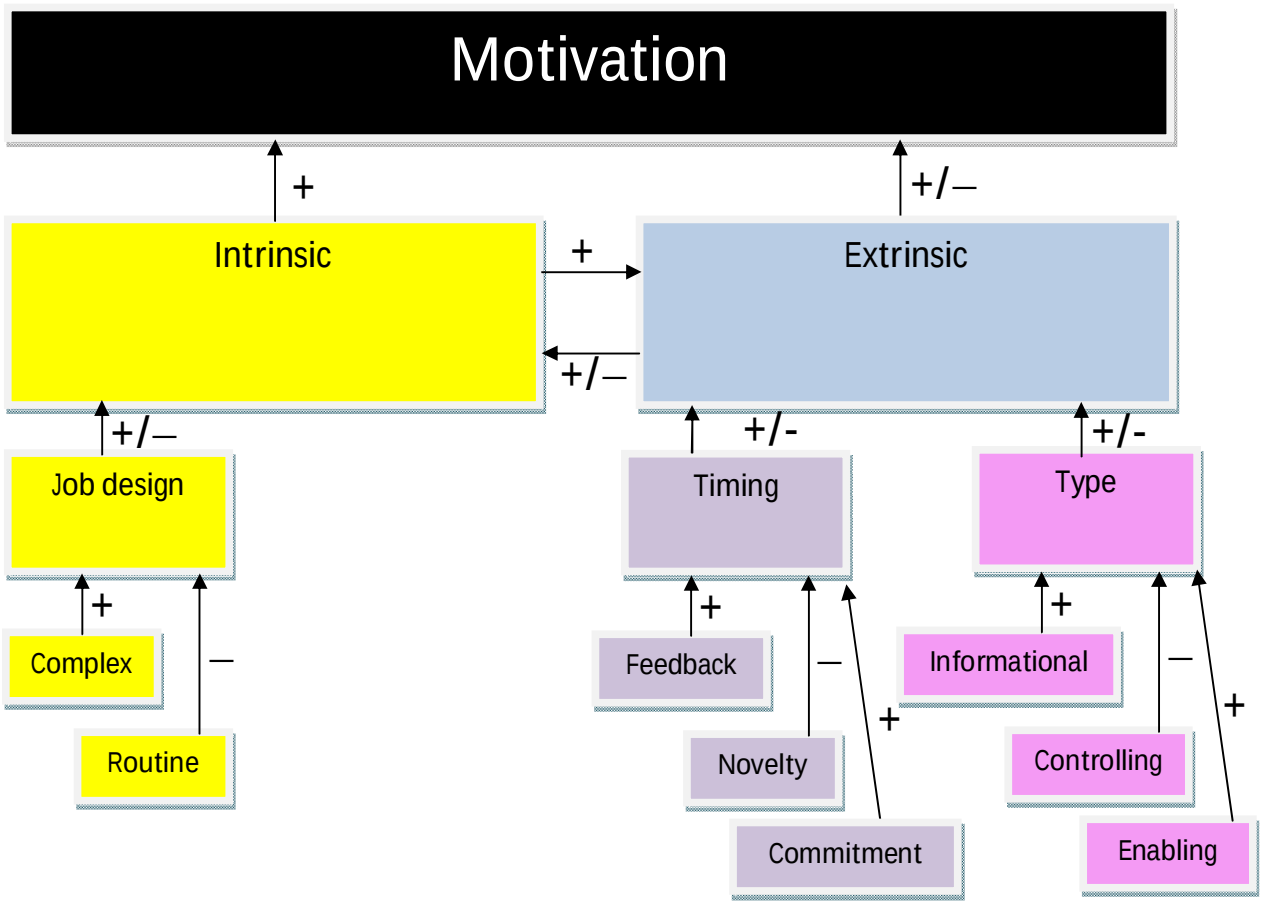

Figure 10: Relations motivation

2.4.4 Environment

The environment is influenced by the culture of the organization, the perceived risk, the network at the organization, what people would do if they are dissatisfied, the group people work with and the leadership. The culture of the organization can have a negative or positive influence on the environment. When it is diverse, autonomy, comfortable, communication, freedom and challenging, when it is lacking these factors it will have a negative influence. The perceived risk will have a negative influence, the higher the risk the more negative people experience it. The higher the status the higher the perceived risk is, how much it is tolerated new ideas the lower the risk is and the better the risk is managed how lower the perceived risk is. The network has a positive influence when people get access to people, they reveal information and they have the right timing to get the information and connections. Dissatisfaction in the work will have a positive influence on the environment when people talk (voice) about it. It will have a negative influence when they exit or neglect. Staying loyal in combination with voicing has a positive influence but will be negative in combination with the other options. The group people work with can have a positive or negative influence dependent on the diversity and support of the group (positive) or in

the outsider feeling and the perception that it is unwise to be creative (negative). Leadership can have a positive effect on the environment but also a negative one. It will be positive when leadership is: respectful, open relationship has work knowledge and is encouraging. It will have a negative influence when it is controlling and directive. The theoretical relations are shown in the next figure.

