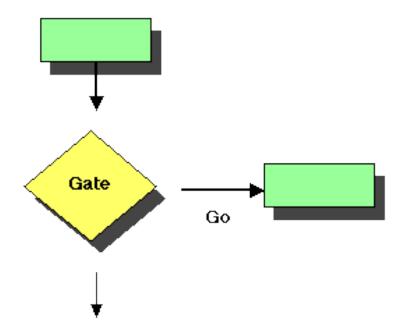
## FROM STAGE GATE TO CORPORATE CULTURE





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**SYNOPSIS:** With basis in Life cycle theory and a functional ontology is streamlining of the initial screening process in corporate entrepreneurship done. By creating a holistic process model with focus of the epistemology, a learning process. Making this operational by creating a stage gate model for management and regulation, and a toolbox for guidiance. The method is approximately inductive, with use of triangulation to validate data. The process model, stage-gate model and the toolbox is found useful, in order to create effective corporate culture.

## **APPREVIATION LIST**

Center for Kultur- og Oplevelsesøkonomi (CKO)

iKRAFT innovationspuljen (iKRAFT)

## **INTRODUCTION**

This Master Thesis project is written for governments and organisations which are the primary stakeholders. This fit with the Center for Industrial Production which my master program is a part of, thus my project is not authorised to be an official output of the Center.

Corporate entrepreneurship is both regarding the government and organisations to prefer. For the government as entrepreneurs are competitive ineffective and is a cause of resource waste for lots of institutions entrepreneurs get in contact with, on the contrary can the state not live without innovations, if so will the state stagnate and in a near future lose market share. For organisations is it obvious that they do not want to lose innovations and innovative resources and innovative capabilities.

As the project is a short master thesis a theoretical problem perspective is wished for. This project have chosen organisational life cycle theory, this gives the following initiating problem statement:

# What does organisational life cycle theory state and can an interesting gap be found for further investigation?

Organisational life cycle theory is about phases any organisation needs to go through in order to mature, the theory of Greiner (Greiner, 1972) can be observed way past; take for example the Romans. By overthrowing the monarchy in 508 BC the Roman Republic were born; a flat hierarchy were all (noble) men were equal. As the empire grow, corruption and autonomy by the provinces threatened the stability of the Republic, a need for leadership and clear direction occur and they "installed" an emperor, this were Julius Caesar who reformed the Republic to an Empire in 44 BC. As the empire continued to grow, it suddenly started to stagnate, civil war entered and one ruler after another got instituted and murdered, a need for additional internal systems occurred as the rulers could not handle all matters alone by themselves, this led to the delegation of control by Trajan in 98 AD. Once again the Roman Empire flourished and grows rapidly under the control of Trajan. Thus in 182 AD under the realm of Commodus the Empire got divided into two, a Western and Eastern Empire. The leadership could no longer handle its size; there were too much red tape. These two Empires grow separately and declined and died later on. Today we have the possibilities to be much more integrated than before, the development of IT and a globalised world has make all men closer and the collaboration stage can enter and bring all men back into a teamwork for the better of all.

The following report is made by a team of the writer, possessing the technical competences learned during this study as input, and from the sideline my counsellor Kim René Bohn, who possess knowledge of the market in which the suggested stage-gate model should fit. For this I want to thank Kim for his engagement in me and my project. As the idea screening process suggests later on in this report, this makes us ready to carry on with investigations of the project idea.

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# 1 OVERVIEW OF ORGANISATIONAL LIFE CYCLE THEORY AND NARROWING OF THE PROBLEM AREA

Greiner is working with a birth phase of "Creativity"; the goal of this phase is to become a viable entity driven by direction. In the birth phase certain rules are in force, but less significance are often put into these rules and the focus has been the professional organisation, and how such growths through institutionalisation (Greiner, 1972), (Miller & Friesen, 1984), (Mintzberg, Power and Organization Life Cycles, 1984), (Quinn & Cameron, 1983).

Though organisations are not institutionalised from the very beginning, a division between the institutionalised and those who will never be institutionalised are made. According to (Churchill & Lewis, 1983), (Churchill, 1997) this is the decision point where one can choose to disengage a stable company or one can "take-off" with growth. Mintzberg with his work on power also puts focus on this important step (Mintzberg, Power and Organization Life Cycles, 1984). A suitable description of the period before institutionalisation could be Mintzberg's "Autocracy".

What one should recall being the first phase in every life-cycle is a birth phase, a period where stability is still not met. This phase is about the development of the business idea and the process of applying this to life, if successfully, that is to innovate (Adizes, 1979), (Churchill & Lewis, 1983), (Churchill, 1997), (Kimberly, 1979), (Garnsey, 1998) It is not at this stage that the idea arises, but rather how the technology integration takes place. This is an iterative process where customer needs are important to implement the right technologies in the product, in order to serve needs and being able to commercialise ones product (Drejer, 2001).

But important decisions are made before the birth of a company, some authors do accept this, decisions about the strength of the idea given the backing of the idea in the environment. The interest is in how the idea is developing and how far one should be with the idea before starting ones own business (Kimberly, 1979), (Garnsey, 1998), (Adizes, 1979), (Kazanjian & Drazin, 1989), (Torbert, 1974-1975). This stage has to be considered as well, because without all stages, there is no holistic model, no real life cycle model, but only fragments of the life cycle stages (Mintzberg, Power and Organization Life Cycles, 1984).

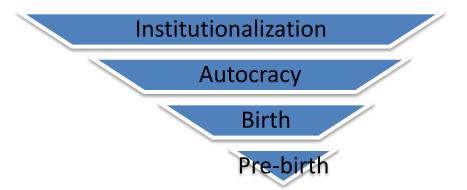


Figure 1: How I interpret the life-cycle into four prime phases. This report will look into the Pre-birth phase, with focus on creation of ideas

Figure 1, is an inverted pyramid built up of the four phases. This is done to show the size of the organisation at a given point, and that later periods builds on former periods, success is needed in all

the periods in order to grow large, these four points are together the whole life-cycle of an organisation.

Theory Ethicists, however, describes the organisational life cycle process right from the idea arrives and the support and resource security one have to build around this idea, but lacks that which makes life cycle going. Opposite, Torbert bases his theory of Erikson on human development (Torbert, 1974-1975). But one is already in a development before it decides to start a new one. There must be a break from something old. We do not start as entrepreneurs, while we are curious children. This is illustrated in Figure 2. Proverb: "The old has gone, something new has come." There is a revolution or a conviction behind. One might see this as Lewin's force field. Something that holds one back with the benefits one now have, and something that drives one to change.

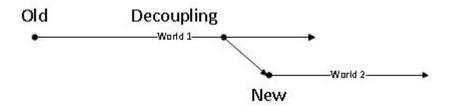


Figure 2: The decoupling from an old world/company to a new world/company.

One says following about creating learning or finding an idea:

"Using this visual metaphor of a combination lock with six tumblers, the potential number of learning permutations is more than 15 million and it can be further expanded to an almost infinite number." (Beard & Wilson, 2006)

This means about how we learn and get an idea, an impulse, there are countless answers for. What we in this assignment will look at is from the impulse to want to create a business, and the screening of this impuls' potential.

In this way, the beginning of something new becomes the end of something old. This phase should be remembered in corporations in order to keep their innovativeness/entrepreneurship. Because it is when entrepreneurship vanishes in corporations that corporations stagnate and ultimately decline and die (Adizes, 1979), (Churchill, 1997), (Garnsey, 1998). One like to keep entrepreneurship inside, because independent entrepreneurs tend to use others resources and thereby reduce the overall national effectiveness (Bohn, 2011).

Robert Cooper marks that the initial screening of ideas is the weakest activity in the innovation process in corporations. Furthermore he also states that only 11.6 percent of such screenings are made with help of checklists, and further 2 percent are made by checklists of external evaluators (Cooper & Kleinschmidt, 1986). The problem of this phase is that 100 percent in the investigations of (Cooper & Kleinschmidt, 1986) proceeds the screening stage in their stage gate model, while it is only 1.9 percent of the ideas who go through all his 13 stages of innovation, referring to a weak screening process! This causes later on that resources are wasted in projects that never should be started. This screening process may on the other hand not hinder creativity. Therefore a process that reinforces innovation and at the same time creates a proper gate is wished for.

## **2 PROBLEM STATEMENT**

Due to Robert Cooper's frightening figures concerning the screening process in corporate entrepreneurship, there is a need to solve the problem statement of the report as follows:

How can one streamline the initial screening process in corporate entrepreneurship?

To streamline the initial screening process following will be done:

- 1. Provide a general process model (to-be) to support the understanding in a holistic perspective.
- 2. Provide a key tool targeted management and regulation of the specific screening process.
- 3. Create a toolbox to help succeed in the process stages.

The result will be a manageable process made operational through the building of a stage-gate model and one can be guided by using the suggested toolbox. As the assignment hypothesises are:

We believe that a checklist strengthens the entrepreneur's preparation and thereby its power of persuasion, which reinforces his commitment to the idea, which thereby strengthens the innovation culture within the company.

And about decoupling:

You must break out; otherwise you cannot start something new.

#### 2.1 ONTOLOGY: WHAT IS REALITY?

The reason for stating the ontology viewpoint is to show the way in which the research problem is perceived, the specifications of the research problem, the unit of analysis and which knowledge there is useful to create, and how this should be done (Lassen, 2007).

It is clear in the life cycle theory that reality is seen as a process. Thus a given input generates a given output, is a human more than a machine, he may change in the process, and therefore is the subject seen as an organism. These organisms are influenced in their lives, which is a long process. We humans are therefore a process in a process, and that is why we must look at human life as a history book to understand its context. This fulfils the characteristics of functionalism, as can be seen in Table 1; this is the guiding ontological viewpoint of the report.

	Subjective <> Objective						
Examples of philosophical directions	Phenome- nology	Hermeneutics	Symbolic Interactionism	System theory	Functionalism	Positivism	
Core ontological Assumptions	Reality as a projection of human imagination	Reality as a social construction	Reality as a realm of discourse	Reality as a contextual field of information	Reality as a concrete process	Reality as a concrete structure	
Assumptions about human nature	Man as pure spirit, consciousness, being	Man as a social constructor, the symbol creator	Man as an actor, the symbol user	Man as an information processer	Man as an adapter	Man as a responder	
Basic epistemolo- gical stance	To obtain phenomenolog ical insight, revelation	To understand how social reality is created	To understand patterns of collective action	To map and explain context	To explain systems, process	To explain and predict a positivist science	
Some favoured metaphors	Transcenden- tal	Language game, "text", accomplish- ment	Culture, artefacts	Cybernetics	Organism	Machine	
Research methods	Exploration of pure subjective experience	Interpretation of "text"	Interpretation of interaction mediated by the use of symbols	Contextual analysis	Historical analysis	Lab experiments, surveys	

Table 1: Different ontological paradigms (Lassen, 2007)

## 2.2 EPISTEMOLOGY: WHAT IS KNOWLEDGE AND MEANING?

According to the functional paradigm is the short answer to knowledge and meaning: "To explain systems and processes". Therefore, the purpose is to derive a stage-gate model to improve the overall screening process in organisations. This will be done by first explaining and validating the screening process and then to derive a system, a tool for managing and regulating the process.

To satisfy potential users the metrics for a stage-gate model should be presented in an operational way. These metrics should enhance the understanding of when the stages within the process changes, potential pitfalls and what tools one can use as guidance.

The basic knowledge is the process to learn, as the basis of the report is organisational life cycle theory where the focus is: "learning to mature". Learning is the data to be collected. To see this

learning development, we need to observe peoples actions. Therefore, an immature case is good. Here are a few things taken for granted and reasons for actions are easier to observe as they furthermore encounter a learning process. This learning is what extends a corporate culture when combining it to principles. These principles (actions) will be collected and a supporting tool in the screening process for ideas will be formed.

#### 2.3 METHODOLOGY: WHICH METHODS SHOULD BE USED?

Overall one can be deductive or inductive or combinations of those two, where the end of an inductive process can start a deductive process and vice versa. To be deductive means, to acquaint oneself with a field of theory in order to solve practical issues. To be inductive means, that one through observation of practice form an overview in order to create theory (Varming, Hansen, & Thomsen, 2003), (Lassen, 2007).

Virtually all writers in the life cycle theory of organisations make use of either case studies or longitudinal studies and argue that this approach is the only correct one (Mintzberg, Power and Organization Life Cycles, 1984), (Torbert, 1974-1975), (Miller & Friesen, 1984), (Churchill & Lewis, 1983). Further does Maaløe describe that case-studies gives insight into: "Hvilke faktorer der henholdsvis kan fremme eller hæmme arbejdernes evne og vilje til at tage vare på deres egen, henholdsvis firmaets situation. Vel gennemførte case-studier vil f.eks. kunne give os en intim forståelse for, hvordan grupper arbejder, den modstand og det løft de kan få fra andre medarbejdere. Det giver en indsigt i dybden." (Maaløe, 1996) A case study provides a great depth of detail; conversely this implies the problem of evaluating the responsible factors. Therefore there is a necessity for multiple data sources.

Lassen quotes Yin and says concludes six tool types when working with case studies (Lassen, 2007): Participant/Direct observation, archival records, documentations, interviews and physical artefacts. The functionalist ontology accepts both the qualitative and quantitative methods provided. By this a triangulation can be achieved so that the methods can reinforce each other: "Jo flere vinkler, desto større gyldighed – eller som det også hedder, desto større validitet." (Maaløe, 1996)

### 2.4 METHOD

This section account for the approach of the assignment with ground of basis in the ontology; our reality, the epistemology; what knowledge and meaning is, and further our methodology; the specific methods that can be used. Thus most importantly is the purpose of this section to clarify how validity and reliability of the problem statement is produced.

The method of the assignment is approximately inductive. Approximately as the assignment did not firstly observe practice and create theory upon those observations. Instead does the assignment experience through a theoretical investigation. Thus do this experience further build upon earlier observations during the writer's internship period. This strengthens the validity as practice is evaluated via more angles (Maaløe, 1996). Further is theories challenged and brought into a new coherence. Thereupon creating new theory, thus the theoretical observations of practice are second-hand. If the approach were pure inductive should the assignment strictly be based on observations of practice, this approach is thus found more time consuming. Therefore does the assignment not look upon the theory section as truth, but will through the assignment try to illustrate its truth.

This choice is chosen as the assignment is a short Master Thesis. For those is a general theoretical derived framework wished for. To make one such manageable does the assignment further focus on operationsalisation of the framework by constructing a management and regulation tool and the development of a toolbox to guide ones process within the framework.

#### THEORETICAL BASIS

The problem statement is solved through three sub questions which are derived of each other in order to heighten the operationality of the assignment result. Here is the first sub question derived by the organisational life cycle theory, which is the cornerstone of this report. Main concepts are drawn out and discussed and a comparison with organisational life cycle theory will occur to strengthen the red thread. The theoretical basis and the observations of practice create a new picture of reality, a learning process, referring to the ontology and epistemology, where knowledge and meaning is described as a learning process.

This learning process can be supported by systems. This report develops a system, the management and regulation tool. This tool is derived through the concepts of the overall framework, the screening process. Thus with point of departure in Operations Management, as the point of ideas is to become operations in time, as is also true in regards to organisational life cycle theory.

The last sub question of the problem statement asks for a toolbox, suggested tools emerge by observing actions and the learning that occur in actions. To achieve this insight is a longitudinal case used.

## DATA PROCESSING AND REPORT OBJECTIVE

Grounded in theory is a formal structured screening process created; this process is illustrated in Table 4 at page 22 and a management and regulation tool in section 3.2.7. The rest of the report has the objective to:

- 1. Prove the structure of the theoretical derived process model, plus the overall concepts which the process model brings on.
- 2. Prove the usability of the data matrix as a management and regulation tool for the just mentioned process model.
- 3. Draw scenarios to make an operational toolbox.
  - a. In doing so will tool types first be discussed.

In the discussion will data triangulation be used by storytelling, as the ontological framework focus on the coherence as functions, derived of variables.

## DATA BASIS - VALIDITY AND RELIABILITY

The data basis will be formed of both qualitative and quantitative data; these data will be used for triangulation. The data types in the analysis are listed below:

- Qualitative: Participant/Direct observation The observations has been completed before the project statement arrived. This eliminates the bias of data manipulation by the participant observer. On the contrary parts of the story can be forgotten and disregarded and the depth in embedded cases are tough (Lassen, 2007).
- Quantitative: Archival records and documentations As a qualitative case can have troubles in getting all necessary information can archival records be used for support and validation of the qualitative data, whereto a triangulation in the analysis occur. Archival records are collected within Playscapes, documentation are collected regarding foundations, there application process and application demands (Lassen, 2007).

The focus of the methods will be to:

- 1. Investigate the screening process in Playscapes and within foundations.
- 2. Investigate the decoupling point in Playscapes and within foundations.

This will strengthen the result of the report, as the content of the screening process are checked twice.

The case Playscapes is about an entrepreneur, small and foreseeable. However there will be areas, in which the case company are not open. Holistic and embedded data can be drawn via the case. The time of measurement of the organisational life cycle is found irrelevant, as all organisations at any time need to push entrepreneur processes through to avoid stagnation (Adizes, 1979), (Churchill, 1997), (Garnsey, 1998). Likewise can decoupling be done at any time in an organisational life cycle, decoupling is furthermore seen in the case example of Playscapes.

To demonstrate the screening process is correct, will a longitudinal case be used, where the stages of the screening process occur multiple times. Thereby is the reliability of the data secured. Furthermore is quantitative data included from gate keepers, in this report, foundations, where their application process is compared with the screening process. It is assumed that the application process of foundations is greatly responding to a screening process in a corporation.

All the data will be used to validate the management and regulation tool concerning each stage in the screening process. Further will the content of the fond applications be investigated; this is the decoupling point in the idea screening process, whereto the management and regulation tool should guide one through. If coherence is located, will the validity of the management and regulation tool be found true, as the last gate shall contain all the previous gates content. Since the assignment's used gate theory indicates that the last gate contains the requirements from all the previous gates, see section 3.2.6.

The approach regarding the discussion of tool types will, as for the screening process and the management and regulation tool, take point of departure in both the fund applications and the case.

## 3 THEORY

The forthcoming theory section is intended to explore the theoretical backgrounds of the three subquestions in our problem formulation. Namely to:

- 1. Plot a general process model (to-be) to support the understanding in a holistic perspective.
- 2. Provide a key tool targeted management and regulation of the specific screening process.
- 3. Create a toolkit to help succeed in the process stages. (Here the theoretical focus will be to analyse possible scenario functions. The discussion will include actual tools.)

The approach in the theory section is to expand the already known concepts towards the desired goal, with a starting point in life cycle theory.

Therefore, the forthcoming theory section deduces first how a screening process is by motivation of the assignment hypothesis and goals of the task, strengthening the innovation culture in an enterprise using checklists. As knowledge and meaning in the functionalist ontology is learning, will the assignment take starting point in learning. This process will be built on concepts which will be studied and validated in the report.

These concepts can be seen as challenges that through the creation of a tool, with the aim to manage and regulate the process, will be put in the system so that effective culture can be strengthened. This is done using procedures that are the essence of culture and an organisation's effectiveness (Galbraith, 2002). Here, starting out in operations management, as operations management is the context in which an idea is to be deployed.

Subsequently there will be a section dealing with the remaining concepts, where the key tool for management and regulation do not harmonise.

Finally, the main principles of cases will be built up theoretically, to see how the management and regulation tool and an extensive toolbox must cater. This achieves a fit between the resource oriented and market oriented perspectives.

#### 3.1 THE SCREENING PROCESS

The purpose of this theory section is to create a process model of the idea screening process and to reach the hypothesis:

"We believe that a checklist strengthens the entrepreneur's preparation and thereby its power of persuasion, which reinforces his commitment to the idea, which thereby strengthens the innovation culture within the company."

This is done through expanding the conceptual frames that the idea screening process stands in. These are explained in the sections below. Further the objective is to create a stage-gate model out of the process model and describe the concepts that belong to one.

In chapter 1 we reached the hypothesis; "you must break out; otherwise you cannot start something new." This phenomenon refers to the need for change, why one want to change. Here Lewin, with his force field analysis, has a good suggestion. Life cycle theory does suggesting how this decoupling happens. Mintzberg has his Political Arena (Mintzberg, Power and Organization Life Cycles, 1984); Adizes has his Divorce (Adizes, 1979).

One more thing that is vital, before one have something to break out with, is one must learn it. Either its better ways to manage a business or the way people work, or the functionality and quality of what they do or whether one just gets a whole new idea. Therefore, this report sees the pre-birth stage as a learning phase. One have to mature, which is the essence of life cycle thinking and the way this report see knowledge. Knowledge is a learning process.

Finally, it is good to know what it is the chosen focus engages on, how the pre-birth stage looks so far and what it requires taking the step to become a new business. In innovation, the pre-birth phase can be seen as the phase between the idea and commercialisation of the idea, see Appendix 1.