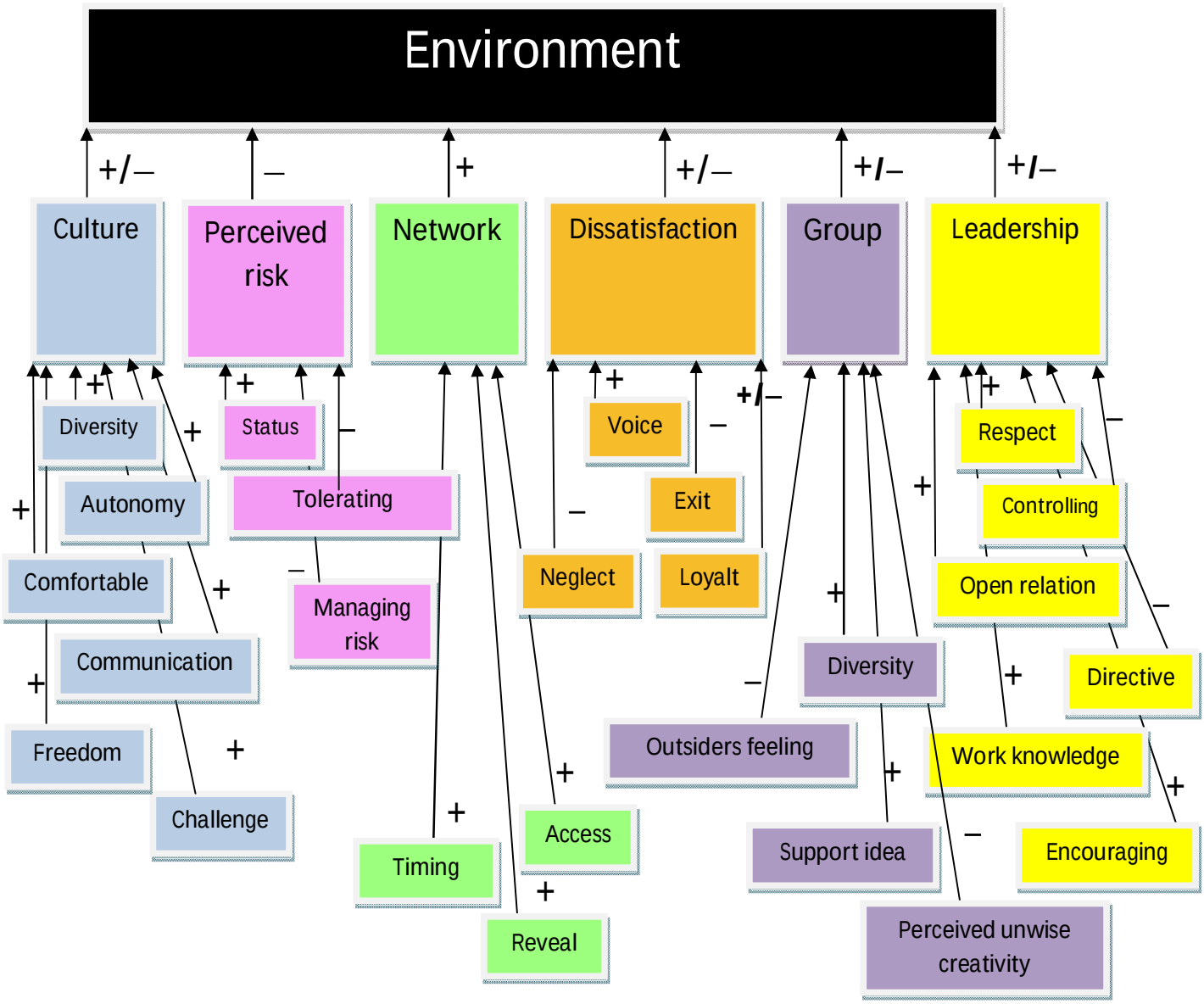

Figure 11: Relations Environment

2.4.5 Value innovation

Value innovation is made up by innovative ideas made up about the whole service/organization or a part of it. It is important to not look at what the competition is doing. The value innovation starts with idea of

the employees which are influenced by their creativity. Value innovation is tested on what kinds of ideas employees have on all the different aspects of the service (competencies of the customer, competencies of the service organization and the technology) and as a whole. Also is looked at the influence competition has on developing new ideas.

3. Methodology

In this chapter an overview will be given of the methodology that is used to answer the research questions. The complete overview of how the research is conducted is shown in Figure 12. The research starts with a preliminary investigation. The preliminary investigation starts with orientating interviews with the senior managers of the different focus groups. With these orientating interviews and the studying of different documents the cause and the research questions are formulated.

The nature of the research is deductive. First the literature is searched for previous researches and the found correlation. These correlations are used to analyse the organization to be able to analyze the organization. The research is explanatory; it tries to explain the behaviour of the employees.

3.1 Research approach

Sub-question: Which capabilities support innovative value?

The first sub-question will be answered with a literature study. First an elaboration is made of how innovation in consulting firms can be created. After this, an overview is given of how value innovation can be created. This will lead to a framework of how innovative value can be created on an individual level. The search for literature is done according by a systematic approach. In a systematic approach the keywords and free-text words are selected to find relevant literature. Annex B holds the total list of key- and free-text words. To find relevant articles the first selection is made by selecting the title of the article based on relevancy. When the article is selected, the abstract has been read to make an additional selection. If the article was found relevant the article is totally read, and if the article is still applicable it is used. Before the article is used the quality of the article is determined. This is done by looking at how many times the article is cited, but this approach is a bit more difficult for new articles. New articles are mostly not cited many times, because the time is too short to publish other articles that refer to the new article. When article is still very new, the quality of the article is determined by the quality of the journal. When an article is used the reference list of the article is checked for other relevant additional information.

Sub-question: How does Accenture create innovative value?

To answer this question a document study will be conducted. A systematic research will be done on the knowledge exchange of Accenture to search for relevant documents. Documents will be selected on information about the stimulation of employees to create innovative value. The other information that is selected is about how innovation (strategy) is translated to the employees. Search words to selects documents are:

- Innovation (Netherlands)
- Innovation Accenture (Netherlands)
- Innovation strategy Accenture (Netherlands)
- Innovation strategy corporal (Netherlands)
- Strategy corporal (Netherlands)
- Strategy Accenture (Netherlands)
- Innovation Oracle (Netherlands)

- Innovation Strategy Oracle (Netherlands)
- Strategy Oracle (Netherlands)
- Oracle Consulting
- Ideas (Oracle)
- Improvements (Oracle)
- Business development (Oracle, Netherlands)

The documents will be first selected based on their title. When the title of the documents is relevant the description of the document is used to determine of the document is used or not. If so, the complete document will be read and, when relevant, it will be used for the document research. The documents must provide information about how Accenture stimulates the creation of innovative value capabilities.

Sub-question: What are the barriers and enablers for creating capabilities for creating innovative value?

To answer this question the results of the previous questions will be used. The outcome of the precious question will give points of attention which are further used in the research. To get a good insight, first a questionnaire will be conducted to all the employees of the Oracle Consulting Group. Survey research is one of the best methods available for collecting original data of a population that is too large to observe directly (Babbie, 2004). This questionnaire will test the different capabilities of the employees. The Unit of Analysis and sampling selection criteria are the employees working at the Oracle Consulting Group Netherlands (76 employees). The employees need to self-evaluate some of their own capabilities and that of the organization. To get a representative sample at least 50% need to fill in the questionnaire, this amount is adequate. A higher response is always better, with 60% being good, 70% very good and 80% excellent (Babbie, 2004). The questionnaire is spread by e-mail and will be web-based. The advantage of a web-based-questionnaire is that it provides a greater speed and will have lower costs. The questionnaire can be spread more easily and people can fill-in the questionnaire at any time when internet is available. They can fill-in the questionnaire in their own comfort zone and complete it when they like. The costs are lower, because the interviews are not printed and are not send by post or are spread in any other way that cost money. The second advantage is that the questionnaires are more visual, flexible and interactive. The third advantage is that the interviewer effect can be avoided; this is of significant advantage if social desirability effects are likely to be lager. The social desirability effects will be elaborated more profoundly in the next paragraph. Some disadvantages of online questionnaires are that the non-responses tend to be higher. The second disadvantage is that it is difficult to check who filled in the interview, did the right person filled in the questionnaire (Duffy, Smith, Terhanian, & Bremer, 2005). Because every employee of the Oracle Consulting Group has its own laptop everybody can reach the questionnaire online. To obtain a high response an incentive was given to fill-in the questionnaire. This was done by writing-out a contest for the focus group that has the highest percentage filled-in questionnaires. The focus group with the highest response rate will win a pie for the next focus group meeting. In a reminder send out by email, a half-time score was given to promote the filling-in of the questionnaire. To get it under everybody attention, a short article was published in the monthly newsletter and a presentation was held in the management meeting asking the managers to

promote the questionnaire under their subordinates. Which some managers did by sending out an e-mail to their group asking them to fill-in the questionnaire to win the pie.