### 3.1.1 LEARNING

Kolb does see the learning phase as a process (Kolb, 1984). And he has created a theory in which ideas develop from learning experiences through four learning modes. Figure 3 shows on the vertical axis development in learning, in other words, maturity. It is this development axis as Torbert has his thoughts of through Erikson, as Kolb also applies to. The circle at the bottom refers to the different ways of looking at knowledge, learning modes. True creativity and growth comes through the use of all four areas (Kolb, 1984). One can therefore see Kolb's theory as a spiral, where one must go through the four stages as a process to grow in maturity.

Kolb ends his theory with an action stage called Active Experimentation (AE); this stage is the breakaway stage. This stage is the last, where one have outweighed the benefits and drawbacks in the stage of Reflective Observation (RO) and put them in perspective in the Abstract Conceptualisation (AC) stage. Now Lewin's force field analysis assesses whether there are more forces for than against, one will act accordingly. The enabling process stage is Concrete Experience (CE) that one experience something one will investigate further that one get an impulse, an idea. This is shown as a process in Figure 4. Kolb does see the learning phase as a process (Kolb, 1984).

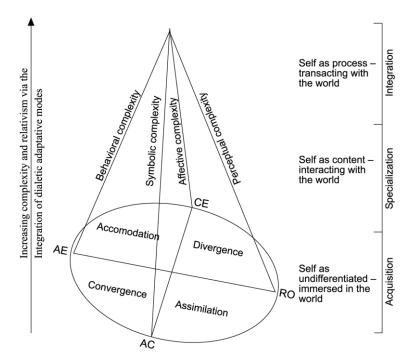


Figure 3: The learning process described in (Kolb, 1984).

"In the early stages of development, progress along one of these four dimensions can occur with relative independence from the others." Which means that entrepreneurs must be careful not to focus on one part of learning and thus have no "true creativity and growth." But when one grow, one discover that one are missing the other dimensions: "however, the adaptive commitment to learning and creativity produces a strong need for integration of the four adaptive modes. Development in one mode precipitates development in the others." Therefore, to ensure the best creativity and growth a focus on true learning is important.

It is important to have learned in a whole, so one can avoid many start-up failures. Inputs are different from person to person, since one often specialises in one area. Therefore, what one need to ensure a good pre-birth process is different from person to person. This may seem like a contradiction, but as I said, different people develop at different stages first and move into the other stages of the development with time. Furthermore, one can have a knowledge which others have not learned yet! Kolb also refers to Myers-Briggs and their personality types and compares them with the model shown in Figure 5.

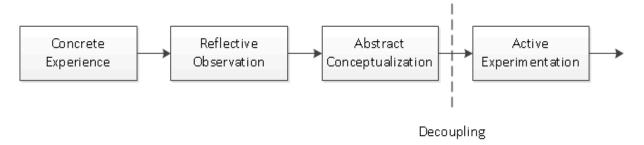


Figure 4: Kolb's four stages as a process including the decoupling point

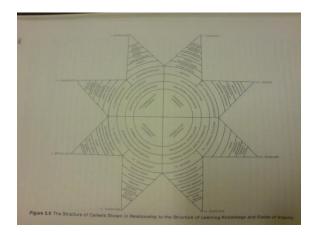


Figure 5: Individuals typical learning modes (Kolb, 1984).

In order to learn best, one does not use all these four learning modes simultaneously. No, because learning is a process. Therefore there is a need for those who are creative at certain times, and later on others, who are better at putting the ideas in context. Though structured learning and maturity can be seen as a spiral, we only look at Kolb's process in one maturity phase; this can be seen in Figure 4. Other maturity stages may occur after project approval, which takes place immediately before Active Experimentation, which may lead to new experiences and so on...

#### 3.1.2 CHANGE AND PHASE-SHIFT

The last stage Active Experimentation is comparable to Lewin's force field. The idea behind this force field is one outweigh the costs and benefits on a physical as well as a psychological level. The change process can happen suddenly. One stop and break out in a sudden act or the outbreak can be more balanced and not least over a long period of little things that all together pushing one to want to create change. Change can occur internally in the business one's in, but if change is impossible, there is the opportunity to break out. The driving force in this action may be multiple. This will take its starting point in one's thoughts and ideas about the product or the concept.

Mintzberg's Political Arena is a phase-shift in the life cycle theory, where ideas are prepared among the active partners, of some more, of others less. This political conflict may occur between an old business partner / workplace, where it can lead to a decoupling or an internal conflict resolution. An example may be Adizes Divorce stage, where some continue in the bread-and-butter business looking for small gains and where another partner will grow and develop, sometimes they cannot agree and conflict ends in a Divorce and thus a decoupling. One could imagine those thoughts before such an exodus is not properly thought through. It can be difficult to intervene and help before one act, because of the current force field. After such a stage, one can imagine, that one can go through the learning process again, to understand what one have just said yes to do, before one break out completely.

#### 3.1.3 THE PRE-BIRTH PHASE OF ORGANISATIONAL LIFE-CYCLE.

If we briefly summarise the learning process and pre-birth theory, its see that the company start, can happen at different times, depending on how well prepared one are before start-up. Some examine financial backing and market potential before start-up. Others do not hesitate much after they've got an idea. They have not thought much about the market and sponsors other than someone benefits from

the idea, and therefore must also be someone who will sponsor it. For the entrepreneur is in love with his idea (Adizes, 1979).

But before that, there is a divide with the past. The division consists in the moving from reflection to action. One go into active experimentation, if following Kolb. This idea can be seen in (Kazanjian & Drazin, 1989), where they believe that the focus before the switch is for the entrepreneur more on the development of product/technology, securing financial backing and identification of market opportunities. These activities underline the opportunities that can be created from the initial idea to a new business. While (Kazanjian & Drazin, 1989), (Kimberly, 1979), and (Quinn & Cameron, 1983) only explain the outcome before the boundary. (Torbert, 1974-1975), (Adizes, 1979), and (Garnsey, 1998) put more effort into the process and explain what happens before the decoupling point.

In (Garnsey, 1998) there is a similar focus with (Kazanjian & Drazin, 1989). Where Garnsey instead of the word development uses the phrase: "knowledge about the product". Additionally, the necessary contacts are also important. Otherwise Garnsey focuses primarily on the choice of a sector where it is the choice of the sector which ultimately creates a lock-in. One can see the sector selection as a narrowing of focus.

The idea of obtaining the necessary contacts have taken a step further in (Torbert, 1974-1975), which goes into more detail on how this construction is taking place, creating the necessary teams, studies on market opportunities and ultimately what the consequences of action will be . So Torbert goes from stage 1 in Kolb's process about the fantasy, to stage 2 about the development and mobilisation of the idea, and to stage 3 concerning assessing the outcome.

(Adizes, 1979) Compares the Pre-birth phase with an airplane in need of force before take-off. Similarly, the entrepreneur has a need of force. He needs confidence in himself and from a constructed network that can help him carry out his idea. The entrepreneur acts as a missionary: "searching for the audience to convert". He is in love with the idea. The primary goal is to create commitment, so one dare to take a step, and later to act in the form of borrowing the necessary resources. It is when this positive commitment exceeds the negatives that one begin to act for real, if we follow Lewin's thinking about change.

Kimberly and Torbert, see the governing principle in the process right from the start created as ideology and vision, which exercise considerable influence right up to the institutionalisation phase. Kimberly argues there must be situation-specific limitations that favours emergence before division occurs.

In general, after the division, one can have a stage where one investigate opportunities and build up plans before one create a 100 percent lock-in with a business plan, or one can unwind from day one of the action phase with or without a business plan. The building of commitment is the driving force that will keep the development going, until its success.

## 3.1.4 THE IDEA SCREENING PROCESS AND ITS OVERALL CONCEPTS

In general are two perspective seen, which is:

- 1. Commitment as driver
- 2. Learning as a process, with four separate learning modes.

In Table 2 is the parallel between organisational life cycle theory and the theory of Kolb listed. Two dots are marked with a star these symbolises theoretical observations outside the framework of Kolb.

Concrete experience	Reflective	Abstract	Active
	observation	conceptualisation	experimentation
-Fantasies	-*A missionary,	-Choice of sector	-Decoupling
	searching for audience to	-Development of product /	-Force field
	convert	technology	
	-*Creating the necessary	-Securing financial	
	teams	backing	
	-Development and	-Identification of market	
	mobilisation of the idea	opportunities	
	-Studies on market	-To assess the outcome	
	opportunities		
	-Knowledge about the		
	product		
	-Necessary contacts		

Table 2: The parallel between organisation life cycle theory and the theory of Kolb

Kolb puts an emphasis on the need of a proper team that people in the team consist of proper learning modes. Though he sees it as consistent before the process start and not a part of the process. On the contratrary is the distinction between stages in life cycle theory vague, especially between stage one and two. This means a need exist to create a new stage. This stage is a process that both develops ones idea and ones team.

#### STAGE 1

In the first stage the idea arises from experiences and fantasies. The stage gate model must in the initial stage have, before commitment is secured, a gate which ensures that the idea's vision is in place. If this does not happen and commitment is formed to an idea that does not fit into the vision of the organisation, the idea team will attempt to decouple itself away from the organisation in the gate after stage

4, see

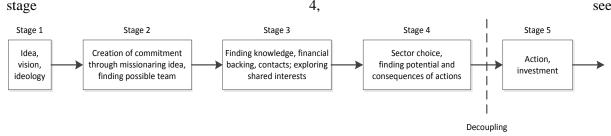


Figure 6, which the society has no interest in. Furthermore should a deeper understanding of the organisational fit of the idea strengthen the entrepreneur in his missionairing in stage 2 both in order to get more positive feedback so commitment by that can be build up and to establish a team. To secure the right competences in a pre-development team, this vision needs to be operationalised. This operationsalisation can further strengthen the entrepreneur in his search for both commitment and a development team.

These are the goals of stage 1:

- 1. To transfer the idea into a concept that fits in line with the organisation vision.
- 2. That the idea is possible to operationalise further within so a team can gathered.

STAGE 2

This stage is in relation to Kolb a new stage. This stage is a combined stage initiated through missionary work of the idea by which a preliminary team is created and motivated to pursue the idea to success. The search for contacts and a preliminary team is done through an interest in the market and product knowledge. In addition, it is important that one focus on learning and that people have different learning modes they favour. The initial team must therefore be created by a mix of people with different favourite learning modes to streamline the process. Further, one can see this stage as an early exploration stage where human resources are found through ones missionary work of the idea.

These are the goals of stage 2:

- 1. Ensuring the right learning modes and knowledge competences around the idea
- 2. To strengthen the commitment, so there is power to drive the idea all the way to the goal

STAGE 3

The following stage is a deeper search stage, where the potential team talks together about the contacts, financial support, market opportunities and the knowledge they find. The goal of this stage is to create a solid database in order to create a good concept in stage 4.

This is the goal of stage 3:

1. To collect data and construct a database strong enough to conceptualise the idea.

STAGE 4

In the subsequent stage all the knowledge is put together. This is initiated by choosing the sector that is evident to narrow down the idea. The development of the product/technology of the idea will begin in this direction. The outcome includes a business plan, market potential and the consequences of actions are assessed. This is done in order to get financial backing, corporate backing, accept to develop the idea further.

Therefore is the goal of stage 4:

1. Assessing knowledge to a business plan, the business plan must cater for the recipient's vision.

## STAGE 5 - DECOUPLING - COMMITMENT

Now one is ready to act. The result of the stages may be more or less thought through, but if there is a need for financial backing, there is a need to gain the acceptance of the holders of finances. This is by the financial support function such as funds, banks or the CEO who decide go or no go eventually. Before they do so it is colleagues, friends and others that have been the target of the missionary process of the idea, and have increased or decreased the commitment of the idea holder. If the bank says "no", and there is enough commitment, one will continue with the idea. It is the commitment that keeps the process running even after the decoupling point and a new company's birth.

Therefore is the goal of stage 5:

1. To get idea acceptance and to avoid decoupling.

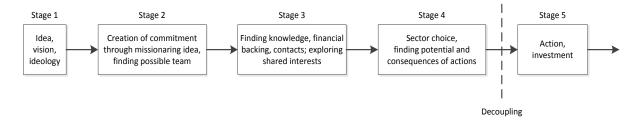


Figure 6: The screening process including decoupling

## **HYPOTHESIS**

When it's commitment that drives the process, the question for a successful process must be. "How can we foster commitment?" The commitment is strengthened when communicating with others. If one prepare before this communication one will unequally do better and the acceptance of ones idea will be greater. Simultaneously, the process is better developed, and a pattern of action, a culture, a way to innovate would in an instant be created.

This gives us the hypothesis:

We believe that a checklist strengthens the entrepreneur's preparation and thereby its power of persuasion, which reinforces his commitment to the idea, which thereby strengthens the innovation culture within the company.

#### CHECKLISTS - DATA STORAGES

The screening process is in many companies today, both informal and unstructured, only 3 percent have structured and formalised their screening process (Cooper & Kleinschmidt, 1986). We have now structured the process. The process ends with a formal act, action or no action. But the process could also be more formal, that the middle stages shall be approved. The advantage of this is to spend less time on projects that never come to anything. Here by saving data along the way, thus creating gates, one does not need to always start over from the beginning. For example a project discarded in the third stage could be broad up again and this furthermore by others. Conversely, one should also save data and in doing so remember the mistakes one has committed. By this, one can ensure either that the mistake will not happen again and a higher commitment for the project is secured or one can use known error information to kill the motivation of projects without credence. Tid and Bessant (Tidd & Bessant, 2009) use a case of Phillips which argues that the screening phase (their search phase) takes 12 month out of a total of 30 month in the whole innovation phase. This can also be seen in the timeline of the case example in this report in Figure 18. The total overall stage gate model can be seen in Figure 7. The creation of gate content is the purpose of part two of this report.

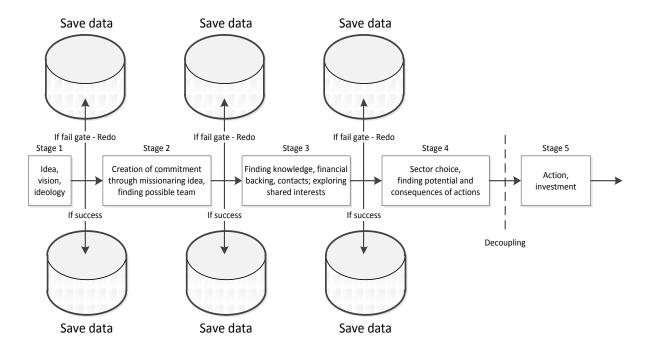


Figure 7: The process as a stage gate model with data storages and concepts

## 3.1.5 SUMMARY

Thereby we get four overall concepts and challenges to solve and for each stage specific concepts to solve in the idea screening process these will be discussed in section 5.1, the concepts and challenges are as follows:

- 1. Decoupling and force field
- 2. The will as the driving force in the process
- 3. The need for storages
- 4. The need for a checklist
- 5. The process consisting of 5 stages.
  - Stage 1 objective:
    - o To transfer the idea into a concept that fits in line with the organisation vision.
    - o That the idea is possible to operationalise further within so a team can gathered.
  - Stage 2 objective:
    - o Ensuring the right learning modes and knowledge competences around the idea
    - o To strengthen the commitment, so there is power to drive the idea all the way to the goal
  - Stage 3 objective:
    - o To collect data and construct a database strong enough to conceptualise the idea.
  - Stage 4 objective:
    - Assessing knowledge to a business plan, the business plan must cater for the recipient's vision.
  - Stage 5 objective:
    - o To get idea acceptance and to avoid decoupling.

# 3.2 THE DATA MATRIX; A TOOL FOR MANAGEMENT AND REGULATION OF THE SCREENING PROCESS

The following sections will be based on an overall understanding of the idea screening process, which is formed in section 3.1. This will be based on the conceptual frame with which we operate in. This frame will be used to build a tool to guide the idea screening process by managing and regulating which gate thinking is a good option, we will create a stage-gate model.

The goal of an idea is that it must be implemented in an organisation's processes. It will thus in some way be a part of the inputs to be transformed into outputs, this field is called Operations Management. Operation management is introduced briefly in Section 3.2.1. To see what operation management is in need of, in the design of new processes, Operations Strategy is interesting, see section 3.2.2. Section 3.2.3 brings up, in report context, the interesting issues regarding Operation Management. By these introductory sections our contextual frame is created.

Since the ultimate product of the process is a strategic plan, strategy and what the goal and focus of such a plan is important. When the general understanding of the contextual is founded, we will go into detail with the conceptual areas in the project focus, the idea screening process. Here section 3.2.4 focus on the importance of the competences in the initial team. Section 3.2.5 is about data gathering, with the point of departure in Enterprise Architecture, which is about the coupling of IT projects and the organisation, this aspect in the tool is important in order to get an organisational usable output. Regarding Enterprise Architecture are the initial phases general, and therefore can these be used in general. Enterprise Architecture is concerned with the fit of the organisational vision, the goal both in the eyes of the developer and the management. This concerns competences those are important, plus a way to structure data so that they can be stored. Section 3.2.6 is about the implementation of gates.

This means that the management and regulation tool with the basis of Enterprise Architecture can be created with exception of the concepts, of checking commitment and learning modes. These subjects will be handled through a discussion in section 5.3.

A tool will be generated from the discussed concepts, which are guided by the challenges in the idea screening process, see section 3.2.7, this is done to secure a fit with the tool and the process.

## 3.2.1 OPERATIONS MANAGEMENT BRIEFLY:

According to Slack et al. operations management can be separated into three areas of responsibility; direct, indirect and broad. Direct responsibilities deal with the process of transforming inputs into outputs. Indirect responsibilities are responsible for the support of other functions with operations management and an optimised output as focus. The last operations managers need to account for are the broad responsibilities, which are longer-term interests, in other words they are part of a company strategy. These areas are the understanding of globalisation, environmental protection, social responsibility, technology awareness, and knowledge management (Slack, Chambers, & Johnston, 2004). The strategy is how one are going to tackle the issues. The focus of this report is not organisational strategy but how one can create a tool that can follow and guide ones development according to ones strategy. Therefore we will start looking at how this fit can be created. All this can be seen in Figure 7.

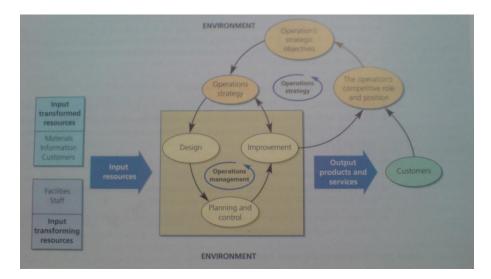


Figure 8: A general model of Operations Management and Operations Strategy, with the direct, indirect and broad responsibilities (Slack, Chambers, & Johnston, 2004)

## 3.2.2 OPERATIONS STRATEGY

The goal of operations strategy is to specify objectives and frames of the processes within an organisation. The tool to be produced can be seen as such a process. The first step in operations management and in the development of such a tool is to understand the goal of the operation in focus: "This means developing a clear vision of how the operation should help the organisation achieve its long-term goals. It also means translating the organisation's goals into their implications for the operation's performance objectives; quality, speed, dependability, flexibility and cost." (Slack, Chambers, & Johnston, 2004). What drives the goals of an operation should be a guiding vision fitted with the organisation in which we operate. That this vision is followed, is the goal of stage one of our model, and thereby the goal of all the stages. While the gate of one phase is equal to the goal of the potential phase and all the prior phases, See section 3.2.6. The vision is the guiding star.

Hereafter one should create a strategy for the operation: "It is vital that operations managers have a set of general principles, which can guide decision making, towards the organisation's longer-term goals." Guiding principles are what determines culture and a checklist. This is what this report is all about. The need for checklists is mentioned in chapter 1, where Cooper and Kleinschmidt blame the missing of an external observed checklist, to give rise to the inappropriate low project decline percentage.

#### 3.2.3 OPERATIONS MANAGEMENT

Operation management is about designing products, services and processes after the vision and checklist given by the operations strategy. Furthermore operations management is about planning and controlling the operation, and improving the performance of the operation (Slack, Chambers, & Johnston, 2004).

The inputs of the process can also be seen in Figure 8. Besides operations strategy, influenced by the environment, which ultimately makes the organisations stakeholders as the guiders. Inputs are resources, which need to be present to transform the needed output, which the customer wishes for. Inputs to be processed are; materials, information, customers and inputs which are processed by facilities, and staff.

It is core for the support functions to understand the operation function in order to serve it with the needed inputs. This is the indirect responsibilities; therefore these functions must obtain all needed knowledge of the operation. This does also mean that all the inputs to the operation function become input to every particular support function (Slack, Chambers, & Johnston, 2004). This means that Engineering/technical, Accounting and finance, Human resources, Information technology (IT) gives inputs to the operations function which gives input to the Product/service development function. Which in turn means that competences regarding marketing, engineering/technical, accounting and finance, human resources and information technology (IT) need to be present in the process of developing a product or a service.