A problem with questionnaires is that it does not collect vital information concerning the details of the artefacts. To get an better understanding there is a need to go more in-depth with observations or other qualitative research (Duffy et al., 2005). Therefore the questionnaire will be supported with in-depth interviews. With the in-depth interviews is tried to seek out the taken-for-granted, underlying, and unusually unconscious feeling that underlie with the perception. One of the advantages of the face-to-face interviews is to be able to observe and record nonverbal as well as the verbal behaviour (Babbie, 2004). The interviews will be semi-structured to be able to limber up emotions and feelings that are not written in the interview. Two focus groups were selected, one with mainly employees who were "home-grown" Accenture employees and another with the most working experience out-side Accenture. This is done to get two completely different points of views and to get the less bias answers. From every level (analyst, consultant, manager and senior manager) of the two focus groups one person was interviewed which gives a total of eight people. To get the interviews under attention the winning of the pie-contest was presented at a practice meeting (all the members of the Oracle Consulting Group were invited) and at the practice meeting the interviews were announced. The people were randomly selected out of the two focus groups and were asked by phone and e-mail to collaborate. Only one person rejected the interview because of time reasons and one other person was not able to come to the Netherlands. To solve this problem a conference call was held.

The main problem of questionnaires and interviews is that there is a chance to receive social desirable answers. In the next paragraph is described how is dealt with this problem.

3.1.1 Social desirability bias

If you ask people questions that are experienced as sensitive there is always a possibility that people will give social desirable answers. In this research two different methods are used; a web-based-questionnaire and a face-to-face interview. These methods have their own characteristics which can cause social desirability bias. The different aspects and possibilities of the social desirability bias will be explained in this paragraph and an explanation is given how is dealt with it in this research.

When people fill the in questionnaire people need to fill in the questionnaire as truthful as possible. But this will not always happen, because most people will do an effort to conform to societal norms. Individuals may present themselves in a favourable light, regardless of their "true" feelings or "actual" behaviour. Specifically, individuals may under-report those activities perceived to be socially or culturally undesirable and may over-report those activities deemed to be socially or culturally desirable. Acting this way can for example mask a relationship between two or more variables, provide a false correlation between independent and dependent variable, or moderate the relationship between those variables (Randall & Fernandes, 1991). This is called social desirable bias; Keuter and Presser (2008) stated that *"questions can be considered sensitive if respondents experience them as intrusive, if questions raise fair about the potential repercussions of disclosing of the information, or if they trigger other social desirability concerns. The concept of social desirability rests on the notions that there are social norms governing some behaviour and attitudes and that people may misrepresent themselves to*

*appear to comply with theses norms. This can mean that people over- or underreport on sensitive questions to make the situation look better" (*Keuter & Presser, 2008). There are two different factors that can cause social desirability answers. The first factor is *self deception,* the tendency of people to see themselves in a favourable light. The second factor is *impression management*, the conscious presentation of a false front, such as deliberately falsifying test responses to create favourable impressions (King & Bruner, 2000). Not clear is how big the effect of social desirability bias is. There is some debate about the extent which social desirability is actually a problem for self-report measures; several authors have argued that its importance has been exaggerated. The pervasiveness and impact of social desirability is not known. Secondly it is not clear how social desirability should be conceptualized. The different scales and measurements of social desirability have all different conceptualizations of social desirability. Finally very little is known about how and when social desirability operates. Is it a continuous and deliberate process or one that is largely automatic (Holtgraves, 2004)?

Because of this uncertainty there is not much attention for this subject in studies where they use methods where people need to self-report. A review of business ethics research revealed that self-report data were relied upon in almost 90% of empirical journal articles. However, only one of the of 96 empirical research articles since 1960 till 1991 has attempted to assess the impact of a social desirability response bias (Randall & Fernandes, 1991). King & Burner (2000) also point out that marketing research published in six rigorous marketing journals between 1980-1997 of the hundreds of articles published only 13 reported testing for social desirability bias. There are scales to test the social desirable answering and scales in some areas to correct the answers. Even when authors find significant social desirability bias, most of them did not correct the scale. These authors had different reasons for not correcting the scale, but there is a chance that the results are bias (King & Bruner, 2000).

Controlling social desirability bias can be done in different ways. This can be done by the use of pre-tested scales on social desirability bias. Another way is by correcting the bias with validation data (King & Bruner, 2000). The first option is to use the social desirability bias scale, but all of them have some validity problems. The most frequent used; the Marlowe-Crowne Social Desirability scale has also some validity problems (Nederhof, 1984). An alternative option to get a good overview of social desirability bias you need to have validation data. This data however, is often difficult (or impossible) to obtain. When the data is available, they may involve very specialized populations. The lack of validation data forces investigators to make two assumptions in determining which mode leads to "better" results. The first assumption is that social desirability concerns lead respondents to underreport socially undesirable behaviours so that the data collection mode that yields higher levels of reporting in more accurate one. The second assumption is that lower reports of socially desirable behaviours reflect more accurate answers. The extent to which these assumptions are correct cannot be determined without validation data (Keuter, Presser, & Tourangeau, 2008). An additional way of controlling social desirability bias is to get a scale that prevents subjects from responding in a socially desirable manner. Neutral questions or forced choice between two statements can be good ways of preventing item to be socially desirable answered. It is also important to be aware where situations exist that people will give social desirable answers. Social desirability bias can also be limited to make sure that the administration is anonymous and the subjects have the feeling of being anonymous. When this is not possible try to convince subjects

of the anonymity. A final method can be to warn subjects that fake answers will be detected, therefore forcing them to fill in non bias answers (King & Bruner, 2000). Wilkerson, Nagao & Martin (2002) stated that even when the answers are completely anonymous there is still a chance that people feel a considerable pressure to present themselves or the company in a favourable fashion. Respondents find themselves in situations demanding more social desirable responding when personally relevant consequences is apparent in the questionnaire's stated purpose and the context of the data collection (Wilkerson, Nagao, & Martin, 2002). Finally Holtgraves (2004) found that people that are more concerned with how their responses might make them look, they do tend to consider their answers more carefully. This does not always affect the particular answer that they give but it does affect how long it takes them to respond. Hence, social desirability tends to operate primarily during an evaluation stage (Holtgraves, 2004).

Social desirability bias in web-surveys

Web-surveys have their own characteristic when it comes to social desirability bias. The first reason for this is argued by Joinson (1999). He stated that people that are using the WWW have a bigger private-self-awareness than a public-self-awareness. This leads to key behavioural differences between online and real life. Users of the WWW can be characterized as disinhibited; they are more willing to exchange hostilities, swap personal information, seek potentially threatening information and publish normally protected aspects of themselves. This will results in significant differences between web-based questionnaires and pen & paper questionnaires. Joinson (1999) found out that questionnaires published on the WWW scored: "*significant lower on measures of social desirability and social anxiety and scored significantly higher on measure of self-esteem*." The combination of using the WWW for completing the questionnaires and filling them in anonymous caused the lowest social desirability and social anxiety scores. But here needs to be noted that there has been found that being non-anonymous, as opposed to anonymous, had only a small effect on the WWW participants. This can be caused by the fact that WWW has a strong enough effect on reducing the public-self-awareness and increasing the private-self-awareness. The final note that needs to be made is that participants who worry more about the public-image then the private-image might be more effected when using the WWW as compared to those who value consistency between their inner beliefs and their public believes (Joinson, 1999). Wilkerson et al. (2002) pointed out that it is very important how anonymity is experienced by the respondents. The backtracking and response editing is of importance. The perceived verifiability of computer-collected data effect social desirability responding. This "Big Brother" effect my strongly effect the social desirability answering. Also the sensitivity of the information being requested is also an important factor (Wilkerson et al., 2002). Keuter & Presser (2008) confirms that Web surveys increased the reporting of sensitive information relative to conventional models like CATI and IVR. Web surveys represent increased accuracy, not only more likely to report more socially undesirable things about themselves; they were also less likely to falsely deny them. But here needs to be noted that Web surveys are more accurate if the items concern undesirable characteristics than for those about desirable characteristics (Keuter et al., 2008).

Social desirability bias in interview

King and Bruner (2000) point out that social desirability bias in interview is a subject that is not very often discussed. In many manuals with interview skills almost no attention is paid to this subject. Statements like "there is inherent faith that the results are trustworthy and accurate and that the relation of the interviewer to respondent that evolves in the interview process has not unduly biased the account". But the question is, if this is true because still the same social desirability bias problems can occur. The trusty relationship can have a positive influence on the social desirability bias but how this is affected is not very clear. The comparison between marriage and interviews is often made. Everybody knows what it is, an awful lot of people do it, and yet behind the each closed front door there is a world of secrets. This makes clear that there is problematic interview behaviour that could represent a serious threat to the validity of the interview data (King & Bruner, 2000).

Research interview is a unique situation, laden with meaning for both parties. The nature of research conversations could intensify people's tendencies to make a positive impression or please the investigator. A participant's concern about the researcher's approval and an informant may even make an effort to speak the interviewers 'language' rather than his or her own. This can be heightened by disturb in the power balance or by very sensitive subjects. To reduce the possibility of this social desirability bias participant need to assured that the response will be kept confidential and there are no correct answers (Collins, Shattell, & Thomas, 2005). Also Duffy et al. (2005) point out that face-to-face respondents are more likely to have an interview bias, giving more socials desirable answers in face-to-face interviews. The advantage of these face-to-face interviews is that interviewees will give lesser answers of "neutral" or "don't know" because the interviewer can explain the question when it is not clear. It is also clear that the interviewees will not use an additional source of information, like the internet to give answers. It has also an advantage that interviewees will give more in-depth answering getting a better understanding of the answer (Duffy et al., 2005).

Dealing with social desirability bias

In this research social desirability is a serious concern because the questions are work related and people can have the feeling that they need to present themselves in a favourable way. Even when the questionnaire is anonymous, they still can have the feeling that they need to represent the organization in a positive way.

To minimize the social desirability bias several authors (Duffy et al., 2005; Joinson, 1999; King & Bruner, 2000; Kreuter & Presser, 2008; Nederhof, 1984; Randall & Fernandes, 1991; Tourangeau, Couper, & Steiger, 2001; Wilkerson et al., 2002) argue that the key step is to make the questionnaire anonymous. It is also important that the participants feel that it is anonymous. This is important with the online-survey and of much more importance with the face-to-face interviews. With the online questionnaire the people of the Oracle Consulting Group were asked to fill in the on-line questionnaire with a bold printed statement that the questionnaire was anonymous. When they started the questionnaire this was again stated and at the end of the questionnaire people were asked to fill in their personal information without the option of going back and changing the questions. This was done to prevent that people would go back and change the questions because they would have a less anonymous feeling and want to correct the answers to more social desirability. Filling in the personal information was optional.

Stated was; "*In the following section some personal information is asked, however the questionnaire will be anonymous and the different questions will not be combined. But if you still feel uncomfortable I kindly ask you to fill in your level and choose for yourself which other questions will be answered."* This needs to keep on giving the respondents a feeling of anonymity. To get a higher response an email with a short explanation was send to the people to fill in the questionnaire. This was done in a way to reveal no information that could cause any bias to the questionnaire. To get a high percentage of filled in questionnaires a contest was held. The focus group with highest filled in questionnaires would win a pie. The second element was a picture of me that was added to get a personal pressure to fill in the questionnaire. The email is added in Annex E. The contest can cause higher social desirability bias because people know that at some point they will be asked to fill in the focus group. This can increase the bias of the "Big Brother" effect (Wilkerson et al., 2002). Therefore questions about differences between focus groups need to be interpreted with caution. The picture of me as a researcher will have probably little effect on the social desirability bias. As Tourangeau et al. (2001) have shown that there is little found support for social desirability bias differences when people see a female, male researcher or no researcher. It was only significant when there were questions about the opinion about differences between male and female. They found little support that people are influenced by social interfaces outside the laboratory setting (Tourangeau et al., 2001).

The anonymity of the interviews is more difficult because people need to answer face-to-face to your questions. Therefore it is of much importance people know that the information will be treated totally anonymous. Therefore the start of the interviews was pronounced publicly at a practice meeting (the total Oracle Consulting Group was invited) that the interviews will be held random and will be totally anonymous. The people that were asked to join the interviews were called and e-mailed with the same statement that it will be totally anonymous. At the start of the interview it was also repeated telling them that the interview will not be made public, even not in the report. That it was never told who cooperated with the interview and that the conclusions will be numbered anonymous making no connections which can reveal the interviewees. The total interview was worked out on paper, sending it to the interviewees for approval with a second statement that the interviews were anonymous. The e-mails can be found in Annex E. Even with the feeling of anonymity there is still a chance of social desirability bias.

In both methods there is a possibility of some social desirability bias. With analyzing the results caution is taken and when social desirability is suspected this is augmented and explained what the possible bias is. There are some examples that in the first instance a social desirable answer is given but when the trust builds up within the interview, the non bias answer is given. These double statements are also pointed out within the analyzes; given a total overview of how the results are found.

The questionnaire and the interviews will give an answer to the sub-question: what are the barriers and enablers for creating capabilities for creative innovative value? The different sub-questions will lead to the main question.

Main-question: What can Accenture do to improve the innovative value creation capabilities of the employees?

This will be answered with the outcome of the three sub-questions. The answers of the three sub questions will be combined in the Conclusions and Recommendations in which the main results, conclusions, recommendations and discussions are shown(Chapter 8). The next figure will show total methodology of this research.