### 3.2.4 COMPETENCES

To fill the data matrix, skills and knowledge within the seven functions are important. This section will look into if a separation of competences can occur in relation to an idea area. Though not always are the whole operations influenced in new developments. As developments can be small and focused e.g. like Human resource procedures.

The goal of the data matrix is to gather data to a goal oriented business plan, a strategy plan. In the theory of strategy, there are two leading theoretical paradigms. Namely the resource based approach with Prahalad and Hamel (Hamel & Prahalad, 1989) and the market based approach with Porter (Porter, 1996). Here lies the secret to creating a fit between the theoretical paradigms (Mintzberg, Ahlstrand, & Lampel, 2005). While if one does not do his best, another will do it better. And if none wants what one are good at, one cannot sell it. Meaning one must do his best with what others have a desire to buy. A strategy must therefore be grounded in external as well as internal factors.

In operations management are there three core functions, operations function, marketing function and product/services development function (Slack, Chambers, & Johnston, 2004). Organisational lifecycle theory name three prior areas; technology/product development, sector lock-in, and Financial backing, see Section 3.1.3. An input from the classical hierarchy of organisations is the functional organisation which focuses on Manufacturing, Marketing, R & D and Accounting (Daft, 2007).

Table 3 is a summary of the different perspectives,	, which show that marketing are important from all
perspectives, thus we conclude that marketing are a	t all times important.

Sub functions Operations Management	Marketing	Specific sub functions	Engineering /Technical	Finance and Accounting
Organisational life-cycle stage 2	Studies on market opportunities	Knowledge about the product		
Organisational life-cycle stage 3	Sector lock-in		Technology/Product development	Financial backing
Strategy	Market based view	Resource based view		
Core functions Operations management	Marketing	Operations	Product/Services Development	
Organisations structure	Marketing	Manufacturing	R & D	Accounting

Table 3: A summary of theory focus regarding sub- and core-functions in operations management, organisational life-cyle, strategy, and organisations structure

It is seen there is a division in the technical skills from either engineering/technical only or specific support skills in Table 3. Regarding organisational life cycle theory, is it important to note that focus is on product innovation. This may mean that specific functions are important under different assumptions. In other words, when we talk about a product, is the engineering/technical function the important one in the resource based view. But if new ethical principles or employee health are at centre, the resource based view is from the human resource support function, as they possess knowledge and competences within this field. This makes the support function which possesses the technical knowledge of the subject to the idea particularly important. This means that projects with a diverse scope need more technical support functions. In larger projects where e.g. a new IT system is built, there could be a further need of new work procedures, in order to utilise the new system, or new work processes to put data correctly in the new system. If so more support activities are in particular important. This means that the resource based view, illustrates the resources which in the project are important. As the title of the column suggest, specific sub functions.

Finally it should be noted that the goal of setting a project up is first to get approval from gate four, to get financial backing and allowance to consume resources on the project. The financial aspect is thus always important.

A final note and the reason why organisational structure is included in Table 3, as R & D may seem isolated; in R & D are all "key" support functions important and not just engineering. A bad example here is "Bang & Olufsen". A touch of this can be found in the life cycle theory, where only (Garnsey, 1998) enters the marketing aspect. Garnsey is from the law faculty, and her approach could therefore be backward, investigating grounds of bankruptcies. Overall, bring the different viewpoints three important competences forward. These important competences are:

- 1. Competences regarding the resource base, which is idea specific.
- 2. Competences regarding the financial.
- 3. Competences regarding the marketing.

## 3.2.5 INFORMATION GATHERING

The functions should be guided in some way to get the right type of information. Here Zachman gives with his framework a way to see all information. Of course it can be argued that we need the seventh "horse" how much, which in French is called combien or in German wieviel (Ambler, Nalbone, & Vizdos, 2005), the needed result of how much in the framework of Zachman is a budget.

The good thing about Zachman is that he understands the different levels and depth of information needed. Meaning that the idea of seeing Kolbs process and thereby our overall framework as a spiral becomes active. Zachman has six phases, the first called scope, which is a contextual phase, the second called enterprise model, which is a conceptual phase. In Zachman the contextual phase is concerning information gathering in order to get a good conceptualisation, which is the next level of the framework. Then the concept should be explored in order to get further to the next level, thereby creating a spiral. The goal of the project is to conceptualise information into a business plan which can be benchmarked towards managerial goals. The rest of the Zachman framework is out of this project scope.

	What (Data)	How (Function)	Where (Locations)	Who (People)	When (Time)	Why (Motivation )
Scope (Contextual) Planner	List of things important to the business	List of processes that the business perform	List of locations in which the business operates	List of organisations important to the business	List of events/ cycles important to the business	List of business goals/strategies
Enterprise Model (Conceptual)	e.g. Semantic Model	e.g. Business Process Model	e.g. Business Logistics System	e.g. Workflow Model	e.g. master Schedule	e.g. Business Plan
System Model (Logical) Designer	e.g. Logical Data Model	e.g. Application Architecture	e.g. Distributed System Architecture	e.g. Human Interface Architecture	e.g. process Structure	e.g. Business Rul Model
Technology Model (Physical) Implementor	e.g. Physical Data Model	e.g. System Design	e.g. Technology Architecture	e.g. Presentation Architecture	e.g. Control Structure	e.g. Rule Design
Detailed Representation (out-of-context) Subcontractor	e.g. Data Definition	e.g. Program	e.g. Network Architecture	e.g. Security Architecture	e.g. Timin Definition	e.g. Rule definition
Functioning System	e.g. Data	e.g. Function	e.g. Network	e.g. Organisation	e.g. Schedule	e.g. Strategy

Table 4: The Zachman Framework

If we take a brief look at the Zachman Framework in Table 4, it can be seen that Zachman summarises the data found in the contextual phase in a conceptual phase: Into a semantic model which is the data to be processed, a business process model which is how it is going to be processed, a business logistics system is where it is going to be processed, a workflow model is by whom and a master schedule is when. What guides all this is the business plan which sets the motivation.

	What (Structure)	How (Function)	Where (Locations)	Who (People)	When (Time)	Why (Motivation)	Cost/Benefit (Finances)
Business process Models	Most significant business concepts (Enterprise glossary)	Enterprise business processes (Process model)	International view of locations (Location map)	Organisation- al strategy (Organisation chart)	Business events and planning	Enterprise vision/mission	Corporate financials
Portfolio Manage- ment	List of systems and interrelation- ships	Map business processes to systems	Map project teams to locations	Project team assignments	(IT) planning	(IT) vision	Savings from improved management

Table 5: Section 1 of improved Zachman framework, concerning enterprise management disciplines

Ambler et al. (Ambler, Nalbone, & Vizdos, 2005) has further developed on Zachman's Framework for Enterprise Architecture. Here they in addition to connecting the cost/benefit analysis, changed Zachman's focus on what, to be structure-related and not data related.

The value adding in (Ambler, Nalbone, & Vizdos, 2005), lies in their focus on both management and development. Here management disciplines are listed in Table 5, these represent directors who must approve the project, as such can be a foundation. In the first row are there listed what the organisation holds and its guiding vision. The last row is concerning portfolio management which fits with the decoupling thought. That a gate in relation to strategic criteria select projects, this could be done towards its portfolio. In this way of course only incremental innovation fits the model. It is worth

noting that when talking about IT planning and IT vision, Enterprise Architecture focuses on the development of IT. As the framework of Zachman is general, it is in this assignment believed that it could be all other functions and IT.

	What (Structure)	How (Function)	Where (Locations)	Who (People)	When (Time)	Why (Motivation)	Cost/Benefit (Finances)
Business modelling	Most significant business concepts (Project glossary),	Project mission, strategies processes (Process model)	Project view of locations (Location map)	Affected positions (Organisa- tion chart)	Business events	system vision/mission	Savings from reengineered business processes
Require- ments	Domain model (CRC Cards, UML Class Model)	Usage of the system (Use cases)		Users of the System (Actors Personas)	Timing require- ments (Use cases business rules)	Business policies and technical requirements	Savings from improved understanding of stakeholder needs

Table 6: Section 2 of improved Zachman framework, concerning core development principles

Table 6 represents, what there during development is a need to evaluate upon. The similarities are great between the two tables, thereby making a benchmarking of management and projects easy. The last series focuses on requirements, in other words the market. Here is a fit also required. It is this fit that section 3.2.4 point as particular important in the development phase, plus a fit with the financials which Ambler et al. adds. Again it is noted that the model is targeted at IT, in other words the precise requirements will in other functions be different as the ones noted in Table 6 regarding IT.

#### 3.2.6 CONSTRUCTION OF GATES

Gate 4 is the last gate, where the gatekeeper says: "go or no go", the previous gates are building one up to a "go" in gate 4. This makes gate 4 a function of:

Gate 
$$1 + (Gate 2 - Gate 1) + (Gate 3 - Gate 2) + Gate x$$

When knowing how to clear gate 4, one know what to do in gate 1, gate 2 and gate 3. To illustrate the gate principles, is an example listed in Table 7 regarding the concepts from the idea screening process, see section 3.1.4.

Gate 1	Gate 2	Gate 3	Gate 4
-Commitment for idea	-Commitment for	-Commitment for idea	-Commitment for idea
-Vision	idea all the way to	-Vision	-Vision
-Ideology	success	-Ideology	-Ideology
	-Vision	-Having team behind	-Having team behind
	-Ideology	-Product/technology	-Product/technology
	-Create a team	knowledge	knowledge
	behind the idea	-Market opportunities	-Market opportunities
		-Necessary contacts	-Necessary contacts
		-Financial backing	-Financial backing
			-Assessed business plan

Table 7: illustration of initial checklist for gate 1, gate 2, gate 3 and gate 4

#### 3.2.7 THE TOOL - THE DATA MATRIX

The data matrix tool is intended for management and regulation of the idea screening process described in section 3.1. In order to make the tool operational is a focus put on the measure of shift stage. And to guide both management and ideaholder is both of their objectives listed.

GATE 1

Regarding the idea screening process, is the objective in stage 1 to conceptualise the idea and assess it against stakeholder's vision, in order to avoid decoupling, see section 3.1.4.

The function of Product/service development is to find and develop ideas. The other six functions can be seen as support function for the Product/service development function, making it the guiding function regarding idea development; therefore should the idea be conceptualised for guidance. This is consistent with Ambler et al. which suggest that projects should first take care of the overall business modelling to conceptualise the idea into business objectives; this can be seen in the first row in Table 8. Furthermore is it important that the idea vision fits corporate goals in order to avoid decoupling, here the goals of Ambler et al. for good enterprise management are listed in the second row in Table 8. An comparison of the two rows is easy. This strengthens the theory and our approach.

	What (Data)	How (Function)	Where (Location)	Who (People)	When (Time)	Why (Motivation)	Cost/Benefit (Finances)
Business modelling (develop- ment)	Most significant business concepts (Project glossary),	Project mission, strategies processes (Process model)	Project view of locations (Location map)	Affected positions (Organisa- tion chart)	Business events	system vision/mission	Savings from reengineered business processes
Business process models (enterprise)	Most significant business concepts (Enterprise glossary)	Enterprise business processes (Process model)	International view of locations (Location map)	Organisatio nal strategy (Organisatio n chart)	Business events and planning	Enterprise vision/mission	Corporate financials

Table 8: Shows overall project and business goals which can be used to conceptualise an idea

The importance of fit at each "wh" question depends on the strategy within the particular organisation. If Arla foods with the slogan: "ko til køledisk", is a loyalty to 100 percent vertical integration of particular importance. As for Arla Foods, this is essential to demonstrate quality and certainty of the product's good content to consumers. If Carlsberg with a strategy to expand in west China and Eastern Europe, is ideas regarding market opportunities in India be of less interest. Though if the potential is great, the idea can form the basis of future expansions. Thereby does the model also recognise radical innovation, thus the time frame is broader. So it all depends, this makes the business glossary important, so ones know the focus and terminology of the whole business. Therefore are the objective, management objective and measure of gate 1:

- Objective: To complete row 1 in Table 8.
- Management objective: To complete row 2 in Table 8, and compare the organisation's and the idea's vision.
- Measure: Organisational fit.

#### GATE 2

With the right competences a team should in stage 2 of the idea screening process be put together. Challenges considering learning modes and commitment are not covered by this tool; these areas are evaluated in the discussion in section 5.3.

A team with different viewpoints of the complexities of the ideas future operation is important. This discussion is in section 3.2.4, and is further agreed upon in section 3.2.5. Three functions are found important; marketing, to secure a market; a resource based viewpoint, to secure the production; and finances, to enable resources. Table 9 is a comparison with operation management functions. Illustrating the permanent importance of the marketing and financial functions and the case specific importance of the other functions regarding the related area of the resource based view.

	P/S Developme nt	Marketing	Engineerin g/technical	Accounting and finance	Human resources	Informatio n technology	Operations
Marketing		X					
Resourced based view	If the idea is related to develop- ment principles (Methods)	If idea is related to marketing principles (Market procedures)	If idea is related to technical principles (Product technics)	If idea is related to accounting principles (Accounting process)	If idea is related to staff principle (Ethics or health)	If idea is related to IT principles (Building of IT)	If idea is related to operations principles (Operation processes)
Financial				X			

Table 9: A comparison with operations management functions and the discussion in section 3.2.4

Therefore are the objective, management objective and measure of gate 2:

- Objective: Ensure at least one marketing, one technical and one financial competence in the initial screening phase.
- Management objective: From an understanding of the idea to evaluate and secure the competences needed.
- Measure: It is important to have competences concerning the market function, finance function and the technical focus function at the centre. If the project is larger and less straightforward, competences of other functions can be in need.

### GATE 3

In order to assemble a good plan in stage 4, there is a need for good data; they are picked up in stage 3.

The six different viewpoints can give a solid all round input, to the Product/development function, of a future process. In order to make these areas measurable, can the areas be added upon the first phase of Zachman's framework where the context of the idea in the form of "wh" questions should be listed, in order to be able to answer Zachman's second phase, conceptualisation. This gives us the matrix in Table 11 for information to be gathered in this process stage, with the viewpoints on the horizontal axis and the information needed on the vertical axis.

To fill out the matrix, a comparison with functions and "wh" questions are essential. A list of the responsibilities of support functions, operations and the inputs to operations are set up in Table 10. The last row summarises the functions core responsibility.

	Marketing	Engineering /technical	Accounting and finance	Human resources	Information technology
Operations input	Customers		Materials and facilities	Staff	Information
Operation function	Understanding of the capabilities and constraints of the operation processes	Understanding of process technology needs	Provision of relevant data	Understanding of human resource needs	Understanding of infrastructural and system needs
Support functions	Market requirements	Analysis of new technology options	Financial analysis performance and decisions	Recruitment development and training	Provision of systems for design, planning and control, and improvement
Summarised Core responsibility	Markets	Technologies	Finances	Staff skills	Systems

Table 10: A comparison and summary of functionality of the operation function and its support functions plus the main responsibilities of operation input regarding support functions

These concepts make up the data areas in the data matrix, as illustrated in Table 11.

	Marketing	Engineering /technical	Accounting and finance	Human resources	Information technology	Operations
What (Data)	List of segments options	List of technology options	List of funding options	List of skill options	List of systems options	List processes options
How (Func- tion)	How the market function	How the technology function	How to get funds	How to get skills	How to get systems	How to get processes
Where (Loca- tion)	Location of segments	Location of technologies	Location of funds	Location of skills	Location of systems	Location of processes
Who (People)	Who knows customers	Who have technologies	Who have funds	Who have skills	Who have systems	Who have operations
When (Time)	When segments needs it	When technologies can be finished	When funds are available	When skills are available	When systems are available	When processes are available
Why (Motiva- tion)	What marketing goals exist	What technological goals exist	What financial goals exist	What competence goals exist	What system goals exist	What process goals exist
How much	How big is the market potential	How big is the technology potential	How big is the funding potential	How big is the competence potential	How big is the system potential	How big is the process potential

Table 11: The Data matrix

Gathered data can be compared to the data matrix, and strong and weak data points can be spotted, where to one can be regulated. The tool can besides management and regulation be used to an overall structure where data can be saved and stored. A final advantage of the tool is that it does not structure the data collection process, which in this initial search phase can reduce creativity (Stacy, 1993).

In order to make the process more specific and quantitative, one can establish an equation about adequate data. In the equation is it important to value e.g. four spread ideas, according to the "wh" questions, more value, than four ideas only expanding one "wh" question.

The advantage of the data matrix is that once one have listed possible technologies, one can see whether one have looked only at a single dealer (who), or in a single geographical area (where) or whether one have looked at a single or more types of technologies (how). This visualises the breath of the data gathered, thereby the matrix can be used to manage and regulate the search stage, so resources can be spent where the data basis is small and by this avoiding using the first solutions that comes along. The two lower fields "Why" and "How Much" are the motivating fields. Why is concerning the organisational fit, how much is concerning the organisational cost / benefit of the idea.

Furthermore, the more radical the idea is, the larger data base is needed, as the focus area is to a higher degree unknown. This makes learning of the focus area essential through experiences of possibilities.

Therefore are the objective, management objective and measure of gate 3:

- Objective: To gather data by the use of the data matrix.
- Management objective: To manage and regulate the development team to fulfil the data matrix adequately.
- Measure: To evaluate the magnitude of data in the different data areas of the data matrix.

#### GATE 4

The contextual phase of Zachman is used to create a concept in Zachman's second phase. The question is of course to make a fit with all the viewpoints in doing so. To make a semantic model as data, a business process model as function, a business logistics system as locations, a workflow model as people, a master schedule as time, a business plan as motivation, and a budget as finances.

To obtain a strategically organisational fit will the opinions of Ambler et al. be included. Though Ambler et al. focus on IT projects and Zachman's focus is general, are the goals of Zachman listed in the first row of Table 12. These are the goals, which the development team shall fulfil.

	What (Data)	How (Function)	Where (Locations)	Who (People)	When (Time)	Why (Motivation)	Cost/Benefit (Finances)
Conceptual	e.g. Semantic model	e.g. Business process model	e.g. Business logistics system	e.g. Workflow model	e.g. Master schedule	e.g. Business plan	(Budget)
Portfolio Manage- ment	List of systems and interrelation ships	Map business processes to systems	Map project teams to locations	Project team assign- ments	(IT) planning	(IT) vision	Savings from improved management

Table 12: Shows the comparison of project concept and portfolio management.

The perspectives of Ambler et al. are illustrated in the second row in Table 12. These are interesting from a management point of view. As it is management who shall approve the conceptualised idea, and if approved find resources and lead them into the project, both regarding workforce and facility disposal, as Slack et al. regarding operations management note as the processers of inputs. Further does management request the "wh" questions match the business processes and data concepts all ready

in existence, and not the least that there is a vision fit! Management shall, guided from the perspectives and project vision, create an organisational cost/benefit evaluation.

A business plan: "Is a formal statement of a set of business goals, the reasons why they are believed attainable, and the plan for reaching those goals. It may also contain background information about the organisation or team attempting to reach those goals." Meaning that a business plan draw up all the data into a full plan. This is the plan that gate keepers wish for, e.g. foundations, CEO's, banks or other investors.

The assessment can either be done quantitatively or qualitatively. Quantitatively through a mathematical benchmarking of data, or qualitatively by an external evaluation. If the assessment is done quantitatively are raw data of particular importance. Further can an assessment be done in a combination of the two.

Therefore are the objective, management objective and measure of gate 4:

- Objective: To sort and assess ideas into conceptualised "wh" questions.
- Management objective: By means of Portfolio thinking to assess the cost/benefit of the concept relative to the organisation's vision.
- Measure: A qualitative evaluation of fit and realism.

## 3.3 TOOLING CRITERIA - SCENARIOS

The strategy is a plan towards a goal; the goal is to meet the demands of one's stakeholders. The stakeholders of operations have the objectives; quality, speed, dependability, flexibility and cost. As the idea screening and an operation is a process it is possible to measure the objectives. However the process time of the idea screening process is long and must be unstructured in order to foster innovation (Stacy, 1993). Furthermore is the process input between projects different. Therefore are influencial variables of ideas of interest, e.g. variables which can be used to manage projects.

These variables could be goals, like SMART goals, as managers and SMART goals are result oriented. But finding SMART variables suitable for this context is a whole study in itself. This assignment on the other hand has put emphasis in the creation of a tool regarding management and regulation of the context, the idea screening process. Therefore can the variables of this tool be used to create theoretical scenarios. Of course different parameters can influence, but these can be accumulated around the variables of the managing and regulating procedures of the data matrix. Through this argumentation it is assumed that the miss-fit of the data matrix does not play a part regarding the parameters of the scenarios. This will be evaluated and validated when tools are discussed regarding scenarios in chapter 6.

To get a proper understanding of project variables, will general frameworks of such variables be introduced. According to change management, as all projects leads to change, does Balachandra and Gustafsson have suggestions.