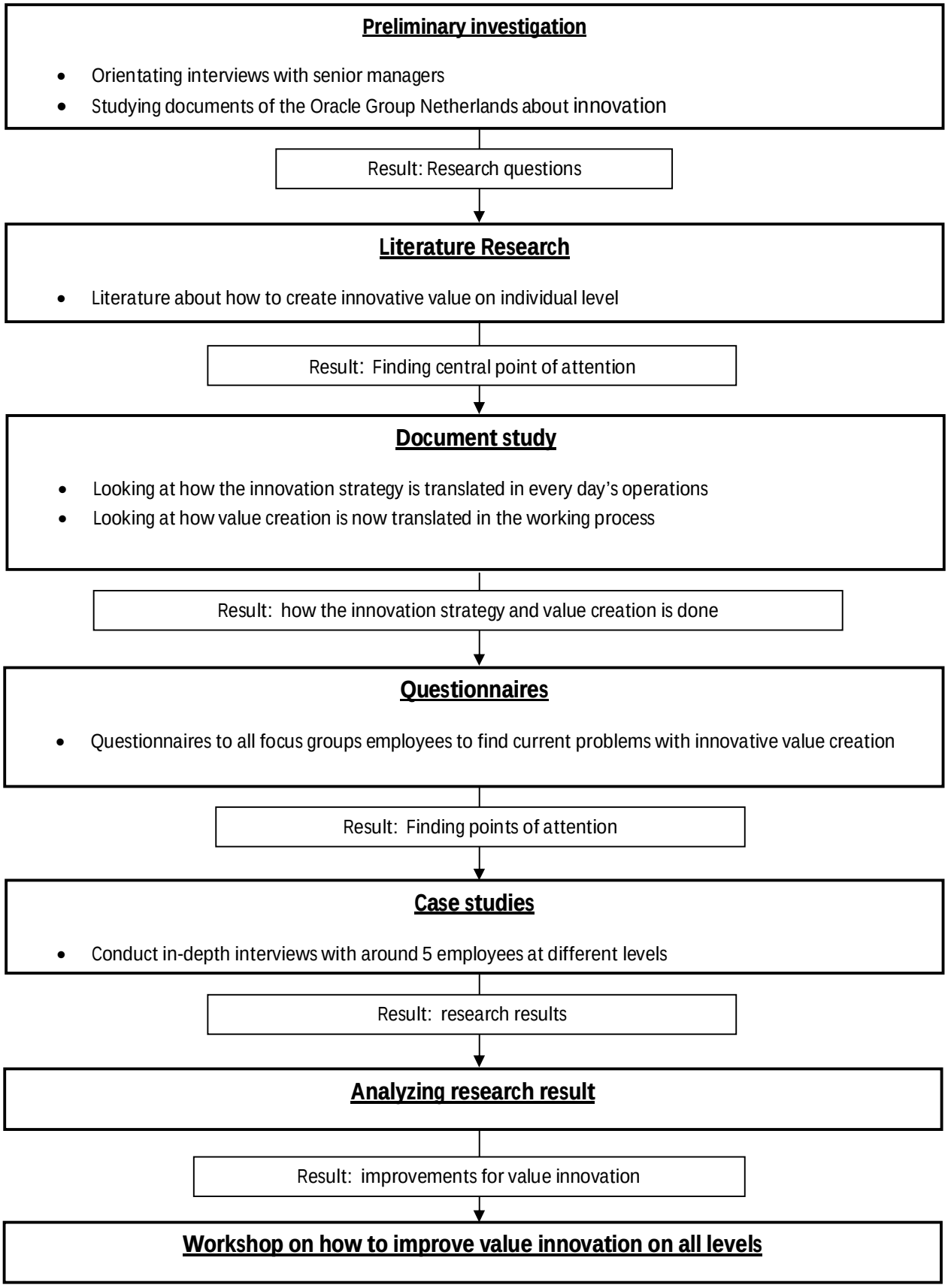

Figure 12: Research approach

3.1.2 Data analysis

In this chapter the method of analysis that is used to analyze the data is presented. First the document study is elaborated, secondly the quantitative data and finally the qualitative data.

Document study

Dealing with different documents it is important to answer different questions to be able to really analyze the documents. The questions are:

- Who composed the documents? Why is the document written?
- Is there a bias in the documents and how might you go about checking or correct them? For example is there a time laps between the writing and the documentation? And with what kind of purpose is the document written?
- What kind of key categories and concepts are used by the writer of the document to organize the information presented?
- What sorts of theoretical issues and debates and issues do these documents cast light on? (Babbie, 2004)

If we look at the documents used for this research the documents are composed by employees of Accenture. Some documents are written by managers or higher level, and some are written by analysts and consultants. Every employee can post information on the knowledge exchanges which is used to search for relevant documents. The documents are written for four purposes. The first one is that people would like to share the information that they have gain, to help other employees of Accenture to solve problems quicker in the future. The second purpose is for guidance; higher levels are showing in what direction they want to lead the organization. The third purpose is for work together to develop new services and improve the organization. The final purpose is to promote and sell services of Accenture. Most documents are not documents but PowerPoint presentations or websites where the information is sorted by the head points. The documents like to shade light on the why Accenture likes to develop new value to the organization or service.

Quantitative data analysis

The analysis of the quantitative data is deductive. To examine the collected data several statistics analyzes were performed.

Descriptive analysis: to demonstrate the demographic characteristics of the respondent

Cronbach's alpha: To show how well a single one-dimensional latent construct is measured. In statistics a Cronbach's alpha of 0,60 is acceptable with a low N (62).

Framework	Alpha	N of items
Expertise	0,70	13
Expertise – Challenging job	0,35	3
Expertise – Learning	0,54	3
Expertise – Organizational knowledge	0,67	4
Creative skills	0,70	14
Creative skills – personal Characteristics	0,73	31
Creative skills – Analytics	x	1
Creative skills – Synthetic	0.36	5
Creative skills – Practical	x	1
Creative skills – Thinking style	x	1 & 1 non Likert scale
Motivation	0,71	14
Motivation – Intrinsic	0,68	4
Motivation – Extrinsic	0,71	8
Environment	0,89	21
Environment - Culture	0,86	5
Environment – Perceived risk	0,31	3
Environment – Network	0,59	2
Environment – Dissatisfaction	X	Non Likert scale
Environment – Group	0,51	3
Environment – Leadership	0,84	7
Value Innovation	0,70	8
Value Innovation – looking at competition	x	1

Table 1: Cronbach's alpha

Al the different elements are analyzed separately and the mean and SD is compared to the different levels and focus groups. Because of the low N no further analyzes can be made. To be able to understand and argument the founded relations in-depth interviews were conducted.

Quantitative data analyzes

Analyzing qualitative data is done in an inductive way. It is important to understand the individual cases and be able to compare them. This was done by first transcribing the individual interviews in detail; writing down every single word that is spoken. This was send to the individuals who were interviewed asking them to confirm the written interview is correct. A variable analyze was done by making a schema to analyze the enables and barriers for every variable of the framework. The focus is on interrelations among the variables "level" and "focus group". For example it is tested if an analyst would feel less comfortable expressing his/her idea in a group than manager or senior manager.

The results of the data are shown in the next three chapters.

Research

Final results

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Annex B: Databases

The databases that have been used in this research are:

- ISI Web of Knowledge (selection on Social Sciences Citation Index (SSCI))
- Scopus (selection on Social Sciences)
- Jstor
- GoogleScholar

Search words

- Consulting organizations
- Service organizations
- Value innovation
- Business development
- Idea management
- Creativity management
- Creating innovation
- Developing skills
- Innovation skills
- Creativity skills

Annex C: Gough Personality Scale

Please indicate which of the following adjectives best describe yourself. Check all that apply.

_____ Capable	_____ Honest
_____ Artificial	_____ Intelligent
_____ Clever	_____ Well-mannered
_____ Cautious	_____ Wide interests
_____ Confident	_____ Inventive
_____ Egotistical	_____ Original
_____ Commonplace	_____ Narrow interests
_____ Humorous	_____ Reflective
_____ Conservative	_____ Sincere
_____ Individualistic	_____ Resourceful
_____ Conventional	_____ Self-confident
_____ Informal	_____ Sexy
_____ Dissatisfied	_____ Submissive
_____ Insightful	_____ Snobbish
_____ Suspicious	_____ Unconventional

Scoring Key:

Specific items reflect higher creativity. A scoring key is provided to determine with characteristics are indicative of creativity. For each one the test taker selects pone point it give. Higher total points indicate higher creativity.