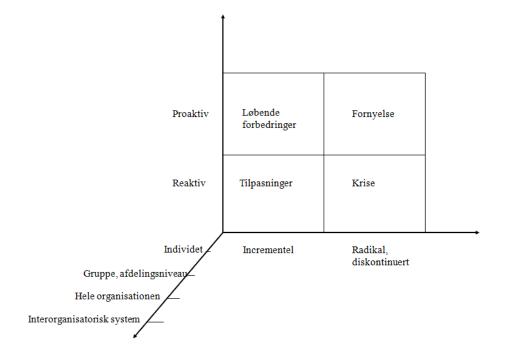


Figure 9: Types of change (Gustafsson, 2010)

Gustafsson has deduced his model regarding change management of projects in three factors, see Figure 9. The size, derived from the number of individuals. The size derived of the organisational fit of the idea (incremental or radical). And what that drives the project, if it is reactive driven (forced by external circumstances) or proactive (voluntary, on the forefront of external circumstances).

The ideas in the screening process are created of learning experiences; this will make any idea proactive. Thus the idea can arise on knowledge of an external pressure, for the idea creator will the idea seem proactive, later in the implementation process can the driving force change to be reactive, for the ones who are influences. Further, in the idea screening process shall the idea creator find the motivation within him, here can a burning platform or a ticket on the train of opportunities be of help.

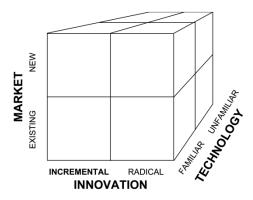


Figure 10: The contextual cube for "New Product Development" projects (Balachandra, 2000)

Balachandra suggest three variables to be market, technology, and innovation. These variables are mutually dependent; this is illustrated by the use of a cube, like in Figure 10.

In order to gain a clear-cut definition of size is the concept of scale and scope found acceptable. Zachman does name the information gathering stage, for the scoping stage, see Table 4. While the data matrix is constructed of two variables, can scale and scope be conjunctured. The variables are the amount of functions to be used and the amount of data each function shall find, as enumerated below:

- 1. scale in relation to the quantity of functions
- 2. scope in relation to the data quantity in each function

If we compare the variables with Balachandra, a connection can be seen with scale and radicality, where the necessity of a total change construct the necessity of functions, and thereby radicality. Opposite can the depth of the functions, the quantity of data needed be seen as how unfamiliar one are with either the market, the technology or the innovation in order to get a good data collection, more data are in need in order to learn the area, again we see knowledge as a learning process.

Confusion with the definitions can be found. Gustaffson uses the innovation radicality and the organisational levels as parameters. Here is great parallel with Balachandra's focus on unfamiliarity (complexity). But what gives complexity? Although all functions are important in a development project, does not make the project radical, but if the project is radical are all functions in need, as a radical process shall be created from scratch. Likewise accounts for the other parameters.

As the variables of the data matrix can be used as argumentation regarding Balachandra and Gustafsson is a fit with the tool accepted. Furthermore is two of the parameters of Balachandra the central support functions of the management and regulation tool, see section 3.2.4. To simplify the scenario possibilities, a 2 X 2 matrix, with four different scenarios are created in Table 13.

	Little scale	Huge scale
Huge scope	Scenario 2	Scenario 4
Little scope	Scenario 1	Scenario 3

Table 13: The scenario matrix

## 3.4 SUMMARY OF THEORY

The assignment purpose is to validate the idea screening process, to create a tool that can help in management and regulation of the idea screening process and to create a toolbox that can help one in the respective stages in the idea screening process. The toolbox will be created through a discussion of the case and foundation data. Specific tools will be discussed in relation to the scenarios. The core parameters in the screening process are evaluated to be regarding the scale in relation to the quantity of functions and scope in relation to the data quantity in each function.

Table 14 summarises the target in each stage of the idea screening process, the target being measurable and manageable by using the data matrix, to show the whole coherence are the add-on concepts to the data matrix listed, where the data matrix does not fit.

Stages/Gates	The idea screening process	Management and regulation (Data matrix)	Add-on concepts
Stage 1/Gate 1	<ol> <li>To transfer the idea into a concept that fits in line with the organisation vision.</li> <li>That the idea is possible to operationalise further within so a team can gathered.</li> </ol>	To complete row 1 in Table 7	
Stage 2/Gate 2	1. Ensuring the right learning modes and knowledge competences around the idea 2. To strengthen the commitment, so there is power to drive the idea all the way to the goal	Ensure at least one marketing, one technical and one financial competence in the initial screening phase.	1. Learning modes 2. Commitment
Stage 3/Gate 3	1. To collect data and construct a database strong enough to conceptualise the idea.	To gather data by the use of the data matrix.	
Stage 4/Gate 4	1. Assessing knowledge to a business plan, the business plan must cater for the recipient's vision.	To sort and assess ideas into conceptualised "wh" questions.	
Stage 5	To get idea acceptance     and to avoid decoupling		

Table 14: Comparison of the idea screening process, the data matrix as a management and regulation tool, and the needed content of a toolbox

The idea screening process will be discussed and validated in section 5.1. The data matrix as a management and regulation tool in the idea screening process in section 5.2. The add-ons to the management and regulation tools are discussed and found in section 5.3. The discussion of possible types of tools can be found in section 5.4. Lastly will chapter 6 found specific tools and relate these to the theoretical parameters of ideas.

## 4 ANALYSIS

The goal of the forthcoming analysis is to create a data base which can pave the way for both an overall validation of the theory described in chapter 3, about the idea screening process and the data matrix as a supporting tool for this process. But the analysis should also be the cornerstone for evaluating principles regarding innovation culture, actions and learning, so that concepts and their challenges can be picked up in a discussion, and a toolbox can be built to address these challenges.

To achieve a triangulation of data, this analysis will be based on qualitative data from observational entries in the entrepreneur Playscapes and quantitative data through documents to strengthen the case study. In support there will also be used quantitative data regarding gate keepers, their application procedures and project acceptance; in this analysis the gatekeeper is the two foundations iKRAFT innovationspuljen (iKRAFT) and Center for Kultur- og Oplevelsesøkonomi (CKO).

#### 4.1 THE CASE

The case is written from observable entries done in the entrepreneurship Playscapes while I was an intern in the company. I came into Playscapes just before the last process gate of the digital strategy tool and digital painting relative to the idea screening process, and in the middle of the process of a further development of the playSea element. The remaining data is intercepted through conversations and internal documents from the company (Playscapes ApS, Playscapes Identitet, mission, vision strategiarbejde, 2006), (Playscapes, Strategi 2005, 2005), (Playscapes, Virksomheden Playscapes websted), (Birkmose, 2005), (Playscapes & Alexadra Instituttet, Ansøgning til iKRAFT innovationspuljen). Further information regarding observations can be found in my internship report (Thomsen, 2011).

The approach in the case study focuses on the choices and actions in Playscapes made in connection with the projects; field area project (playgrounds), the digital strategy tool, the digital painting, and the playSea element. Choices and actions are the focus as they can be viewed as process steps, an action per process step. Furthermore, choice change in the same process stage over time is what constitutes learning. Therefore is cause/effect diagrams used as illustrations.

## 4.1.1 THE HISTORY OF THE ENTREPRENEUR PLAYSCAPES

The entrepreneur Playscapes is located in Ormslev near Aarhus with three employees, Charlotte the creative director, Per the Technical director and Iben a good artistic friend of Charlotte who is paid through a field project with "Odense universitetshospital" to find funding, further are 3-5 interns hired each semester. Playscapes are currently occupied with the project at "Odense universitetshospital", creating elements for this project, selling playSea elements and workshops of the viaArt process. Their economics is not good and bankruptcy is feared, they have given up their vision and have started over again in the pre-birth lifecycle phase with a primary goal of survival. A summary of the start-up of Playscapes can be seen in Figure 11.

## PLAYSCAPES START-UP - PLAYGROUNDS

Playscapes' idea had its basis in a lecture room. Where a teacher expresses a desire for a process that may be used for problem solving. Charlotte grabs the idea and from her artistic background, she puts problem solving together with the process she uses in the artistic world. Charlotte has now developed a tool, viaArt, that will prove essential in the story of Playscapes.

This process tool was first used in 2003 in an exhibition at an architectural school in Aarhus, with the focus on arts interference of one another. Here she came on the idea of children and adults climbing around in sculptures and paintings. She melts playing and art together.

Playscapes come into existence in 2004 when Charlotte together with her cohabiter Per enter into a collaboration to make art that children can move around in. In other words, Playscapes decides to develop sites and sculptures primarily for playgrounds. "De begyndte et samarbejde fra hver deres indgangsvinkel. Charlotte bruger sin viden som kunstner og underviser af både børn og voksne; Per er håndværkeren, der sørger for at idéerne bliver til virkelighed." (Birkmose, 2005).

Playscapes get advice e.g. through "Start og vækst". This results in, that Playscapes in early 2005 produces of all time, the most formal and focused strategic plan, herein are however expressed: "Vi ser andre forretningsmuligheder med vores produkt, men af strategiske grunde koncentrerer vi os om legepladser, men vil udvide senere" (Playscapes, Strategi 2005, 2005). Here Playscapes position them in relation to quality, arts and craftsmanship, safety, durability and maintenance, and aesthetics.

Playscapes have a good sense of the importance of networking and markets themselves in many areas, municipalities and offices, which accounts for the majority of all playground projects, but through trade agreements. Here, through the municipal authorities: "Børn og unge"; "Naturforvaltningen"; "Bygningsafdelingen"; "Skoleforvaltningen"; and "Fritids og kulturforvaltningen". Furthermore does Playscapes market them through newspapers and at more specific trade journals; the creation of a website; the use acquired contacts through their network; and the discovery of a pilot scheme at "Østervang skolen" that would later prove to be one of the first customers of Playscapes. To strengthen their networking, they try to form an interest group around the company containing Aalborg Portland, Sport Scientist Glen Nielsen, Architect PhD Anders Gammelgaard and "Teknologisk institut" for professional feedback, and mutual exchange. In order to strengthen their weaknesses an advisory board is formed to get competent counselling in strategy, sales and marketing. Where the idea has been to create a board out of this. All of this is the foundation of Playscapes and it looks as if they come to a good start with 1 playground sold in 2004 and 3 playgrounds sold in 2005.

The artistic playgrounds underlying the use of unique sculptures, such as playCurve or playWave. To distribute the development costs, it is planned that these elements must be sold apiece.

In the autumn of 2006 Playscapes takes a daring step, they are expanding their concept due to lack of selling impact. Customers do not take Playscapes seriously at sales meetings, but might see the idea with Playscapes products. The result is that Playscapes chooses to expand its product area out to reach a wider customer group. They now believe that the playground market is too narrow and will spread the concept of playing in areas other than playgrounds:

"Vi mener vi bliver opfattet som en god sparrings og samarbejdspartner på legeareal området gennem vores referencer, kontakter til forskere og resultater. Både hvad angår metode og udførelse. Det vil vi gerne holde fast i, da det giver mulighed for fremtidige projekter som vi allerede har erfaring med. Vi er dog også bange for at blive holdt fast i denne opfattelse, da vi mener vores arbejdsmetode og proces rummer mange andre muligheder." (Playscapes ApS, Playscapes Identitet, mission, vision strategiarbejde, 2006)

Subsequently, we see a whole new Playscapes, the outcome of the choice is also the dismissal of their advisory board. This decision lays the foundation for a series of ideas and more developed concepts. But up to today there has come very little from any of these concepts. Concepts as; Mini golf parts, a dust bin as an elephant, "strategi viaArt", the digital strategy tool, the digital painting, playSea and playSea with massage jets and mixPlay. Today Playscapes work with the ideas of playSea, an element Playscapes have generated only to retail distribution. Digital products including the digital strategy tool and the digital painting, the strategy workshop viaArt and an field project at "Odense universitetshospital", which Playscapes intend to use as a springboard into colour therapy. It is in 2007 that Playscapes start dialogue with "Alexandria Instituttet" which leads Playscapes towards digital art.

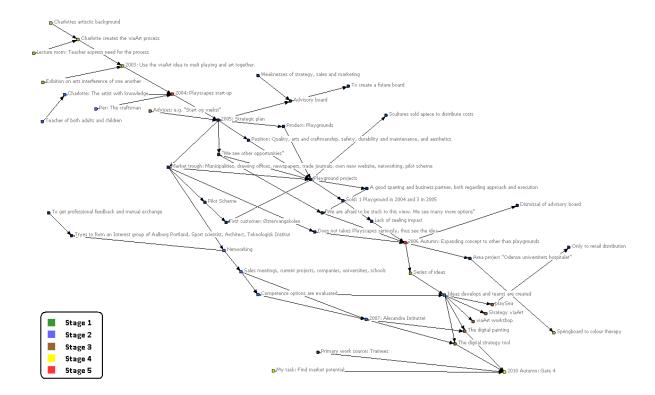


Figure 11: A cause / effect diagram of the start-up of Playscapes

During this period, Charlotte and Per spent much time with external partners. It is during these meetings that ideas have evolved and competence options have been evaluated and, not least that partners have been found to assist in realising ideas. Here they have among other things, driven to sales meetings and meetings in the search for partners for current projects (elements and playgrounds), not forgetting Playscapes' conversations in workshops with companies and other institutions.

In the wake of a long creative process, I come into the company as an intern in the autumn of 2010, just before Playscapes final blow for project approval regarding the digital strategy tool and the digital painting. My task as an intern has primarily been to; find market potential. From day one, there is a high pace, a funding application must be completed in the following week and another the week after. The primary work force comes from interns, thus creating a new team every six months in Playscapes. A summary and cause/effect diagram of the start-up of Playscapes is illustrated in Figure 11.

## THE DIGITAL STRATEGY TOOL

The first funding application is concerning the digital strategy tool for iKRAFT. Right up to the deadline the product content, technologies and ideas are discussed with "Alexandra Institutet", the technical business partner. The external market demands on the other hand are not placed too much attention. The driving force in the project remained continuously with Playscapes that should pull the strings before tasks in the network were performed. For example has "Alexandra Institutet" been responsible for the interconnection with the digital technologies and the idea, this process has been stretched even to the day before deadline.

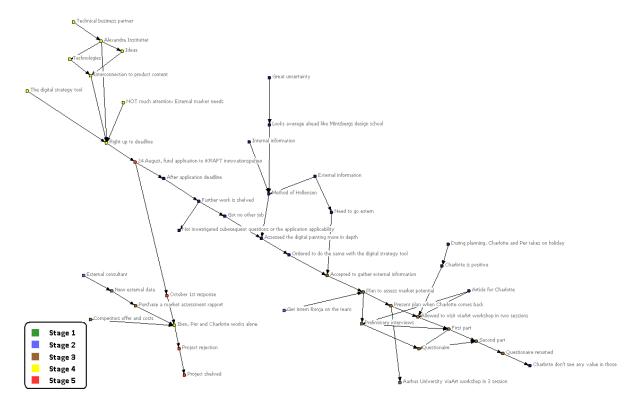


Figure 12: A cause / effect diagram of the digital strategy tool process

After application hand in, the further development of the tool is put on the shelf. There will not be assessed whether the fund has subsequent questions, and weak points of the application. I only get told that it is a waste of time to work with something unknown, but I get no other jobs!

Thus instead I started to assess the digital painting more in depth. This is done with the motive of the eight step guide of Hollensen (Hollensen, 2005), this guide serves as Mintzberg's Design School (Mintzberg, Ahlstrand, & Lampel, 2005), which intends to look average ahead, this seems sensible, since everything is still uncertain, so a detailed plan, would with great certainty be a waste. When I show the first overall results, I get orders to do the same with the digital strategy tool.

The Hollensen model requires both internal and external information, so to complete the guide; there is a need to go external. Because of this need, a green light is given to gather information about the digital strategy tool. Meanwhile Charlotte and Per take a holiday in Switzerland. In this period it is made clear how to explore the market potential for the product to see what users think about the product. When Charlotte comes back, Ronja (an intern) and I present our plan, and we are allowed to visit a viaArt workshop there is spread over two sessions. In the first part of the workshop preliminary interviews are conducted both in order to make an article for Charlotte but also to form the basis for a questionnaire that should be given after the second final part of the workshop. To get a greater understanding of the product viaArt Ronja and I have also been even invited to participate at Aarhus University for a workshop over three sessions. Charlotte sounds at that time very positive towards the initiative. But when the questionnaires are returned Charlotte remarks that she does not believe that it can offer any value at this time.

After a good month or so, around October 1st, Playscapes get response from iKRAFT. How this response precisely sounds, no one gets to know. In this phase Charlotte, Per and their good friend Iben works behind closed doors 24/7. However, I am asked to browse on competitors, what they offer and

how much they cost. Further Playscapes purchases a market assessment report by an external consultant to get data about the market potential for the product.

The project outcome is a rejection of the Fund. The project will not be completely forgotten, but shelved. The analysis of the digital strategy tool is presented in a cause/effect diagram in Figure 12.

## THE DIGITAL PAINTING

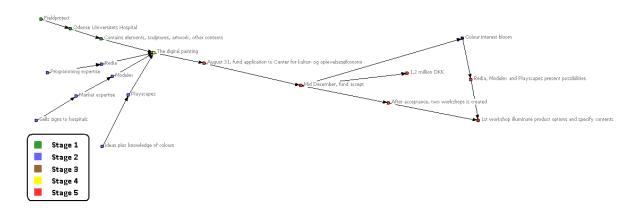


Figure 13: A cause / effect diagram of the digital painting process

A field project at "Odense universitetshospital" which should consist of some related landscape elements, sculpture, artwork or other content. It is in this context, that there is played with an idea of digital painting. The innovative challenge is to create a dynamic image that is constantly in motion. This project is also in the final stage, with two partners; Modulex who make signs for hospitals (market expertise) and Redia (programming expertise). The second application to be sent is about the digital painting to CKO. The response from CKO will come in mid-December just before the Christmas break and Playscapes gets granted approximately 1.2 million Danish kroner for the project.

After acceptance, two workshops are created with their partners Redia; who will be responsible for product development and Modulex; who have market experience. In this process will Playscapes assist as a partner with ideas and knowledge of colours and there impacts, this particularly interest were blooming at that time. The first workshop goal was to illuminate the product options, and specify its contents. The three companies presented the possibilities they saw from their own perspective and competence point of reference. A description of the product and meeting outcome can be found at the following link: <a href="http://www.cko.dk/gruppe/det-digitale-maleri">http://www.cko.dk/gruppe/det-digitale-maleri</a>. The analysis of the digital painting is illustrated in Figure 13 by a cause/effect diagram.

## LIGHT THERAPY

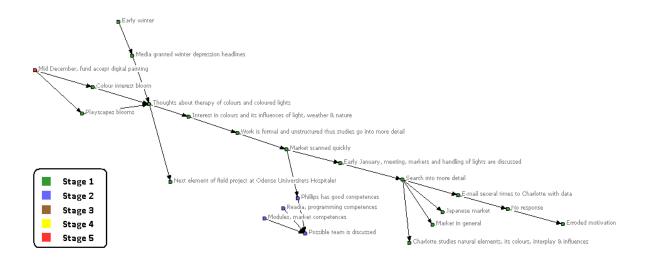


Figure 14: A cause / effect diagram of the light therapy process

Now Playscapes bloom and the idea of the digital painting pushes life in thoughts about the therapy of colours and coloured lights. This lead to the next element of "Odense universitetshospitalet"; how to make a light therapy room. The thought occurs in early winter when winter depression is granted headlines in the Danish media. This creates interest in light, weather and nature, their colours and influences. Here one can feel that an interest in the subject is being developed. The work on the topic is still informal and unstructured, but studies begin to go into more depth about the colours impact in healing art. The market will now be scanned quickly, where it appears that Phillips has a strong focus on the area. A possible team is discussed, where partners like Phillips with product knowledge, Redia with programming expertise and Modulex with market expertise are possibilities.

Early in January, on a weekly joint meeting the information search goes in more detail. Where possible markets for light therapy are discussed and how to handle the idea. Here, the interns are asked to find information on the Japanese market and to examine the general market and its opportunities in more detail. Charlotte herself begins to study the natural elements, its colours, interplay and influences. During this period the interns are emailing several times to Charlotte with details, but the information is never discussed together in Playscapes, which eroded the motivation to search.

## PLAYSEA - AN ELEMENT PROJECT

In March 2008, Playscapes advertise that they have designed playSea, targeted to the urban environment as art, bench, or a playing element. The particular of playSea is that Playscapes have gone against their old policy of designing elements to fields and then commercialising them. playSea was originally created in plastic with the possibility of free colour choices. Through 2010, a further development of playSea was going on, and one can from January 2011 have the opportunity to get playSea in fibre concrete. This has happened even though there has not been much sales of playSea. In the autumn of 2010 the intern Sanne found potential new dealers for Playscapes elements, this was

received well, but the management in Playscapes only send information about playSea to the potential vendors. It is as though one can feel: "there is a will that keep the product alive." Whether this is due to the high profit margin on the product or the feel that the product is well suited for the market is uncertain. But the product is still not discarded in Playscapes future plans. Conversely are the other elements dropped. This can be seen in Figure 16.

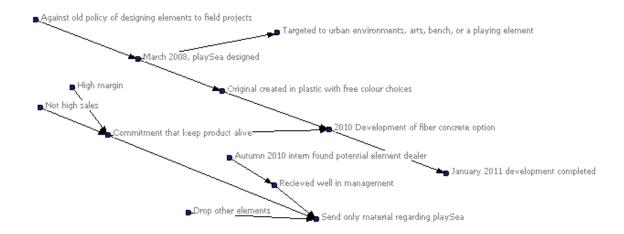


Figure 15: A cause / effect diagram of the playSea process

## STRATEGI 2011



Figure 16: Strategy of Playscapes 2011

On January 8 an introductory meeting was arranged with the new interns for this spring in Playscapes. They are introduced in what Playscapes will work with the coming spring, where especially "Odense universitetshospital" and light therapy are on the agenda, but also the digital painting and element sales. This is illustrated in Figure 16. The new interns are introduced to the viaArt method and a brief session about a better name for the digital painting is being carried out.

#### 4.2 ANALYSIS OF THE FUND'S APPLICATION PROCESSES – DECOUPLING

This is the quantitative analysis part according to the method. Although there is a minority of numbers in the analysis, one must remember that this assignment is created in a functionalist ontology. The prospective analysis is intended to show clear functional connections. Here in the form of the application process and the result it leads towards. The results derived are not numerically measurable, but this can be achieved by finding the functions which data are derived from.

Data are contextual, since the data are not collected in a closed laboratory, therefore bias exist. The contextual are created as the foundations are led by their own vision, as they have their stakeholders to serve. This information shall be discarded from data. To deduce the general, will a profile of the foundations be set.

Data are collected through foundation instructions and their websites (Oplevelsesøkonomi, Fakta om CKO), (Oplevelsesøkonomi, CKOs vækstpulje), (Oplevelsesøkonomi, Vejledning i at søge Vækstpuljen), (iKRAFT, om iKRAFT), (iKRAFT, iKRAFTs ansøgningsproces), (iKRAFT, iKRAFTs ansøgningskriterier), (iKRAFT, iKRAFT innovationspuljen).

# 4.2.1 IKRAFT INNOVATIONSPULJEN PROFILE AND VISION, THE APPLICATION PROCESS AND CRITERIA

iKRAFT is initiated in "Vækstforum" and supported by "Region Midtjylland". The goal is to increase qualified IT labour in the region, strengthening the IT-based cooperation in the region and internationally. By focusing resources on development of innovative IT and IT-enabled business models, and to ensure that projects benefit the entire region best and avoid distorting competition (iKRAFT, om iKRAFT).

Kategori	Fonds behov	Generelt behov
Erhvervsfremmeperspektiv	Skal kunne føre til kommercialisering og skabe forretningsmæssig værdi.	Skal kunne føre til kommercialisering og skabe forretningsmæssig værdi.
Nyhedsværdi	Anvendelse af forskning og/eller ny viden/teknologi indenfor it på en innovativ måde.	Anvendelse af fonds kompetencer.
Netværk	Nye netværk, minimum en virksomhed og en videninstitution	Udbredelse af fonds kompetencer og opbygning af netværk.
Støtte behov	Har brug for backup for at kunne få plan godt igennem. Eller Supplerer eksisterende tiltag.	Seriøs behov for fonds support
Relevans, anvendelighed og formidling	Bredere kreds end dem der er direkte involveret	Relevans, anvendelighed og formidling til fonds interessenter og "kundegruppe".
Efffektdokumentation	Konkrete og blivende resultater, på f.eks. medarbejder-, virksomheds-, institutions- og samfundsniveau.	Målbare og blivende resultater af interessenter.
Forankring, sandsynlighed for levedygtighed	Beskrivelse af samarbejdspartnere og deres opgaver og bidrag til projektet. Både formelle og uformelle	Beskrivelse af samarbejdspartnere og deres opgaver og bidrag til projektet. Både formelle og uformelle
Medfinansiering	Dokumentere medfinansierings tilstedeværelse	Villighed til projektet.

Table 15: The criteria to get approval of the foundation (iKRAFT, iKRAFTs ansøgningskriterier)

Paragraphs 1 to 4 of the application process are pasted below. These points are a good description of the process from the idea generation to the potential decoupling point. The application process is available on iKRAFT's website (iKRAFT, iKRAFTs ansøgningsproces).

- 1. Interesserede med ideer henvender sig til iKRAFT det kan være en netværksagent, eller iKRAFT-projektleder hos en konsortiepartner til en første uformel drøftelse.
- Hvis man ønsker en egentlig sagsbehandling af et projektforslag sender én af de involverede virksomheder på baggrund af drøftelsen en 1-2 siders beskrivelse per email til iKRAFT projektledelsen.
- 3. Hvis projektforslaget i sit udgangspunkt ikke involverer et deltagende videnmiljø, kan projektledelsen hjælpe med at finde en relevant sådan, således at forslaget minimum tilknyttes én konkret fagperson fra et videnmiljø.
- 4. Projektledelsen og fagpersonen hjælper forslagsstillerne med at undersøge mulighederne. Ved positivt udfald udarbejdes en formel ansøgning.

Table 15 shows the requirements needed in order to get the support of the foundation. The first column is a categorisation of the categories. The second column is the actual described needs from the foundation. In the third column are the specific needs of the actual foundation erased and the needs are made general.

Requirements for the content of the application for iKRAFT can be seen in Table 16, which summarises the sections with their purpose and format and with the "wh" questions.

Kategori	Formål/format	"hv" spørgsmål
Sammenfatning	Overordnet idé – vision Sammenfatningen skal indeholde en beskrivelse af hvordan projektet er værdiskabende i forhold til -Innovation -Forretning -Samfund	Projekt og fond (gate 4) vision.
Baggrund	Her beskrives problemstillingen bag projektet. Hvad bygger projektet på? Hvordan er ideen til projektet opstået?	Hvorfor (problemstillingen)
Projekt formål	Hvad er det, man vil opnå indenfor dette projekts rammer?	Hvad
Anden finansiering	Der redegøres for om der er ansøgt andre puljer og i givet fald med hvilket resultat.	Hvordan (finansiel)
Projekt beskrivelse	Gennemgang af hvordan projektet passer overens med fondskrav. Som ses i Table 15.	Hvorfor (fit med fonden)
Projekt organisation	En beskrivelse af projektets partnere, deres forventede bidrag og ansvarsområder, samt deres indbyrdes organisation (gerne i diagram)	Hvem (hvad)
Projekt plan	Beskrives i gannt-diagram eller lignende. Milestones og delmål beskrives	Hvornår (Hvad, hvem, hvordan)
Projekt budget	Her opstilles et projektbudget. Inkluderet heri beskrives den nødvendige medfinansiering	Hvor meget (Hvem, hvad)

Table 16: Content in the application of "iKRAFT innovationspuljen" (iKRAFT, iKRAFT innovationspuljen)

# 4.2.2 "CENTER FOR KULTUR- OG OPLEVELSESØKONOMI" PROFILE AND VISION, THE APPLICATION PROCESS AND CRITERIA

The foundation aims to generate growth through the use of experiences and strengthen competences in this field, through the cooperation between culture and industry. Projects must be based on business challenges and bring together companies, knowledge institutions, creative players and more to develop new concepts, products, knowledge and competencies. (Oplevelsesøkonomi, Fakta om CKO), (Oplevelsesøkonomi, CKOs vækstpulje).

The application process can be seen in Figure 17. Where collaborators are found before overall ideas are to be approved. The team must consist of one participant to perform the role as project manager and coordinator, and it shall specify one global project manager with legal and financial responsibility. The overall idea is assessed in relation to the final assessment criteria, in this stage the criteria are only assessed overall. If the project comes through the first milestone, this concept will be processed through two fond meetings, with the goal to promote and discuss the project's possibilities and limitations. Here, the Fund has the opportunity to discuss any issues and gaps in the initial application. Finally, an extended application is developed that meets the additional documentation requirements in sub activities of the earlier evaluated main activities. There are several instances assessing the application. First the secretariat in CKO and the final decision will be made at the Board of CKO.

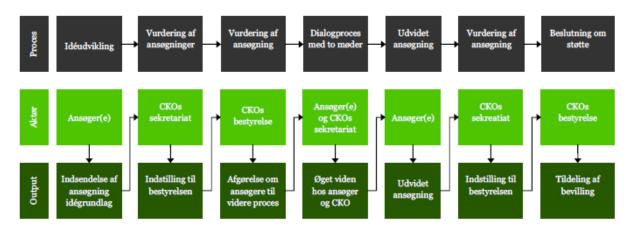


Figure 17: The application process for "Center for Kultur- og Oplevelsesøkonomi" (Oplevelsesøkonomi, Vejledning i at søge Vækstpuljen).

They work with four criteria; growth and market potential, innovation, knowledge sharing and collaboration, and competences. Its funding is provided in open competition, and the projects will be assessed in relation to each other. Grants are provided according to State aid rules. Completion of the four criteria in the vision is a prerequisite for support and to be able to substantiate this. The benefits of the project should appear to be more than merely the project holder and collaborators for good. The project builds on existing knowledge and skills of the applicant. Diversity in the form that the fund will support a diversity of methods and projects. Information must be accountable and co-financed; this must be done to ensure commitment and accountability. The budget for core activities must be specified. Table 17 describes the contents of an application which formats are desired and these formats transferred to "wh" questions.

Ansøgningsindhold	Format	"hv" spørgsmål
En beskrivelse af projektets idé Overordnet beskrivelse af nedenstående punkter for hovedaktiviteter	Koncept	Overordnet
Angivelse af projekts startdato og varighed En tidsplan for projektets hovedaktiviteter, underaktiviteter og leverancer	Tidsplan	Hvornår
En detaljeret beskrivelse af projektets hovedaktiviteter med angivelse af underaktiviteter og leverancer	Projektbeskrivelse	Hvad
En detaljeret beskrivelse, der redegør for formidlingsaktiviteter og projektets mulige videre forankring	Motivation for succes. Sikkerhed og forankring. Formidlingsaktiviteter.	Hvorfor/Hvordan
Hvordan man forholder sig til CKOs kriterier til tilskud	Hvordan projektet passer med fondens vision	Hvorfor
En detaljeret beskrivelse af projektets organisation og hver projektpartners ansvar og rolle i forhold til de forskellige aktiviteter og projektet som helhed. Såfremt der benyttes eksterne konsulenter skal deres rolle også beskrives i forhold til de aktiviteter, hvor de indgår.  Angivelse af regnskabsansvarlige samt ejerforhold.	Organisation, ansvar og roller i forhold til aktiviteter på tidsplanen. En arbejdsplan.	Hvem
Angivelse af projektets samlede budget, opdelt på hovedaktiviteter og underaktiviteter samt projektdeltagere Angivelse af det samlede ansøgte beløb	Budgettering	Hvor meget
Bekræftende angivelse af under hvilken statsstøtteregel, tilskuddet ønskes udbetalt under	Hvordan projektet passer med statsstøttes vision. En højere interessent til CKO fonden.	Hvorfor

 $Table~17:~The~application~contents~(Oplevelses \emptyset konomi,~Vejledning~i~at~s \emptyset ge~V \& kstpuljen)$ 

## 5 DISCUSSION AND RESULTS

This section will go through the concepts as the established overall framework suggests, as can be seen in Figure 7. These concepts are:

- 1. Decoupling and force field
- 2. The will as the driving force in the process
- 3. The need for storages
- 4. The need for a checklist
- 5. The process consisting of 5 stages.
  - Stage 1 objective:
    - o To transfer the idea into a concept that fits in line with the organisation vision.
    - o That the idea is possible to operationalise further within so a team can gathered.
  - Stage 2 objective:
    - o Ensuring the right learning modes and knowledge competences around the idea
    - To strengthen the commitment, so there is power to drive the idea all the way to the goal
  - Stage 3 objective:
    - To collect data and construct a database strong enough to conceptualise the idea.
  - Stage 4 objective:
    - o Assessing knowledge to a business plan, the business plan must cater for the recipient's vision.
  - Stage 5 objective:
    - o To get idea acceptance and to avoid decoupling.

In section 5.1 are the theory concepts hold against the case and the application processes, in order to attain a triangulation. After a brief discussion of the process, is a discussion regarding "what" one need to focus upon in the process stages with the centre to validate the management and regulation tool in section 5.2 and discuss possible add-on tools in section 5.3. Section 5.4 focus on "how" one shall proceed in the stages wherein a discussion of the tool types is in focus. The discussion will use triangulation of the case and application processes by use of story telling the history to present true knowledge. As the output of the process is determined of the input, are validation created in an observed coherence of the process stages and its content. Further, as the data matrix gives us what to measure, this tool gives us a possibility to make a good comparison with the data.

## 5.1 DISCUSSION OF THE OVERALL CONCEPTS AND THE SUGGESTED FRAMEWORK

The concepts regarding the process are firstly discussed. This is done from both the case and the application processes in order to triangulate the data. Then are the process and its stages discussed and evaluated with the same approach.

#### **DECOUPLING**

It can be seen in Table 18 that the decoupling hypothesis is fitting with the case study. Here employees stop cooperating with management, where they distrust old principles here in regarding to playgrounds. This caused the advisory board to resign; as the advisory board is the gatekeeper of the fourth gate their job is to enforce the vision. There are otherwise two options, that employees put the project on the shelf if the project does not meet the requirements of the gate, as the digital strategy tool, or that the project meets the requirements of the gate and is approved, as the digital painting.

It can be concluded that the willingness to implement the digital strategy tool have not been big enough, otherwise it would have decoupled. Here it should be noted that Playscapes need support to carry the idea into practice. One of the drivers to bring the idea into practice is that Playscapes must have something to live on in the future. In which there is hope, yet at the time where the digital strategy tool gets its disapproval about an approval for the digital painting. In other words, the force field must be seen in a whole.

	Legearealer	Det digitale strategiværktøj	Det digitale maleri
Fase 1	På baggrund af proces og tilstedeværende kompetencer.	Baggrund af udbredning, fordybning i kernekompetence. (Produkt)	Baggrund af projekt og fordybning i dette. (Produkt og marked)
Fase 2	Kunst viden for udvikling, murer viden for opsætning. (Produktet)	Playscapes for idéen, IT viden for udvikling. (Produktet)	Playscapes for idéen, IT viden for udvikling, Modulex for salg. (Produktet og marked)
Fase 3	Drøfter muligheder.	Drøfter muligheder og begrænsninger.	Drøfter muligheder og begrænsninger.
Fase 4	Vil alt, har ingen begrænsninger.	Samler viden i Produkt specifikationer. Foregår i lukket kreds	Samler viden i en Produkt- og markedsvurdering. Foregår i lukket kreds
Fase 5	Finder med tiden markedet for snævert, bruger for mange resurser, får for lidt!	Failure, projektet lægges på hylden	Godkendt
Decoupling	Uenig med advisory board. Dette fyres.		

Table 18: The outline of the case

## 5.1.1 THE WILL AS THE DRIVING FORCE IN THE PROCESS

Despite of poor market performance and the fact that there are two major development projects with a high priority is the playSea element still alive. It is like there is a willingness to keep this project alive. Further one can feel the digital painting idea comes to life as the exposure increases and vice versa with the digital strategy tool, which dies quietly out when data are assessed in a business plan.

"Alexandra Institutet" does not have a high desire to bring specifically Playscapes' project to success. The reason lies in the fact that "Alexandra Instituttet" will be equipped with projects from iKRAFT as "Alexandra Institutet" is a part of it. In the case, is it observed that "Alexandra Institutet" have been pulled in order to get their job done with the digital strategy tool. This project dies quietly out when data are assessed. The lack of commitment of "Alexandra Instituttet" can have influenced the rest of the group, thereby is commitment reinforced by its environment. If so, it is important that all parties have faith and willingness to execute the idea. The faith in success also strengthens the commitment. This is seen after the Fund's acceptance of the digital painting where ideas around the project flourish.

One of the success criteria to get funding is co-financing. This secures a commitment to the idea. But the commitment should also be shown in actions. Where the funding application value the criteria of documentation of the applicants actions through two criteria; how he will communicate the project and how he sees the projects relevance and applicability. The second criteria are concerned with the anchoring of the project and the resources that will be used in order to secure the probability of the projects' success and survival potential. It is further said:

"To him that will, wais are not wanting." (Herbert, 1640)

## 5.1.2 THE NEED FOR STORAGES

Regarding the digital strategy tool an interesting process is taking place. First the innovation process is stopped until Gate 4 has replied. But before Gate 4 arrives at an answer, Playscapes recognise that they have not considered the market orientation criteria significantly enough. Thereby the process is going back to stage 4. Since employees who must perform stage 4 are new, they are pushed further back to stage 3, as they do not possess the data needed, and to stage 2, as a new team is created for the job. This happens, but is quickly stopped when directors who possess the needed knowledge, find the data collection worthless.

If data is stored in a structured form, it would be easier to share knowledge. This is important, if new people become a part of the project, if employees, working on the project, cannot participate in all meetings, if the project is stopped and a new team is taking over the project later on, restart of the process can be avoided. By a data base one can use the stored data to get an overview of the knowledge which exists and their own knowledge shortcomings.

## 5.1.3 THE NEED FOR A CHECKLIST

In the study of fund requirements is there listed a process for the applicant to receive aid. It exists in both of the funds studied. These application processes can in themselves be seen as checklists. In these applications there is placed particular emphasis; to start out discussing the idea. Further that one's own skills fit in the elaboration of the idea, and that necessary skills are available. Furthermore that

information is collected and that a formula for the application is set around the needs which sought answers. This can be seen in Table 19. Further it can be seen in Table 18 that Playscapes have had problems not having all needed skills, according to the theory. In the playground period were an advisory board set up in order to cover for these shortcomings. The advisory board had expertise within strategy, sales and marketing.

In the case study are problems of assessing data in stage 4 found, while Playscapes do not know what to aim for. It is there that a checklist's strength lie, ensuring a unified whole and the pursue of a goal. This is seen in the case study, e.g. when the back loop of the process happens, due to a lack of assessment of market potential for the digital strategy tool. This is furthermore seen in the playground project, where knowledge is not put together, and actions are made without considering their context.

An interesting point regarding the digital strategy tool is that Playscapes do not see assessment of market potential as part of the objective of gathering knowledge. No, they see this as new knowledge, and seek this externally, thus making the knowledge Playscapes have picked up and possess wasted, as it is not used. In other words process thinking regarding our framework is of great value.

	iKRAFT	СКО	Teori
	Første uformelle drøftelse af idéen		
Fase 1	Indsendelse af idéforslag	-Roller: En projektleder og koordinator, én overordnet	Secure fit of idea vision.
Fase 2	Tilknytning af fagperson fra vidensmiljø	projektleder med juridisk og økonomisk ansvar -Vurdering/sandsynliggørelse ift hovedaktiviteter: Markedspotentiale Innovation Videnspredning Samarbejde og kompetencer	Create a team behind the idea and commitment.
Fase 3	Fagperson og projektledelsen undersøger mulighederne.	Møder med gate 4, formål at drøfte projektets muligheder og begrænsninger samt at dække mulige huller.	-Product/technology knowledge -Market opportunities -Financial possibilities
Fase 4	-Skal kunne føre til kommercialisering og skabe forretningsmæssig værdiAnvendelse af fonds kompetencerUdbredelse af fonds kompetencer og opbygning af netværkSeriøs behov for fonds support -Relevans, anvendelighed og formidling til fonds interessenter og "kundegruppe"Målbare og blivende resultater af interessenterBeskrivelse af samarbejdspartnere og deres opgaver og bidrag til projektet. Både formelle og uformelle Villighed til projektet.	Sandsynliggøre projektets holdbarhed. Sikre fit med ansøgers kompetencer og viden. At projektet ikke lapper over andre projekter. Vurdering ift. hoved- og underaktiviteter: Markedspotentiale Innovation Videnspredning Samarbejde og kompetencer	Evaluated business plan. Reasoning of choices.

Table 19: The outline of the analysis of the foundations

## 5.1.4 THE PROCESS - AN OVERVIEW

Figure 18 is illustrating a timeline of when the 5 stages are observed in the case study, it is seen that the stages corresponds well to the process. However A2 is observed later than A5, but A2 corresponds to a later second stage in the spiral, where the case attributes to a selection of people to carry out the concluded operations. It also appears that the three projects end differently, project A with a decoupling, project S with failure and Project D is yet, successful.



Figure 18: Shows the observed phases. A = Legearealer, S = Det digitale strategiværktøj, D = det digitale maleri. 1 - 5 = Fase 1 - 5. f = failure. d = decoupling, markering med \* bliver beskrevet nedenfor

The application processes of the foundations follow likewise the stages very well. The differences observed in the application processes are that iKRAFT has one more step, an informal discussion. Stage two is an official submission of the idea. The informal discussion is intended to explain how iKRAFT may help the idea holder, what its vision is and what opportunities it offers. Hereafter the idea holder thinks about how his idea can fit the Fund's vision and the result is a formal submission of the idea and its fit. If we compare this deviation from our process model, this informal contact can be seen as a stage where the vision is to be learned for the idea holder. CKO, by contrast, has a step less than the theory. But this first step includes both the security of a vision fit, here referred to as an assessment of the main activities. Furthermore it does suggest that there must be a fit with the applicant's skills, so he should not go out and find new skills in order to pursue the idea. And that the project has a probability to sustain and be successful, which are a part of the theoretical stage 2. The rest of the stages are fitting with the theory. This can be seen in Table 19 and Table 18.