___+___ Capable

___-___ Artificial

___+___ Clever

___-___ Cautious

___+___ Confident

___+___ Egotistical

___-___ Commonplace

___+___ Humorous

___-___ Conservative

___+___ Individualistic

___-___ Conventional

___+___ Informal

___-___ Dissatisfied

___+___ Insightful

___-___ Honest

___+___ Intelligent

___-___ Well-mannered

___+___ Wide interests

___+___ Inventive

___+___ Original

___-___ Narrow interests

___+___ Reflective

___-___ Sincere

___+___ Resourceful

___+___ Self-confident

___+___ Sexy

___-___ Submissive

___+___ Snobbish

___-___ Suspicious ___+___ Unconventional

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Annex D: Questionnaire

Expertise

Question	Totally agree	Partially agree	Neutral	Partially disagree	Totally disagree
1. A challenging job contributes to developing my knowledge					
2. My network contributes to personal learning					
3. Learning contributes to developing my expertise					
4. My job*[1] is very challenging					
5. The organizational knowledge*[2] does **not** contribute to my expertise					
6. Knowing too much about one thing will not contribute to my expertise needed in my job					
7. There are enough opportunities in my job to learn					
8. I can learn from the organizational knowledge					
9. My expertise has a fit with the job that I am doing					
10. My expertise allows me to generate ideas about adding value to the service that is provided					
Question	**Never**	**Rarely**	**Sometimes**	**Often**	**Very Often**
11. I have not used the organizational knowledge in my job					
12. I have contributed to the organizational knowledge					
13. My expertise contributes to being creative					
14. I am proud of my expertise					

*[1] My job = this are the different tasks you need to execute to deliver the work you are asked to do

*[2] Organizational knowledge = knowledge that is embedded in the organization. This is not only knowledge that is embedded in documents or repositories but also in organizational routines, processes practices and norms (Tsoukas, 2001).

Skills

This part is about the skills you have developed to be able to perform in different parts of your job.

Question	Totally agree	Partially agree	Neutral	Partially disagree	Totally disagree
1. My personality contributes to my creativity					
2. Other employees see fewer problems in their job than I do					
3. Having a problem I try to redefine the problem					
4. When I solve problems, I look outside my job description					
5. I connect different unrelated information to solve problems					
6. Looking differently at problems contributes to my creative skills					
7. I make new connections between existing knowledge					
8. I am good at judging the potential of ideas					
9. When I have confidence in my idea, I try to convince others of it					
10. My skills contribute my ability to add value to the service that is provided					
11. Solving problems by following my intuition contributes to my creativity					
12. I am good at generating new ideas					
13. I feel comfortable trying out new ideas					
14. I have the right skills to be creative					

15. When problems occur I (put in order of what you do the most)

☐ I solve problems by evaluating all the knowledge and options

☐ I solve problems by following the established knowledge

☐ I solve problems by thinking of new ways of doing things

☐ I solve problems by following my intuition

☐ I solve problems by ……

16. Please indicate which of the following adjectives best describe you by putting (+) when it is applicable and (–) when not applicable.

_____ Capable

_____ Artificial

_____ Clever

_____ Cautious

_____ Confident

_____ Egotistical

_____ Commonplace

_____ Humorous

_____ Conservative

_____ Individualistic

_____ Conventional

_____ Informal

_____ Dissatisfied

_____ Insightful

_____ Suspicious

_____ Independent judgment

_____ Risk taking

_____ Honest

_____ Intelligent

_____ Well-mannered

_____ Wide interests

_____ Inventive

_____ Original

_____ Narrow interests

_____ Reflective

_____ Sincere

_____ Resourceful

_____ Self-confident

_____ Impulsive

_____ Submissive

_____ Snobbish

_____ Unconventional

_____ Deviance (exception of others)

Motivation

Question	Totally agree	Partially agree	Neutral	Partially disagree	Totally disagree
1. My personal/intrinsic motivation is high to do my work					
2. When I have a new idea I receive feedback from my supervisor					
3. My job is very complex					
4. My complex job contributes to my motivation					
5. When working on new things I receive motivation from my environment					
6. I get support on the right time when working on something new					
7. My job contributes to my personal/intrinsic motivation					
8. When I have a good idea I get commitment from my supervisor					
9. It is important to get motivation form others about my ideas					
10. When I have an idea for improvement it is possible to work on it					
11. If I make suggestions I feel that I am closely controlled					
12. Getting the right external feedback gets me motivated to be more creative					
13. When I am highly motivated I will be creative					
14. When I have high personal/internal motivation I do not get effected by external factors					
15. When I have a high motivation I will try to add more value to the service that is provided					

Work environment

Question	Totally agree	Partially agree	Neutral	Partially disagree	Totally disagree
1. People are recognized for their creative work at Accenture					
2. My work environment*[3] encourage me to develop my skills					
3. The culture of Accenture supports being creative					
4. I have a lot of autonomy in my job					

5. I feel comfortable suggesting new things					
6. There is are ways to communicate new ideas					
7. I have a lot of freedom in my job					
8. Working on an innovative idea has a high risk					
9. When I am working on a new idea I can manage the risk					
10. My network stimulates me to be creative					
11. My network gives me access to the right information when seeking for new things					
12. The group where I work with do **not** encourage me to be creative					
13. The groups which I work in have a lot of diversity					
14. When I have a different opinion than the group I do **not** tell it					
15. I think it is unwise to be creative					
16. Risk taking is stimulated by Accenture					
17. My supervisor*[4] encourages me to try new things					
18. My supervisor respects me					
19. My supervisor praises good work					
20. My supervisor always seems to be around checking on my work					
21. My supervisor leaves it up to me how to do my job					
22. I have a open relation with my supervisor					
23. If I disagree with my supervisor I talk about it					
24. The work environment stimulates me to be creative					
25. The work environment encouraged to develop my expertise					
26. The work environment at Accenture					

motivates me					
27. The work environment has the biggest influences on my motivation					

*[3] Work environment = this are the different aspects of the Accenture in general, including supervisor, culture of the organization, colleges, job description, ect.

*[4] Supervisor = this is the person you who is currently supervising you. This can be at the project but can also be your supervisor from you focus group or career-counselor.

28. When I am dissatisfied in my job I (more options are possible):

☐ I try to talk about it
☐ I try to improve it
☐ I stay loyal to the organization
☐ I start working less active
☐ I stop at the project
☐ Other, namely……

Adding value

Question	Totally agree	Partially agree	Neutral	Partially disagree	Totally disagree
1. It is important to continuously improve Accenture					
2. It is important to continuously add new value to the service that is provided					
3. I try to actively participate in improving the service that is provided					
4. I do something with ideas that I have for Accenture					
5. When I am at the customer I try to improve the service that we provide					
6. I have ideas on how to add new value to the service that is provided					
7. I have the opportunity to use the idea that I have to add new value					
8. I have ideas on how to improve the technology that I am working with					

9. What can be done to improve the amount of suggestions that you proved:

……

……

……

Personal information

In the following section some questions will be asked to see how your focus group, work level and work experience is of influence on your experience. The questionnaire will be anonymous and the different questions will not be combined. But if you still feel uncomfortable I kindly ask you to fill in your level and choice for yourself which other questions will be added.

1. I am a:

☐ Male

☐ Female

2. I work at the focus group:

☐ AIMS

☐ CRM

☐ F+PM

☐ HCM

☐ SCM

3. My level is:

☐ Analyst

☐ Consultant

☐ Manager

☐ Senior Manager

☐ Senior Executive

4. I work for ..... years at Accenture

5. My prior work experience is ..... years

6. Other comments:

.....

.....

.....

.....

.....

.....

Testing

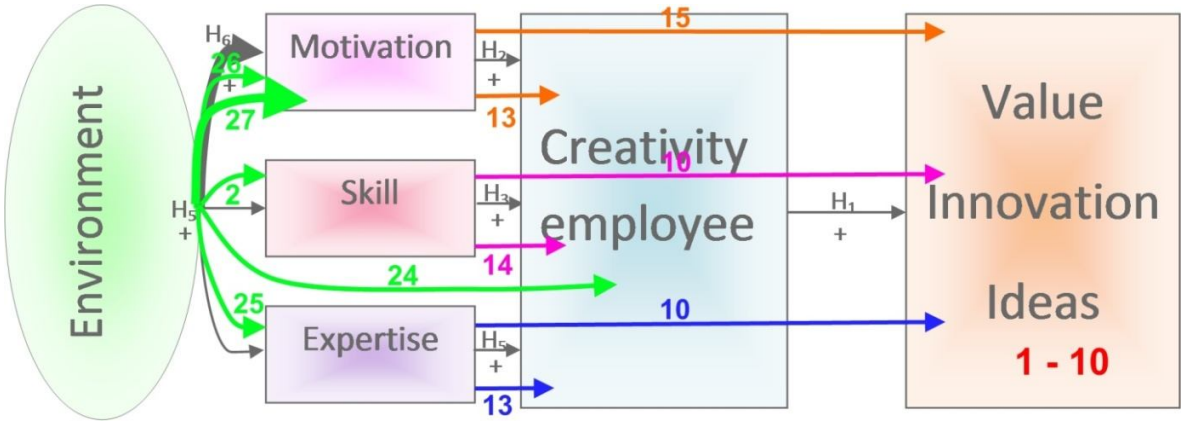

Figure 13: questionnaire questions testing main hypotheses