We can therefore conclude that there are the five stages as the theory suggests, as seen in Figure 7. These five stages with the following objectives:

- Stage 1 objective:
  - o To transfer the idea into a concept that fits in line with the organisation vision.
  - That the idea is possible to operationalise further within so a team can gathered.
- Stage 2 objective:
  - o Ensuring the right learning modes and knowledge competences around the idea
  - To strengthen the commitment, so there is power to drive the idea all the way to the goal
- Stage 3 objective:
  - o To collect data and construct a database strong enough to conceptualise the idea.
- Stage 4 objective:
  - o Assessing knowledge to a business plan, the business plan must cater for the recipient's vision.
- Stage 5 objective:
  - o To get idea acceptance and to avoid decoupling.

## 5.1.5 HYPOTHESIS

We believe that a checklist strengthens the entrepreneur's preparation and thereby its power of persuasion, which reinforces his commitment to the idea, which thereby strengthens the innovation culture within the company.

The hypothesis can be strengthened as the commitment of Playscapes rise after project acceptance where a vision fit is observed. Here a checklist can be used to give this boost earlier in the process to give the innovators a clap on their shoulders and recon them for finding a suitable solution, give them the acceptance boost that they have passed a gate.

Further is it observed that projects that succeed exist in projects where Playscapes specific knowledge is found, such as the complexity of painting and to a lesser extend to the viaArt process. Thus in the digital strategy tool is most challenges in making the process digital and not as much the viaArt process. Further are concepts like mini golf parts and a playSea with massage tubes fast discarded as these ideas complexities do not fit knowledge and competences of Playscapes. Meaning that understanding, and thereby preparation, of complexities can lead to better persuasion and success.

## 5.1.6 THE PROCESS - IN DETAIL

In order to avoid repetition, the process is discussed in detail regarding the objectives of the stages in section 5.2 about "what" the metrics concerning the management and regulation tool are and the addons of the data matrix regarding learning modes and commitment in section 5.3. Section 5.4 treats the tool types, and is focusing and "how" the process shall be fulfilled.

## 5.2 THE DATA MATRIX

This section of the report has the focus to illustrate why management and regulation is needed, and that the data matrix is a good tool to use for this in the idea screening process. The discussion of the data matrix will triangulate case data and foundation application data. Furthermore are the foundations hand in requirements evaluated in the data matrix in order to test the applicability of the data matrix and the result needed in the idea screening process.

Gate 4 is in particular important, as the goal of the data matrix is to satisfy this gate. This means if the data matrix does not correspond to the needs of the gate, the tool will be useless. Of course foundations can have misunderstood the needs to gain operational effectiveness. So if a misfit is encountered, more data is in need. The analysis and discussion of this gate will be used as a validation of the created tool; this is further deepened in section 2.4 regarding the method. However this does prove the assumption of (Maaløe, 1996), if the result of gate 4 does reinforce the validity.

The management and regulation objectives to discuss are as follows:

- 1. To transfer the idea into a concept that fits in line with the organisation vision. And that the idea is possible to operationalise further within so a team can gathered.
- 2. Ensuring the right learning modes and knowledge competences around the idea. And to strengthen the commitment, so there is power to drive the idea all the way to the goal
- 3. To collect data and construct a database strong enough to conceptualise the idea.
- 4. Assessing knowledge to a business plan, the business plan must cater for the recipient's vision.

## 5.2.1 GATE 1

Objective: "To transfer the idea into a concept that fits in line with the organisation vision. And that the idea is possible to operationalise further within so a team can gathered."

The first point in the funding applications, as be seen in Table 16 and Table 17, is separated from the other points; this point is referring to an overall idea. The first process step in the foundations is also to hand in ones project idea at first. It is called "sammenfatning" in regards to iKRAFT, which is asking for the overall vision of the idea and how this idea fits three visionary criteria of iKRAFT. So a benchmark is taking place. CKO have the point "beskrivelse af projects ide og dens overordnede beskrivelse af nedensåtende punkter for hovedaktiviteter". This illustrates a need from the gatekeepers' point of view in getting an overall concept at first, before moving on to the next stage.

iKRAFT have three criteria (core business words): "forretning, at projektet skal være rentabelt, innovation at projektet skal være nyt, og samfundet, at projektet skal kunne styrke regionen." These three criteria should in our typology be part of the business glossary. As the glossary is guiding for the other "wh" questions can these be filled in regards to specific needs of iKRAFT. "Where", is in "Region Midtjylland". "Who", are "IT" competences and so on. By mapping these, the foundation get an overview of what there exist in regards to its visionary area and it can manage and regulate projects accordingly, with business partners and according to IT gaps.

	Det digitale strategiværktøj (Alexandra Instituttet, Playscapes ApS, Erhvervsakademiet Århus, & eBag SolutionsA/S)	Det digitale maleri (Playscapes ApS, Center for Kultur- og Oplevelsesøkonomis websted), (Playscapes ApS, Playscapes websted)	Lege- og opholdsarealer (Danske Ark Byg), (Birkmose, 2005)
What	Innovationsprocesser skal møde færrest muligt forhindringer. Skal være nemt tilgængeligt, mest muligt interessant at bruge og deltage i. Dette skal ske gennem delvist refleksion og aktivitet.	At skabe et foranderligt element i rummet, som er smukt, som appellerer til sanserne, og som visualiserer forskelligt indhold og situationer til betragteren. Det Digitale Maleri er et digitalt produkt, hvor billedkunst og teknologi tilsammen skaber et af fremtidens nye skærmprodukter.	At lave kunst, som børn kan bevæge sig rundt i. Skulpturerne skal skabe legende og organiske former med oaser til ophold og refleksion. Det skal ideelt set være pladser med værdi for mennesker i alle aldre. Lege- og opholdsareal skal nedbryder sociale barrierer, skabe innovation og samtidig være æstetisk fortryllende.
How	Forbinde mennesker i en struktureret udviklingsproces. Kombinere strategi viaArt med en dynamisk, interaktiv proces, som skal være multimedial og foregå via web.	Med udgangspunkt i billedkunstens kvaliteter koblet med interaktive egenskaber at skabe nye former for skiltning og informationssystemer. Det interaktive består eksempelvis i, at ændringer i farver, komposition og hastighed påvirkes af ydre stimulation. For at kunne realisere dette bruges input fra diverse kilder, såsom vejrforhold (fra DMI's database), støj i det fysiske rum (lydsensor), tilstedeværelse af mennesker (måske bestemte typer af mennesker – f.eks. et barn, kamerabaserede sensorer som kan fortælle hvor mange og hvilke type menneske der i omgivelsen), eller lignende.	Abstrakte og organiske former appellerer til aktivitet, fantasi og opfindsomhed.  Den kollektive fantasi opøver også børns evne til sproglig formidling og begrebsdannelse, idet skulpturerne har et abstrakt formsprog, der gennem sproget gøres begribeligt og forvandles til forskellige platforme for leg.  Der foregår nu mange forskellige aktiviteter samtidigt, fordi området ikke fastlåser børnene i bestemte legemønster. Børnenes lege breder sig også ud over de andre områder i skolegården. Det betyder indirekte, at området gør nabopladsen mere brugbar. Hvor legene før var splittet op i grupper af børn, samler det nye legeareal børnene socialt.
Where	På tværs af tid og <u>sted</u>	Hvor mennesker færdes. At forbedre oplevelsen af offentlige rum. I første omgang mod sundhedssektoren. I både patientstuer og i opholdsrum på Odense universitetshospital.	Kunst-, lege- og opholdspladser.
Who	Forbinde mennesker i moderne virksomheder	Da farvernes kunstneriske såvel som terapeutiske kvaliteter vil have en positiv indvirkning på både patienter, personale og pårørende.	De er beregnet for det legende menneske i alle dets facetter. Alle aldre
When	På tværs af <u>tid</u> og sted		Grundformen skal være tidløs og universel. Til leg; Leg forstås i en bred betydning, som omfatter det at opfinde og udvikle.
Why	For at innovation kan indgå naturligt i hverdagen i en moderne virksomhed. Skaber helt nye samarbejds- og organisationsformer. Den digitale Platform vil kunne videreudvikles også for andre webløsninger	Nye former for skiltning og informationssystemer bliver efterspurgt i fremtiden ikke mindst produkter, som tilfører skilte og digitale skærme mere oplevelsesbaseret værdi. Æstetiske omgivelser påvirker sindet og skaber stemning. Foranderlighed vækker os af vores rutiner, og åbner vores øjne for vores omgivelser.	Børn har så meget fantasi, og de elsker at finde på hele tiden. Alle taler meget om at fremtidens mennesker skal være skabende og kreative, og jeg tror på, at vi skal give børnene de bedste betingelser for at holde liv i legesansen for at kunne finde på noget nyt hver dag.  Nyere forskning konkluderer, at antal legemuligheder er afgørende for børns aktivitetsniveau.  Hun tror på, at det er fra legen, at innovation udspringer.  At styrke børns trivsel.

Table 20: The concepts of the digital strategy tool, the digital painting, and playgrounds

If this information were structured, it would be easier to apply with the needed information. This is seen as a problem in regards to the application of Playscapes, which is listed in Table 20. Who think of

the project as independent and not as a part of the regional society as it should be. This need is not stated clearly, though the stakeholders of the foundation are using the fund to gain jobs and strengthen the IT competences within "Regionen". From the point of businesses are good benchmarking possibilities wished for, as it is from the foundation, so projects can be in line with both visions, and both can get a good outcome.

The vision of an idea has first of all to be in line with the organisation's vision and secondary to the vision of other stakeholders. As foundations work as gate keepers, must the idea vision fit the vision of the foundation if acceptance is wished for. But this vision must constantly be in line with the vision of the organisation.

The vision of Playscapes has since 2006 broaden much, as Playscapes found the old one to narrow. The visions are listed in Table 21. In 2006 is the importance in Playscapes to use their artistic process viaArt in the development of playgrounds or concepts in general, thus containing art, accommodation and recreation. In 2007 and beyond is this frame softened, where focus is put on development, growth or disengagement of resources; to find projects with business value. Playscapes is in this period gone back into the organisational pre-birth stage, without any primary source of income.

Playscapes vision 2006 (Playscapes ApS, Playscapes Identitet, mission, vision strategiarbejde, 2006)	Playscapes Denmark vil med udgangspunkt i en kunstneriske metode, de lokale behov, ønsker og udfordringer udvikle koncepter, hvor kunst, ophold og rekreation (det legende) smelter sammen.  Det vil vi gøre både inden og udendørs inden for forskellige områder:  Legepladser, kirkegårde, virksomhedsdomiciler, skoler, biblioteker, gårdmiljø.
Playscapes vision 2011 (Playscapes ApS, Playscapes websted)	Playscapes er en innovativ virksomhed, som så dagens lys i 2004. Vi arbejder ud fra en kunstnerisk proces og skaber udvikling til offentlige og private virksomheder. Vi udvikler vores produkter og ydelser med fokus på menneskelige relationer. Vi skaber rum for udvikling, vækst og frigøring af potentiale inden for tre områderartScapes, Skulpturelle fysiske rammerviaArt, Struktureret kreativ procesinnoArt, Visionær løsningsorienteret udvikling.

Table 21: Playscapes vision in 2006 and 2011

There is a clear fit with regards to playgrounds between art, accommodation and recreation in enhancing the sense of play and play opportunities of children; thereby can both the children's activity level and well-being be increased. Wherein Playscapes can use their creative process for development.

The digital painting focuses on a future business opportunity, further the use of art as the centre of the idea, makes the usage of the artistic process easy.

The digital strategy tool focus is on development of an IT platform in a way so the potential of the platform can be utilised broadly. The idea is also meant to unleash potential in innovation processes in companies. This idea is based precisely on the artistic process viaArt.

From Playscapes perspective does all three ideas fit with their however very broad not easily measurable vision. This concludes the need of a measurable vision in which one can benchmark possible ideas.

	What (Data)	How (Function)	Where (Location)	Who (People)	When (Time)	Why (Motivation)	Cost/Benefit (Finances)
Business	Fund,	Through	Region	IT and art		To both finish	

modelling (development)	Market, IT, Financial	CKO and OUH.	midtjylland	strategy IT: Redia Artists: Charlotte Iben Financial: Per Market: Modulex		a field project and get new market opportunities	
Business process models (enterprise)	Growth and market potential Innovation Knowledge sharing and collaboration Competences	Through CKO	Region midtjylland	Culture and Industry.	2010- 2011	Business challenges Build competences	

Table 22: A brief comparison of the digital strategy tool in relation to CKO

With Playscapes in focus can examples regarding elements be drawn. A project could be to reduce production costs, which are found high "why". Here different production methods could be evaluated according to "how", different vendors in "who", offshoring in "where", the actual content in "what". These ideas should still follow the vision of Playscapes regarding where the products can be sold, and what competences they can pull in an investigation and so on. But in order to get a proper benchmarking the "wh" questions should be mapped accordingly. A brief illustration of the digital painting and CKO is shown in Table 22.

## **RESULTS**

- A need for structured benchmarking from both Playscapes and the foundations are found. The suggested benchmarking method is furthermore found useful.

## 5.2.2 GATE 2

Objective: "Ensuring the right learning modes and knowledge competences around the idea. And to strengthen the commitment, so there is power to drive the idea all the way to the goal."

In all Playscapes projects are partners added, the second row in Table 18 shows the partners in the projects of Playscapes. This table reveals a lack of market and finance competences in most of the projects, with the exception of the digital painting.

A need is seen regarding the importance of financial skills and management and regulation of financial possibilities. In Playscapes there is a focus only on a single option to get financial backing. (iKRAFT for the digital strategy tool and CKO for the digital painting), if the option does not apply, the project is shelved, and Playscapes moves on with the next idea, as were the result of the digital strategy tool.

Playscapes have had their troubles in how to market its ideas; low sales regarding playSea and playgrounds, and iKRAFT asked specifically Playscapes to deepen the understanding of market potential. Thus a focus has been on the resource base, as competences and interest are in this field. In the digital painting which is still successful Playscapes have outsourced the marketing function to

Modulex, further Redia is providing the technical support and CKO allocate the financial support. Thereby, the three essential competences are allocated in the digital painting, which is yet successful.

It can be seen in Table 19 that the foundations have a focus to guide one with technical expertise. iKRAFT affiliate an expert to ones project, to guide one in the search of possibilities, this expert was in the digital strategy tool holding technical expertise (Balesuthas from "Alexandra Instituttet"). The application process of CKO is not concerned with affiliating experts to projects, but CKO put experts at disposal in two meetings with the goal to increase the applicant knowledge of the subject area. What the content of these meetings are is probably given to what the foundation find most relevant, in order to be willing to aid the project. Further CKO is centred on the applicants' competences. Again nothing specific is mentioned. Thus in stating this is a human resource viewpoint.

### RESULTS

- The idea risk to fail if; financial and market options are not evaluated properly. Further much emphasis is put on technical options.

## 5.2.3 GATE 3

Objective: To collect data and construct a database strong enough to conceptualise the idea."

If knowledge is not documented it is tough to establish an overview regarding what knowledge exist and not. This can result in a loop backwards, as for the digital strategy tool. In this example Charlotte stops the data gathering as she found the process unnecessary as she already possessed the knowledge. Thus she is not communicating it. Here a database system would be of great use.

Furthermore there are good indications that this knowledge is not well expanded, as the first potential partner who comes along is taken. Playscapes have only assessed one fund per project and applied to this particular foundation. They have only evaluated a single technical partner per project and thereby are the possibility of this particular one assessed alone. Regarding market competences a learning process is seen. At first they tried to scope widely, which a result of resources wasted in areas where no markets are possible, as is indicated regarding playgrounds. The digital painting is further only one partner assessed. This creates an early lock-in, which according to theory should first be created in stage 4. By this assessable potential possibilities could be ignored. This early lock-in can lead to projects being shelved before they are properly investigated, as for the digital strategy tool.

During this stage expertise is important as stage 2 secures regarding the necessary areas. In the case this is primarily seen for the digital strategy tool in the back loop. Here the model suggested by Hollensen is used to gather information, leading to an external market analysis and an internal resource evaluation. By this the technical as well as the market view is used together. The foundations put experts available for the applicant with the objective to increase the applicants knowledge, the specifics of knowledge is not mentioned, see Table 19.

## **RESULTS**

- To structure and save data, so one can see what is known and what is needed, so a well founded fit can later be assessed.
- If options are found to be miss-fitting, multiple data possibilities are necessary if a good fit should be created.
- That expertise is necessary both regarding an internal resource evaluation and an external market evaluation. Further financial resources are in need to get projects moving.

## 5.2.4 GATE 4

Objective: "Assessing knowledge to a business plan, the business plan must cater for the recipient's vision."

It can be seen in Table 16 and Table 17 that a good comparison of Zachman's second phase of conceptualised "wh" questions and the data base wished for from the foundations perspective. The theory describes how, where, who, when, why one does what and "how much" what costs.

HOW

A business process model is there to show how one will work; this data can be found in both funds as how the project's anchorage (forankring) is secured, but also how dissemination (formidling) is ensured. This part is important to see how thoughtful further work on the project is. How one will tackle the issues that lie ahead. In larger projects, the point may be particularly important in order to ensure a substantial standard so outputs and information can be uniformed, by e.g. working practices.

WHO

In CKO and iKRAFT are roles and their prime responsibilities wished for, by using an organisation chart. Further should their roles be planned and put into the timetable in CKO.

WHERE

Where the dissemination (formidling) of data or goods occurs. This corresponds to the points under dissemination (formidling) and collaboration (samarbejde).

**WHEN** 

In the CKO and iKRAFT applications are a timetable wanted, in iKRAFT by using a Gant-Chart.

WHAT AND WHY

It is important to have a business glossary so a uniform perception can exist. What is also the question in the point of departure when comparing data with the other "wh" questions; what is done by why, how, where, when, why and for how much. If we drag out knowledge areas needed in a fund application does it match the funds business glossary. An example could be in regard to the question why, 10 points is listed in Table 23, from this are the business glossary in column 1 and the why criteria in column 2. "What "is a description of the project. "Why" is the entire business plan.

Business glossary	Business glossary regarding "why"
1. Erhvervsfremmeperspektiv	Som skal vise den forretningsmæssige værdi, som er marketing funktionens speciale.
2. Innovationshøjde	Som skal vise at projektet har behov for ny viden eller innovativ forskning, dette er Product/Service development funktionens rolle.
3. Samarbejde	Hvor projektpartnernes samarbejde beskrives, dette er Human Resource funktionens rolle.
4. Additionalitet	Er et punkt som beskriver de aktiviteter der uden fondens hjælp ikke ville kunne blive udført. Som er den teknologi funktionens rolle. Men også finans funktionens rolle.
5. IT-mæssigt fokus	At fokus er IT baseret innovation, dette punkt er afledet af fondens vision, og svarer også til det den tekniske funktion arbejder med.
6. Pilotprojekt	er endvidere en del af fondens vision, at projektet skal kunne benyttes af så mange som muligt, denne del ligger under Human Resource funktionen, men også den tekniske funktion og IT funktionen.
7. Formidling	Handler om hvordan projektet bliver formidlet, dette hører under Human Resource funktionen.
8. Effektdokumentation	Dokumenteringen af de resultater som projektet kan medføre, hvis projektet er et produkt vil det primært være Marketing funktionens rolle. Hvis produktet er en arbejdsproces, vil det primært være IT funktionens rolle.
9. Forankring	Som har til formal at klargøre sandsynligheden for projektets levedygtighed efter færdiggørelse, denne opgave ligger hos operation funktionen, men også i Human Resource funktionen, som skal sikre at der er motivation hos medarbejderne.
10. Med finansiering	Her beskrives den forudsatte medfinansiering, denne er delt op imellem finansfunktionen og Human Resource funktionen, da medfinansiering også kan være I mennesketimer.

Table 23: Business glossary of iKRAFT (iKRAFT, iKRAFTs ansøgningskriterier)

**HOW MUCH** 

CKO and iKRAFT applications are wishing for a budget, this answers the question about how much what costs. Here Playscapes have in their application to iKRAFT also added who co-finances what.

## **RESULTS**

- In order to gather a proper business plan, all "wh" questions are important.

## 5.2.5 SUMMARY

This discussion illustrate the need for a management and regulation tool in all aspects of the process and regarding the tool goal. Thereby is the validity of the tool tested and approved twice.

## 5.3 ADD-ON CONCEPTS TO THE DATA MATRIX

The data matrix has two misfits regarding the ability to manage and regulate the idea screening process, which is concerning learning modes and to check commitment in the project team. This section will investigate how these two subjects can be managed and regulated; the two subjects are in stage 2. In this stage does the data matrix cover competences and their fit with the idea.

#### 5.3.1 LEARNING MODES

It is difficult to distinguish between commitment and personality types. The discussion also shows a need to have personality types focusing on commitment. Furthermore puts Kolb emphasis on personality types and in particular the terminology of Myers and Briggs.

If we refer to the scheme in Figure 5, dies Charlotte fit the scheme as being a creative artist. This makes her personality type good to lead when knowledge should be gathered. On the contrary an engineer likes to put knowledge together. But in doing so the knowledge which Charlotte possesses is in need. This causes the back loop regarding the digital strategy tool.

"Alexandra Instituttet" is responsible for incorporating the IT technologies regarding the digital strategy tool. This process is stretched to right before application hand in. "Alexandra Instituttet" has no interest in any particular projects, as iKRAFT provides the institute with projects. This lack of commitment spreads to the rest of the team and the application is finished late. Therefore a focus upon commitment is important.

It is seen in the case where responsibility is not handed out properly, problems arise. This responsibility should be handed out to stakeholders who have faith and commitment. This suggests further the theoretical hypothesis. In the analysis of application processes a project leader with a legal and economical responsibility in the CKO foundation is a requirement. This project leader shall coordinate the project. As the idea in the idea screening process is weak, central government is found important, so the idea is not forgotten and so other projects do not take focus. This project leader should of course be good at coordinating projects, and have a commitment to lead the idea to success.

Through this short examination of the case and fund application processes four personality types are found important.

- The creative one
- The structural one
- The committer
- The coordinator

Here can personality tests be used. A good comparison is found with MINDEX <sup>1</sup> and its four personality types. Furthermore a MINDEX test explains how one learns best. The idea of such a test is to illustrate which personality types the group possess and to put focus on using these best, if gaps are found the test can be used for regulation.

May 31, 2011

<sup>&</sup>lt;sup>1</sup> See enclosures for MINDEX test example.

## **RESULTS**

Objective: To evaluate personality types of the team.

Measurement: Do the team possess the needed personality types properly?

### 5.3.2 CHECK WILL POWER

At first it could seem hard to measure commitment. If we look at the example with "Alexandra Instituttet" and their lack of commitment, is it seen that they should be pushed to solve assignments. The argumentation regarding commitment is put on ones engagement<sup>2</sup> in that one do, what one are told. In marketing, the interest for a product is found by this way of thinking. Where an interested buyer has more interest than normal, hereby doing more than expected in order to get the product. This thought can be transferred in our case to measure commitment. Where one can measure the amount of work done or how fast work is done, and if work is done before deadline.

### **RESULTS**

Objective: To evaluate the commitment of partners, especially the one coordinating (see the part regarding learning modes).

Measurement: That one does an additional effort.

May 31, 2011

<sup>&</sup>lt;sup>2</sup> Engagement is a synonym for commitment (Axelsen, 2009)

#### 5.4 THE TOOLBOX

It is concluded that the theory stated regarding the process and the management and regulation tool is suitable. Here the process lists concepts/challenges where the tested tool puts up metrics in order to be able to manage and regulate. This section will deal with "how" one can fulfil the metrics; the result will be types of tools to use. Chapter 6 regarding scenarios will deal with specific tools fitting according to four theoretical cases.

In doing so the case will be drawn into a discussion, where its actions of how they fulfil the gates will be discussed. Meaning that historical perspectives as our ontology suggest used are necessary.

## 5.4.1 STAGE 1

Objective: "That the idea fits in line with the organisation vision" and "That the idea is possible to operationalise further within, so a team can be hooked up to the idea."

There are indicators referring to Playscapes visionary frame of 2004 is weak from the very start. In the first documented strategy plan Playscapes are mentioning possibilities of other business opportunities, but that they for "now" will concentrate on the selected business area. Further choices in the strategy plan are not done, resulting in a plan that frames all.

In 2007 Playscapes is breaking the founding frame and vision. This break forced the advisory board (the gate keepers) to resign. It is in the period just after this break that Playscapes has its creative period. Ideas are turned out which never take root in the company. The ideas unify around art and playing, thus it has been tough finding market potential, as is hard in any undefined market area. As Playscapes do not have a clear cut frame, they have nothing to benchmark projects towards. Therefore all ideas could be just as good and it is tough to choose, and one gets nowhere. This asks for business overview and thereby mapping, so ones resources can be understood.

In autumn 2010, where I start my internship at Playscapes, are resources spend on the digital strategy tool and the digital painting. It seems like an informal frame has been accepted around art, its effects as both healing and idea promoting, here interplay with IT is welcome.

This shows the organisational frame is constructed in correlation to one's own competences and competences available in ones network. Further this illustrates that this is done over time, like in stage 2, and that potential team players build upon the initial vision. Therefore an understanding of one's stakeholders would bring one closer to future possibilities.

## **TOOLS**

- Benchmarking of "wh" questions
- Overview of stakeholders

## 5.4.2 STAGE 2

Objective: "To transfer the idea into a concept that fits in line with the organisation vision." and "That the idea is possible to operationalise further within so a team can be hooked up to the idea"

Backing of the idea and the development of a team should happen first internally, then externally. If we briefly look at the history of Playscapes, there is seen a usage of competences at first from the immediate environment. Here Charlotte is the driving force. She invents the viaArt process through conversations in her immediate environment, in connection with her study and education environment. The idea is refined to fit her cohabitant's competences as master builder. Thereby can she create sculptures and playgrounds which her cohabitant can build.

The market potential for this constellation is found too narrow and the chase to enlarge is done through networking e.g. at meetings and viaArt workshops. In 2007 Playscapes gets in contact with "Alexandra Instituttet", an innovating IT institute. This opens for IT solutions at first for their visionary process viaArt in form of the digital strategy tool. Later the idea of a digital painting occurs. Thereby the external environment is used to enlarge oneself.

The vision is developed in the cooperation with ones stakeholders, through the team creation period in stage 2. But the vision that one develops need to fit the organisation, and build up ones vision; therefore a clear cut operationalised vision is a good idea. This is also the conclusion in section 5.4.1.

In the idea enlargement process commitment is in need to make the idea grow as is noted in section 5.1.1, here the lack of commitment from "Alexandra Instituttet" is used as argumentation. This means that backing from the stakeholder one has, first internal then external, should be gained.

The example of Playscapes blooming after gate acceptance in section 5.1.5shows that checklists strengthen the backing by an observed fit.

E-bag is found in the digital strategy tool project to have a commercialised IT platform; this partner is gathered by "Alexandra Instituttet". The competences of the partner are not understood by Playscapes and all IT related issues are left with "Alexandra Instituttet", which lacks commitment.

In the example regarding E-bag, is it seen that partners are first found from ones immediate network and if this is not found acceptable contacts are found further out in ones network. This can though create an early lock-in and a search for the first competences that comes along. This process needs to be structured as discussed in section 5.2.2. Therefore an overview of potential partners is needed, and how one and they are fitting together. The competences needed are discussed in section 5.2.2.

My job in Playscapes has been to assess knowledge, which fit my educational background as an engineer; my first assignment was to finish the application to iKRAFT regarding the digital strategy tool. As I could not do this alone the issue regarding data lack and the back loop arises. The team needs to work together and use each others preferenced learning mode; this is what divides a team and an individual. Possible personality types are found in section 5.3.1.

## **TOOLS**

- Backing and networking
  - o Benchmarking idea to prepare personal confrontation, first internal then external
  - Observed fit
- Overview of potential partners and benchmarking of personality types
  - o Competences
  - o Personality types

#### 5.4.3 STAGE 3

Objective: "To collect data and construct a database which can conceptualise the idea."

In January 2011, thus after the approval of the digital painting, is partners gathered in order to develop the concept. This can be seen as the next phase of the learning spiral suggested by Kolb. For preparation are interns ordered to find alike products and there use. Primarily regarding light therapy and its healing qualities. Possible markets are investigated and evaluated. Charlotte studies colours and natural phenomena. Investigation methods are in this process unstructured as Stacy suggests. This knowledge and the rest of the partners knowledge is shared in viaArt workshops.

After application hand in to iKRAFT regarding the digital strategy tool, does Playscapes find it necessary to investigate the market potential of the idea further. This lead to external investigations of users through interviews and questionnaires, about their usage of the tool and its functionality and applicability, the interaction in the tool, and not the least the overall effectiveness of the tool, this has been done to better understand who the tool fit, how it shall be marketed, and what there is important to incorporate in a digital version of the tool. This process has though been stopped as Charlotte had a good understanding of these areas.

This challenge can be solved by sharing ones knowledge. E.g. through mapping suggested in section 5.4.1. In such a process will a database be preferred in order to manage and regulate resources, so people does not search for the same knowledge, as discussed in section 5.2.3. Further this will be an advantage if new employees arrive or take over the process, as e.g. happens often regarding interns in Playscapes. And furthermore to avoid lock-in too early in the process so idea possibilities and a good fit can be constructed in stage 4.

## **TOOLS**

- Investigation methods
  - o Unstructured
- Overview of knowledge

## 5.4.4 STAGE 4

Objective: "Putting knowledge together into a business plan, the business plan must cater for the recipient's vision"

Lots of meetings take place in stage 4 in the iKRAFT application, regarding potential project partners, finances and negotiations, and the discussion regarding technical as well as market possibilities. Thus nothing is concluded, and focus is still upon possibilities and not an assembled plan, with specific content, which is the centre in stage 3.

It is tough assembling knowledge when a clear cut goal is missing, further structural tools are not used and meetings are hold with a low level of detail. Resulting in much time spent in meetings to gain and complete partners perceptions. As viaArt is a structural tool this occurrence is found strange.

### **TOOLS**

- Overview of
  - o Ideas
  - o Different perceptions

## 5.4.5 SUMMARY

In order to make good scenarios and avoid repetition in chapter 6, are the tool types concluded in this section structured, the tools concluded are listed in Table 24.

Stages	Stage 1	Stage 2	Stage 3	Stage 4
Tool types	1.Benchmarking of	1.Benchmarking of	1.Investigation	3.Overview of
	"wh" questions	idea	methods	-Ideas
	2.Overview of	2.Backing and	-Unstructured	-Different
	stakeholders	networking	2.Oviewview of	perceptions
		-Benchmarking idea	knowledge	
		to prepare personal		
		confrontation, first		
		internal then		
		external		
		-Observed fit		
		3.Overview of		
		potential partners		
		and benchmarking		
		of personality types		
		-Competences		
		-Personality types		

**Table 24: Summary of Tool types** 

Table 25 have structured the tools found in this section. Tools to gain overview is needed, this can be done through structuring of the issue at hand. For making good benchmarks, specific mapping tools

are needed around the "wh" questions. Personality is also focused on benchmarking, but in regards to personality types. Investigation tools are how one can find data in this process. The stage-gate-model is illustrated, as accept with a gate create an observed fit, further does the hypothesis of the report suggest that this will strengthen commitment. One could find tools needed for networking. Though is this more a matter of skill than tools. Networking will thus not depend much on idea complexity, though the network professionalism and culture does!

Tool	Structuring	Mapping	Personality	Investigation	Stage-gate-
type					model
Issue	Stage 1 -Overview of stakeholders Stage 2 -Overview of Competences Stage 3 -Overview of knowledge Stage 4 -Overview of ideas - Overview of different perceptions	Stage 1 - Benchmarking of "wh" questions Stage 2 -Benchmarking of idea	Stage 2 -Benchmarking of personality types	Stage 3 -Unstructured	Stage 2 -Observed fit

**Table 25: Structuring of tool types** 

# 5.5 COMPARISON OF THE IDEA SCREENING PROCESS, DATA MATRIX AND TOOLBOX

Table 14 shows the target in each stages of the idea screening process, the target been measurable and managereable by using the data matrix, column three shows the add-ons to the data matrix and column four shows which types of tools that are needed to help in different stages to proceed.

Stages/Gates	The idea screening process	Management and regulation (Data matrix)	Add-on concepts	Toolbox for entrepreneurs
Stage 1/Gate 1	To transfer the idea into a concept that fits in line with the organisation vision.     That the idea is possible to operationalise further within so a team can gathered.	To complete row 1 in Table 7		1.Benchmarking of "wh" questions 2.Overview of stakeholders
Stage 2/Gate 2	1. Ensuring the right learning modes and knowledge competences around the idea 2. To strengthen the commitment, so there is power to drive the idea all the way to the goal	Ensure at least one marketing, one technical and one financial competence in the initial screening phase.	1. Learning modes 2. Commitment	1.Benchmarking of idea 2.Backing and networking -Benchmarking idea to prepare personal confrontation, first internal then external -Observed fit 3.Overview of potential partners and benchmarking of personality types -Competences -Personality types
Stage 3/Gate 3	1. To collect data and construct a database strong enough to conceptualise the idea.	To gather data by the use of the data matrix.		1.Investigation methods -Unstructured 2.Oviewview of knowledge
Stage 4/Gate 4	1. Assessing knowledge to a business plan, the business plan must cater for the recipient's vision.	To sort and assess ideas into conceptualised "wh" questions.		3.Overview of -Ideas -Different perceptions
Stage 5	To get idea     acceptance and to     avoid decoupling			

Table 26: Comparison of the idea screening process, the data matrix as a management and regulation tool, and the needed content of a toolbox

### 6 SCENARIOS

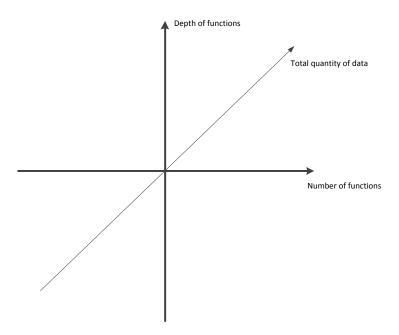


Figure 19: The total data quantity as a function of the scale and scope of the idea

Figure 19 shows the four theoretical scenarios and the variable data quantity. As the data matrix are used for support of the screening process, should all the tools in the scenarios support the data matrix. Thus the data matrix does not cover commitment and personality learning modes. The tool types to be discussed can be seen in Table 25 and are listed below:

- Structuring tools
- Mapping tools
- Personality benchmarking tools
- Investigation tools
- Stage-gate model

Two approaches can be used to plot the tools, either by an understanding of the effects of the tool type's variables or by filling out the matrix slavishly.

#### 6.1 STRUCTURING TOOLS

In the toolbox discussion regarding stage 4 is two important criteria found, the overview of ideas and the perceptions of ideas, these criteria fit the scenario matrix as:

- Ideas: The ease of overview of ideas is a result of how complex one is. The complexity of ideas can be illustrated in relation to amount of knowledge to find, for the specific function needed, for understanding.
- Perceptions: The complexity of perceptions is derived from the amount of viewpoints; viewpoints are derived from the amount of functions.

Four categories of tools are investigated. Meetings and Mindmaps, Cause/effect diagrams, viaArt and Lego serious play, and Six thinking hats.

Meetings is a simple tool for structuring, the more people presented at a meeting the tougher it is to end the meeting with the same understanding. Further must data discussed not be too complicated, else must other structuring tools be used, like drawings or so, which is a variant of cause/effect diagrams.

Mindmaps is useful as long as the level of detail is low, if not can the map easily be crowded. Further does an overall mindmap not show the perception of different people attending, thus can one draw his own map and compare it with others, but if variables are not exact, is comparison tough. Mindmaps is not found suitable for in depth structuring, but the difference of a cause/effect diagram is vague.

A cause/effect diagram can be used to illustrate an immediate chaotic idea, thus only from one perspective. Again one can compare diagrams; on the contrary can the least change of variables and plotting method make structural comparison impossible. Aside does this report use cause/effect diagrams to bring overview of the case example Playscapes.

The focus of viaArt is to get perceptions along. This tool uses the art of drawing one's mind with a few understood variables. Another tool in this genre is Lego serious play which uses bricks. As few variables occur is data specificity and complexity hard to gain. Thus more variables exist in Lego serious play, is this tool more suitable tasks regarding complex than viaArt.

De bono's six thinking hats are structuring thoughts with the hat thinking, both in order to solve ideas and in order to gather different viewpoints. In getting ideas are different hats used, in gathering viewpoints are a round of the participants typically done.

#### 6.2 MAPPING TOOLS

In regards to the discussion of the management and regulation matrix in section 5.2 is a strong fit with foundation concluded and their tool selection. These tools are listed in Table 27. The presented form and usage in the case example is overall fitting with the small and simple case company. Though it is obvious that large complex companies cannot map their entire company with the suggested tools, these companies are typical using organisational intelligence systems.

Mapping can thus be done at different levels, like IDEF or a standard process map is known of. In selecting a mapping tool is the process type not central, if it is in regards to project, jobbing, batch, mass, continuous, professional, service, or mass service (Slack, Chambers, & Johnston, 2004). Here the general rule is; as larger the focus as more layers are added to the map, like a hierarchy.

"wh"	What	How	Where	Who	When	Why	Cost/Benefit
question	(Data)	(Function)	(Location)	(People)	(Time)	(Motivation)	(Finances)
Map method	Semantic Model	Process map	Geographical Map	Organisation Chart	Gantt Chart	Business Plan	Budget

Table 27: "Wh" questions and mapping tools

#### 6.3 PERSONALITY BENCHMARK TOOLS

The importance of the quality (depth) of a personality test is dependent on the resource usage of the specific project, this usage is derived of the data quantity to find as Figure 19 illustrate. A MINDEX test is a simple and overall tool; a Belbin test does much look like a MINDEX test, but is deeper and incorporates more and specified roles. Myers and Briggs type indicators, goes further into dept with the personality at centre. Ones Role are then derived from ones personality afterwards.

#### 6.4 INVESTIGATION TOOLS

Investigations are in the idea screening process in an early stage. In order not to lock-in and disrupt creation, unstructured methods are to prefer. Further are structured methods highly cost effective and in need of highly specified data.

#### 6.5 STAGE-GATE MODEL

The management and regulation matrix is build upon a stage-gate model, which is the backbone of the report and the scenario matrix. As noted is scope in regards to the data amount pr. function and scale in regards to the numbers of functions needed. This gives four scenarios as follows. 1) Few functions and adequate data, 2) few functions and much data, 3) many functions and adequate data, and 4) many functions and much data.

#### 6.6 SUMMARY - SCENARIOS OF THE TOOLBOX

The scenarios are listed in Table 28 where colours of the tooling types are given to better the overview. It must be recalled that issues and ideas can vary in complexity and discussions too in the amount of participants. Therefore will the suggested tools in each project vary according to suggested complexity of ideas and participants perceptions of ideas continuously.

- Structuring Yellow
- Mapping Green
- Personality benchmark Purple
- Investigation Blue
- Stage-Gate model Grey

	Little scale	Huge scale
Huge scope	Cause/effect diagrams	Six thinking hats
	Some hierarchical levels of tools	Much hierarchical levels of tools
	in Table 27	in Table 27
	Unstructured	<u>Unstructured</u>
	Belbin e e e e e e e e e e e e e e e e e e e	Myers & Briggs
	Few functions and much data	Many functions and much data
Little scope	<mark>Mindmaps</mark>	<mark>viaArt</mark>
•	Meetings	<mark>Lego serious play</mark>
	Few hierarchical levels of tools in	Some hierarchical levels of tools
	Table 27	in Table 27
	<u>Unstructured</u>	<u>Unstructured</u>
	MINDEX	<mark>Belbin</mark>
	Few functions and adequate data	Many functions and adequate data

Table 28: The four scenarios

#### 7 RESOURCE SAVINGS

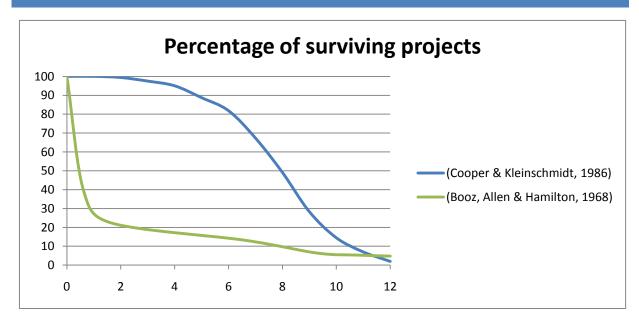


Figure 20: Brief comparison of (Cooper & Kleinschmidt, 1986) and (Booz, Allen, & Hamilton, 1968)<sup>3</sup>

100 percent of all ideas pass through the screening process (which are carried out in 92,3 percent of the times) and only 1.9 percent of the ideas complete all innovation phases (Cooper & Kleinschmidt, 1986). In Figure 20 an astonishing metric in a twenty years difference can be seen. The reason for this difference is in particular interesting. If the innovation context which the two authors represent is the same, the difference between the curves is waste. If so there is a big potential in an optimisation of the first innovation phase, which is the idea screening process. Here it could be interesting to investigate the parameters affecting the innovation process. Interesting concepts to investigate are e.g.:

- Learning stages in innovation
- Incremental versus radical (Tidd & Bessant, 2009)
- Time change, we live in the time of innovativeness (Bolwijn & T., 1998)
- Exploration versus exploitation (Boer, 2001)
- Freedom (3 M)
- Island thinking (B & O)

(Cooper & Kleinschmidt, 1986) furthermore indicate that there is a shortage of operational checklists, where only 11.6 percent use formal checklists and only 2 percent of ideas are evaluated to a checklist by an external relation. Moreover, is the first idea screening phase judged to be the second worst gate surpassed only by the phase "Detailed market study" in a 13-step guide and it is concluded that there is a need for improvement of the idea screening process (Cooper & Kleinschmidt, 1986). This is what this report has done. It has created the operational checklist and furthermore strengthened the innovators with a toolbox.