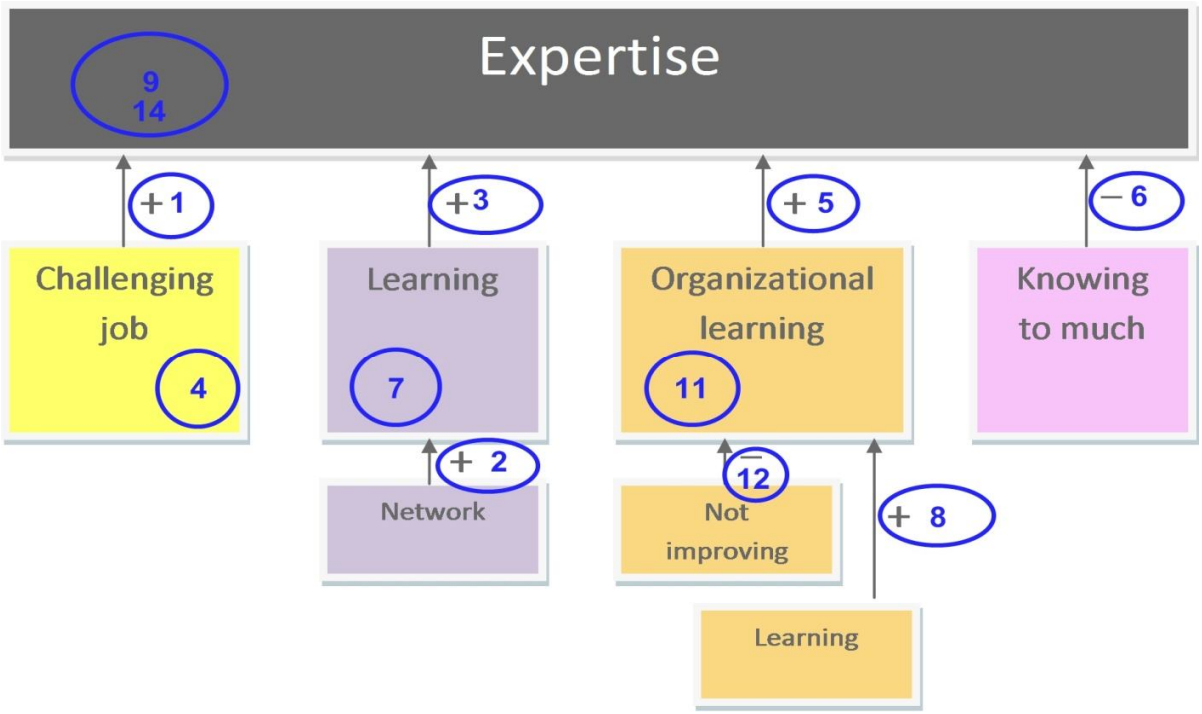

Figure 14: questionnaire questions testing expertise

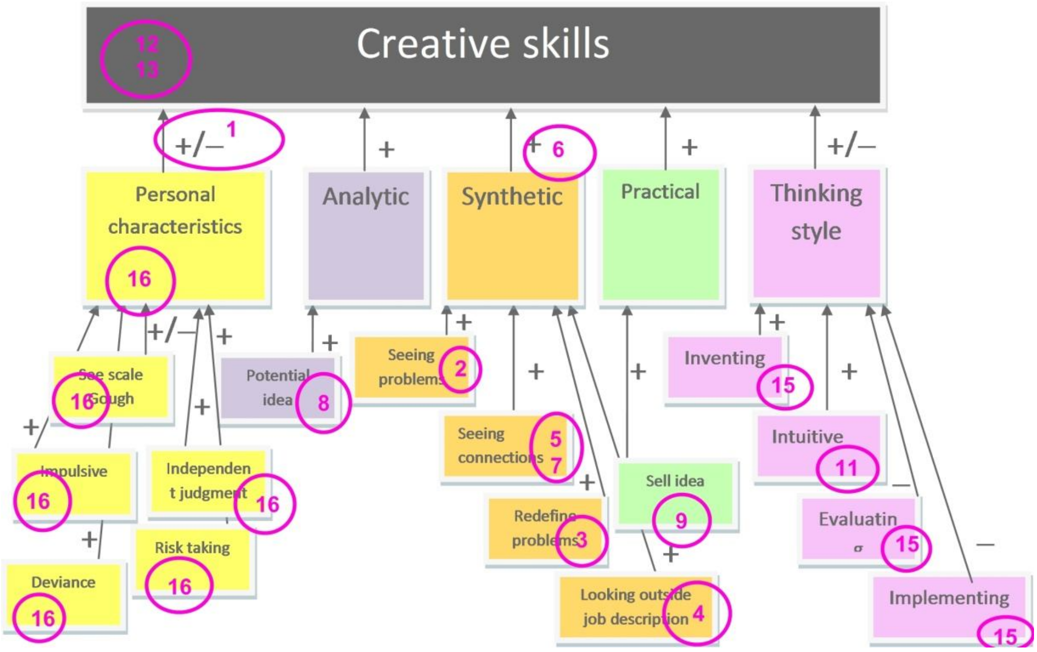

Figure 15: questionnaire questions testing creative skills

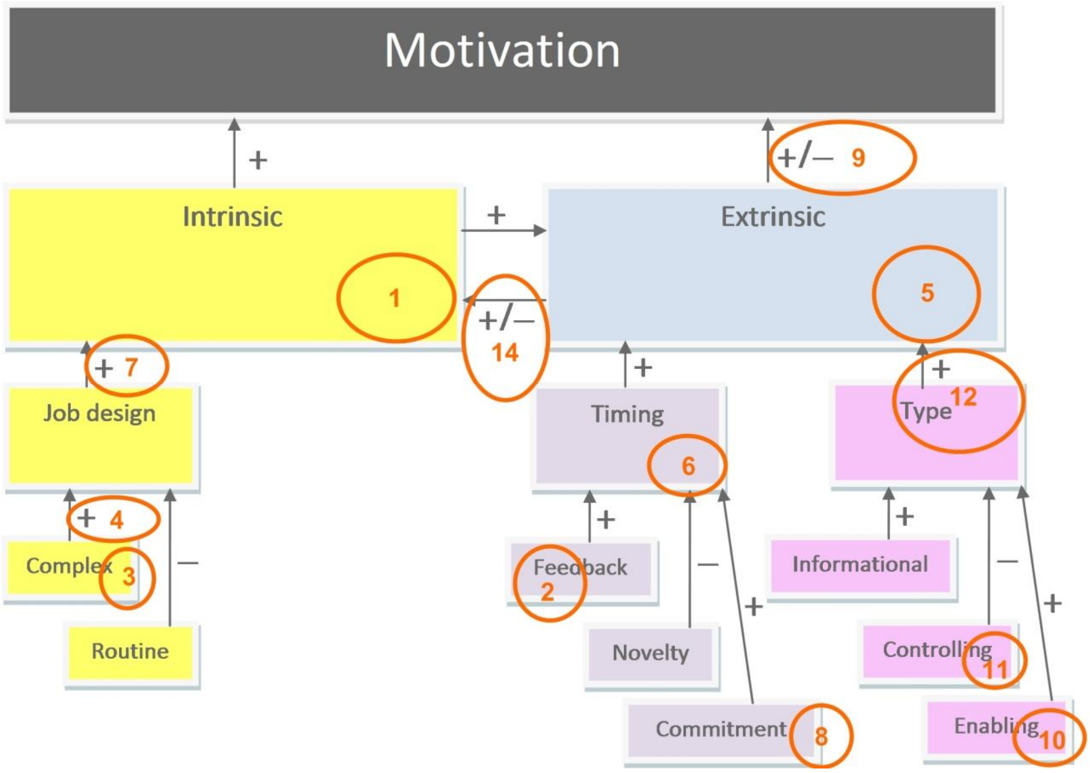

Figure 16: questionnaire questions testing motivation

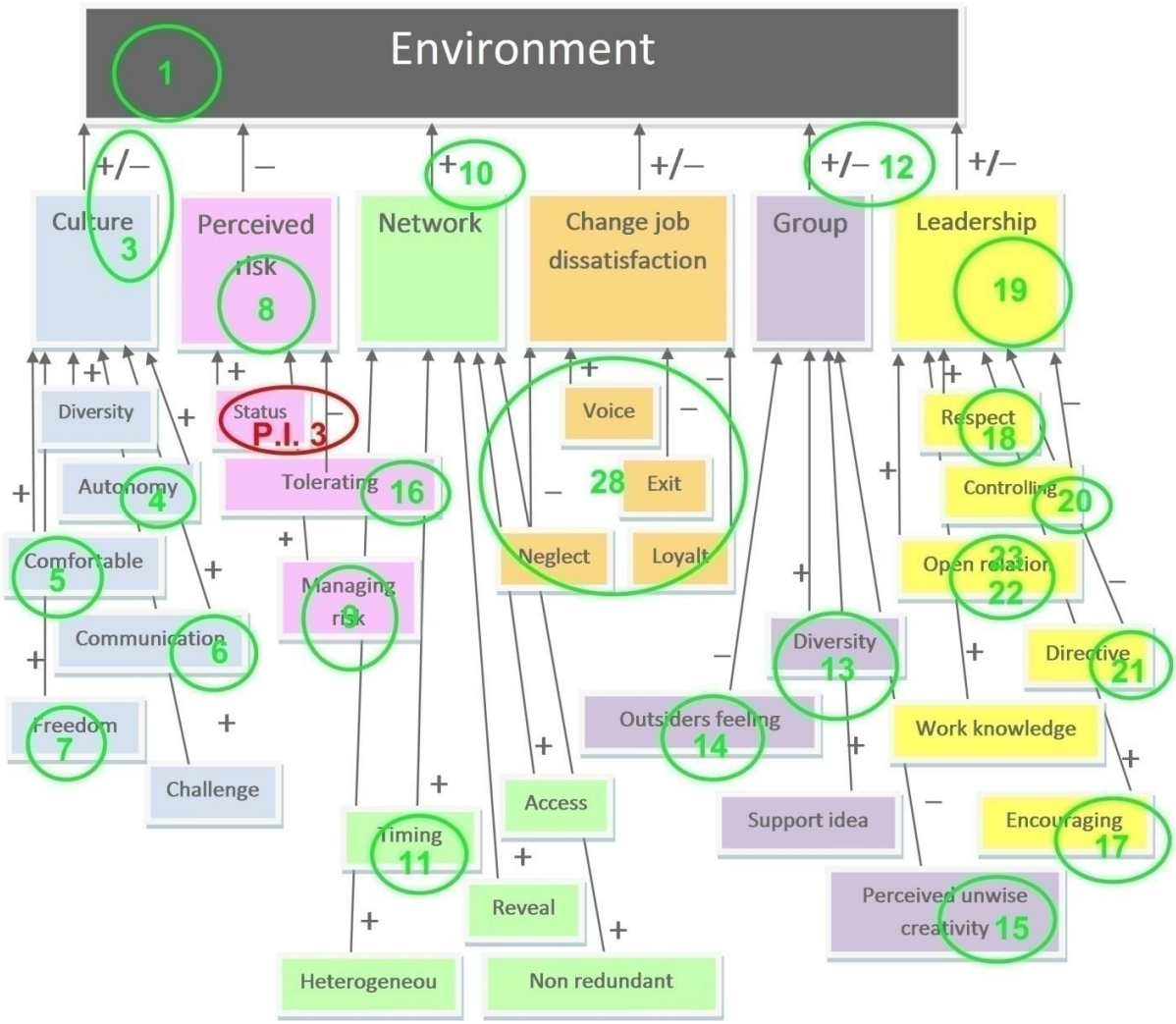

Figure 17: questionnaire questions testing environment