May 31, 2011

<sup>&</sup>lt;sup>3</sup> Cooper shows 13 activities; Allen shows 6 activities according to cumulative time (percent). Cooper focuses on projects performing gates, thereby making the numbers one behind, and with no end product of succeeding projects.

#### 7.1 RESULTS

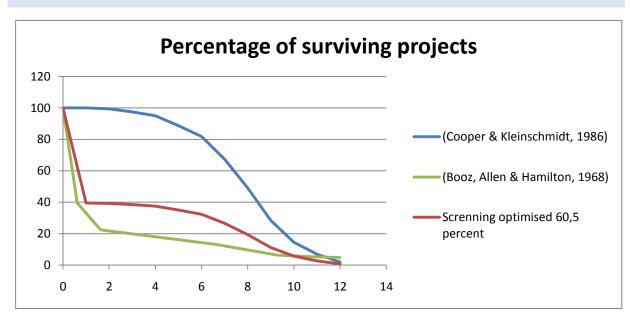


Figure 21: A potential resource savings by using numbers from (Cooper & Kleinschmidt, 1986) and a potential improvement graph.

Figure 21 is illustrating potential resource savings, if the idea screening process can be optimised to the level of Booz et al.. The resource savings is illustrated as the difference between the red and the blue curve. As the resources used in each phase is different, will an evaluation in percentages in relation to each particular point only occur, as seen in Table 29.

Gate	1	2	3	4	5	6	7	8	9	10	11	12	13
Gate	0 /	0,6	1,9	2,5	6,3	6,9	14,5	18,2	20,8	13,8	7,5	5	1,9
effectiveness	60,5												
As-is	100	100	99,4	97,5	95,0	88,7	81,8	67,3	49,1	28,3	14,5	7,00	2,00
To-be	100	39,5	39,3	38,5	37,5	35,0	32,3	26,6	19,4	11,2	5,69	2,73	0,75
Savings	0	60,5	60,5	60,5	60,5	60,5	60,5	60,5	60,5	60,6	60,7	61,0	62,4
(Percentages)													

Table 29: Savings, data and data calculations (Cooper & Kleinschmidt, 1986)

An optimisation of the idea screening process can reduce costs to around 60 percentages for all the remaining processes.

Though the success rate is in this simple mathematical approach estimated to drop 62,4 percent. One must recall that the screening process by benchmarking the vision secures a greater fit of projects. By this will the stage-gate model both reduce Type 1 and Type 2 errors. Though radical projects will fail gate 1. Regarding radical innovation different approaches and organisational channels should be used.

As the checklist is divided in 4 gates, Type 1 and Type 2 errors can be eliminated much further than the figures note, by this creating larger savings in the idea screening process, which in regards to (Tidd & Bessant, 2009), is in time (not resources), taking more than 1/3 of the total time to market. Further if innovation is used in accordance with organisational intelligence systems can the market assessment be done earlier in the process.

#### 8 VALIDATION

#### GATE 4

The basis is for the investigation of gate 4 is quantitative by the case study methodology given by two funds.

In the discussion is a clear fit observed, regarding all "wh" question. As the goal of the stage-gate model is found valid, will the process as the stage-gate model support, direct towards the right goal and thereby be valid.

THE PROCESS

The data basis is qualitative via observations of the case company and quantitative by the case study methodology through archival records from the case company and documents concerning the application process of the two foundations.

In the case as for the foundations' application processes are a strong coherence found with the suggested screening process. Thus the application processes had either a step more or less. In the case it is observed that screening is a process, but that one can go back in this process if earlier process criteria are not fulfilled properly. Furthermore is the possibility of the process working as a spiral observed.

#### VALIDATION

Multiple angles create validity (Maaløe, 1996). As all angles support the screening process, is a great validity identified in the data foundation and therefore is this data found suitable to be used in an investigation of the screening process. This can on the contrary be seen as reliability, as the data basis from both the qualitative and the quantitative angle deal with the same data population. Here could other not case related foundation data be used to test the validity of the reliability.

#### RESSOURCE SAVING CALCULATIONS

The calculations are created upon old data, the variables of the curves can be many and can be changed with a more competitive and globalised world. Thus the numbers evidently express that one can gain high resource savings by optimising the process. If this potential is 60 percentages or 10 percentages the conclusion will remain the same!

#### 9 CONCLUSION

The effect of streamlining the initial screening process can reduce costs to around 60 percentages regarding incremental innovation in corporate entrepreneurship.

The discussion leads one to the following conclusion of the problem statement. That a functional process understanding can streamline the initial screening process in corporate entrepreneurship, as one such make users aware of the importance of commitment as the driver of innovation, that an overall vision should be followed in order to avoid decoupling, and that different learning modes, information levels and competences are needed at different locations within the process model, where such understanding can be used to regulate resources accordingly, thus streamlining the process. The screening process model helps one:

• With an *holistic* overview

That a management and regulation tool using checklists in form of a stage-gate model can streamline the initial screening process in corporate entrepreneurship by creating visible goals of cultural related principles that support the operationality of the screening process understanding, thus guiding ones preparation and streamlining the process. Further it is observed that succession of gates is found to foster motivation and innovation capabilities. The tool helps one:

- With a stage focused overview and the possibility of benchmarking and regulating for the
  - Idea and organisational vision
  - o Competences
  - o The scale and scope of data
  - The idea concept

The add-on concepts help one

- With a stage focused overview and the possibility of benchmarking and regulating for the
  - Personality types and learning modes
  - Commitment

That a scenario oriented toolbox can streamline the initial screening process in corporate entrepreneurship by going one step closer to reality and make it further operational. Where tools easily can be assigned to the matrix and thereby strengthens the validity of the scenarios. Tool types for the particular toolbox are selected at areas where innovation cannot be hindered, as for investigations are an unstructured approach find useable as methods are not find to foster innovation but to help one structure and regulate in order to give an overview and guide one in relation to an organisational vision, thus delimiting innovations which is outside of a visionary scope, thereby is the streamlining of the process only suitable for incremental innovation. The toolbox helps one:

- With an *idea specific* overview by
  - o Structuring
  - o Mapping
  - Personality benchmarking
  - o Investigation methods
  - o Stage-gate model

The stage-gate model foster commitment by succeeding gates, thus will a goal oriented approach towards this objective prepare one in relation to gates. Further is the gates focused to streamline the process and to bring one with a conceptual understanding before missionaring. Here is the understanding of the ideas depth find to strengthen the succession and thereby is the hypothesis of the report found true.

We believe that a checklist strengthens the entrepreneur's preparation and thereby its power of persuasion, which reinforces his commitment to the idea, which thereby strengthens the innovation culture within the company.

Further does the Playscapes case show that a gate keeper can accept an idea, reject an idea and put the idea on the shelf or reject the idea and ideaholder can decouple and start over. This proves the second hypothesis of the report.

You must break out; otherwise you cannot start something new.

The data basis is found supporting for both qualitative and quantitative perspectives and triangulation has been used, this makes the data basis reliable, on the contrary is the data populations very case specific where more data populations can strengthened the validity of the report.

The most important assumptions this conclusion rely on is:

- That the application process of a fund is in agreement with the application process of a corporation.
- That the process goals are identical throughout the entire organisational life cycle.

All in all, by understanding the idea screening process and implementing the management and regulation tool with usage of a toolbox suggested, one implement a strategy and get a culture for effective innovation, where one create commitment for the most suitable ideas and thereby secures the viability of the organisation.

#### 10 PERSPECTIVATION

The product of the report knowledge could be:

A strategic tool that is operational measurable, so that one can streamline the process, whereby fewer resources will be wasted on non-usable ideas. But simultaneously collect and sort the ideas in a database, so that ideas are expressed when the idea criteria is possible. Thereby one will have more resources available to use on applicable ideas.

The innovation projects interplay with organisational intelligence systems is in particular important in order to achieve organisational fit, thus making the idea planning part of the organisational planning. This will enhance the organisational interplay with R & D to avoid island thinking and safeguard the cooperation with operations. By this one can e.g. avoid operational downtime in connection with 0 series. Likewise can planning secure the right speed to market and not only high speed to market, but secure a fit with organisational PR events and innovation knowledge. In other words the product aims to secure the interplay with the organisational strategy plan and through this attain better planning and resource usage. To create the fit between the resourced based view and market view.

With basis on organisational life cycle theory, organisations need a pre-birth phase in order to innovate. This report makes clear that it is important for the organisations to focus on and work hard with this phase to incorporate this culture of innovation. It means that organisations have to do more than performance in order just to survive. If organisations really want to survive at the long view, it is necessary to focus on this pre-birth phase. Meanwhile the question is, do they know the importance and do they know how to manage and implement this culture of innovation? With other words, do they really want to say: "The old has gone, something new has come"? - It is often more easier to act like one always has, and focus on performance. Furthermore innovation is often looked at as a challenge for performance though it is only by having both it creates a competitive organisation.

This report is a bit on how to create and implement viable ideas, and thereby to create viable organisations, in other words how one can get from stage gate to corporate culture.

#### 11 BIBLIOGRAPHY

Adizes, I. (1979). Organizational Passages - Diagnosing and Treating Lifecycle Problems of Organizations. *Organizational Dynamics*.

Alexandra Instituttet, Playscapes ApS, Erhvervsakademiet Århus, & eBag SolutionsA/S. (n.d.). Retrieved April 12, 2011, from Region Midtjyllands websted:

http://www.regionmidtjylland.dk/files/Regional%20udvikling/V%C3%A6kstforum/dagsordensbilag/2010%20december/Punkt\_13\_Bilag\_2.pdf

Ambler, S. W., Nalbone, J., & Vizdos, M. J. (2005). *Enterprise Unified Process, The: Extending the Rational Unified Process.* Prentice Hall.

Axelsen, J. (2009). Gyldendals Røde Ordbøger - Dansk-Engelsk. Gyldendahl.

Balachandra, R. (2000). An expert system for new product development projects. *Industrial Management & Data Systems*, *Iss:* 7, pp. pp.317 - 324.

Beard, C., & Wilson, J. P. (2006). Experential Learning - A Best Practice Handbook for educators and Trainers. Kogan Page Ltd.

Birkmose, L. (2005, December). Praktikant i Playscapes. Pengevirke, p. 26.

Boer, H. (2001, May 4). And [Jethro] said ... Learning: the link between strategy, innovation and production. Center for Industrial Production: Alborg University.

Bohn, K. R. (2011, Marts 11). Vejledermøde. (N. Thomsen, Interviewer)

Bolwijn, P., & T., K. (1998). Marktgericht ondernemen. Management van continuïteit en vernieuwing. Assen: Van Gorcum.

Booz, Allen, & Hamilton. (1968). Managment of New Products. New York.

Churchill, N. C. (1997). The Six Key Phases of Company Growth. In S. B. (eds), *Mastering Enterprise* (pp. 213-219). London: Financial Times/Pitman.

Churchill, N. C., & Lewis, V. L. (1983). The Five Stages of Small Business Growth. *Harvard Business Review*.

Cooper, R. G., & Kleinschmidt, E. J. (1986). An investigation into the New Product Process: Steps, Deficiencies, and impact. *Journal of Product Innovation Management* (3), 71-85.

Daft, R. L. (2007). *Understanding the Theory and Design of Organizations*. Mason, USA: Thomson South-Western.

Danske Ark Byg. (n.d.). Retrieved April 12, 2011, from Playscapes websted: http://www.playscapes.dk/bitcache/d14fa51c61d11685afc902441f93392e9e38c368?vid=201&disposit ion=inline&op=view

Drejer, A. (2001). Den innovative virksomhed: Innovationsledelse - hvorfor, hvornår og hvordan. Børsen.

Galbraith, J. (2002). *Designing Organizations: An Executive Guide to Strategy, Structure, and Process.* Jossey Bass.

Garnsey, E. (1998). A Theory of the Early Growth of the Firm. *Industrial and Corperate Change*, 7 (3), 523-556.

Greiner, L. E. (1972). Evolution and revolution as organizations grow. *Harvard Business Review*, 37-46.

Gustafsson, J. (2010). MMT-eren som forandringsagent.

Hamel, G., & Prahalad, C. K. (1989). Strategic Intent. Best of HBR.

Herbert, G. (1640). Outlandish Proverbs. (730).

Hollensen, S. (2005). Marketing Planning (1st Edition ed.). McGraw Hill Higher Education.

iKRAFT. (n.d.). Retrieved April 25, 2011, from iKRAFT innovationspuljen: http://www.ikraft.dk/innovationspuljen

iKRAFT. (n.d.). *iKRAFTs ansøgningskriterier*. Retrieved 03 23, 2011, from http://www.ikraft.dk/node/123

iKRAFT. (n.d.). *iKRAFTs ansøgningsproces*. Retrieved 03 23, 2011, from http://www.ikraft.dk/node/127

iKRAFT. (n.d.). om iKRAFT. Retrieved 03 23, 2011, from http://www.ikraft.dk/om

Kazanjian, R. K., & Drazin, R. (1989). An empirical test of a Stage of Growth Progression Model. *Management Science*, 12 (35), 1489-1503.

Kimberly, J. R. (1979). Issues in the Creation of Organizations: Initiation, Innovation, and Institutionalization. *Academy of Management Journal*, 22 (3), 437-457.

Kolb, D. A. (1984). Experiential learning. Englewood Cliffs, NJ: Prentice Hall.

Lassen, A. H. (2007). Corporate Entrepreneurship - Towards an Understanding of the Importance of Radical Innovation in Knowledge Intensive Firms. Allborg: Center for Industriel Produktion - Alborg University.

Miller, D., & Friesen, P. H. (1984). A Longitudinal Study of the Corporate Life Cyle. *Management Science*, 30 (10), 1161-1183.

Mintzberg, H. (1984). Power and Organization Life Cycles. *Academy of Management Review*, 9 (2), 207-224.

Mintzberg, H., Ahlstrand, B., & Lampel, J. (2005). Strategy Safari - A Guided Tour Through the Wilds of Strategic Management. New York: FREE PRESS.

Mintzberg, H., Ahlstrand, B., & Lampel, J. (2005). *Strategy Safari: A Guided Tour Through the Wilds of Strategic Management*. New York: Free Press.

Maaløe, E. (1996). Case-studier af og om mennesker i organisationer. København: Akademisk forlag.

Oplevelsesøkonomi, C. f.-o. (n.d.). *CKOs vækstpulje*. Retrieved 03 23, 2011, from http://www.cko.dk/pulje

Oplevelsesøkonomi, C. f.-o. (n.d.). *Fakta om CKO*. Retrieved 03 23, 2011, from http://www.cko.dk/sites/default/files/cko\_fakta\_vaekst\_web.pdf

Oplevelsesøkonomi, C. f.-o. (n.d.). *Vejledning i at søge Vækstpuljen*. Retrieved 03 24, 2011, from http://www.cko.dk/sites/default/files/projektstoettevejledning\_cko\_gaeldende.pdf

Playscapes. (n.d.). Retrieved 03 23, 2011, from Virksomheden Playscapes websted: http://playscapes.dk/

Playscapes ApS. (n.d.). Retrieved April 12, 2011, from Center for Kultur- og Oplevelsesøkonomis websted: http://www.cko.dk/gruppe/det-digitale-maleri

Playscapes ApS. (n.d.). Retrieved April 12, 2011, from Playscapes websted: http://www.playscapes.dk/nyheder/Det-Digitale-Maleri-Id%C3%A9udvikling

Playscapes ApS. (2006). Playscapes Identitet, mission, vision strategiarbejde.

Playscapes. (2005). Strategi 2005.

Playscapes, & Alexadra Instituttet. (n.d.). *Ansøgning til iKRAFT innovationspuljen*. Retrieved from http://www.regionmidtjylland.dk/files/Regional%20udvikling/V%C3%A6kstforum/dagsordensbilag/2 010%20december/Punkt\_13\_Bilag\_2.pdf

Porter, M. E. (1996, November-December). What is strategy. Harward Business Review.

Quinn, R. E., & Cameron, K. (1983). Organizational Life Cycles and Shifting Criteria of Effectiveness: Some Preliminary Evidence. *Management Science*, 29 (1), 33-51.

Slack, N., Chambers, S., & Johnston, R. (2004). *Operations Management*. Edinburgh: pearson Education Limited.

Stacy, R. (1993). Strategic Management and Organisational Dynamics. London: Pitman Publishing.

Thomsen, N. L. (2011). *Praktikopgave - Iværksætteren Playscapes denmark ApS*. Aalborg: International Technology Management 3rd Semester.

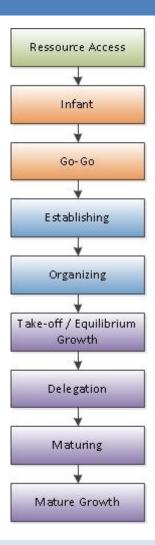
Tidd, J., & Bessant, J. (2009). *Managing Innovation*. John Wiley & Sons Ltd.

Torbert, W. R. (1974-1975). Pre-Bureaucratic and Post-Bureaucratic Stages of Organization Development. *Interpers.*, *5*, 1-25.

Varming, O., Hansen, M., & Thomsen, P. (2003). *Psykologisk-pædagogisk ordbog* (14 ed.). Gyldendal.

# **APPENDICES**

## 1 APPENDIX - LIFE-CYCLE



#### 1.1 SAMMENLIGNING

Det der er interessant, er ikke bare nogle fase navne, men hvordan man kommer fra fase til fase. Derfor er det trinene under hver fase der er interessante og hvordan man kommer fra trin til trin.

Har forsøgt at finde de forskellige faser som teoretikere på området har og sammenlignet disse, hver gang hvor der har været grundlag for adskillelse, har jeg lavet en ny fase.

Tabel 1: Sammenligning, (Greiner, 1972), (Churchill & Lewis, 1983), (Adizes, 1979), (Miller & Friesen, 1984), (Quinn & Cameron, 1983).

Fase/For	Greiner	Churchil	Adizes	Miller	Quinn &	Garnsey	Lyden
fatter		1		Friessen	Camero		
		Lewis			n		
Resourc			Courtshi		Entrepre	Prospecti	
e Access			p		neurial	ng	
Infant	Creativit	Existence	Infant	Birth	Collectiv	Resource	
	у				ity	Mobilisat	
						ion	
Go-Go			Go-Go			Resource	
Establis		Survival				Generati	
hing						on	
Organisi		Success	Adolesce		Formalis		
ng		Growth	nt		ation and		
Take-	Direction	Take-off	Prime	Growth	control	Growth	
off/						reinforce	
Equlibri						ment	
um							
growth							
Delegati	Delegatio		Prime -				
on	n		D				
Maturin	Coordina	Resource	Mature	Maturity			
g	tion	maturity					
Mature	Collabor			Revival	Elaborati		
growth	ation				on of		
					structure		
Decline		Ossificati	Aristocra	Decline			
		on	cy				
			Pre-				
			Bureaucr				
			acy				
			Bureaucr				
			acy				
			Death				

 $Tabel\ 2:\ Hvor\ teori\ ikke\ helt\ passer\ overens,\ gælder\ kun\ for\ Mintzberg,\ (Mintzberg,\ Power\ and\ Organization\ Life\ Cycles,\ 1984)$ 

Fase/Forf	Miles &	BCG-	Mintzberg	Innovatio	Kazanjian	Kimberly	Torbert
atter	Snow	matricen		n	& Drazin		
Resource	Prospector	Spørgs-	Autocracy	Idea			
Access		måltegn		generation			
Infant				Mobilisati			
				on,			
				Advocacy			
				and			
				Screening			
Go-Go				Experimen			
				tation			
Establishi	Analyser	Stjerne		Cormercial			
ng				isation			
Organisin			Instrument	Diffusion			
g				and			
				implement			
				ation			
Take-off							
Equlibriu							
m growth							
Delegatio			Missionary				
n							
Maturing							
Mature							
growth							
Mature	Defender	Malkeko	Closed				
			system or				
			Meritocrac				
			у				
Decline	(Reactor)	Hund	Political				
			arena				

#### 1.2 PRE-BIRTH:

Fase/Forfatt	Adizes	Quinn &	Garnsey	Kimberly	Kazinjian &	Torbert	+
er		Cameron			Drazin	mere!!	
Creation of				First stage		Fantasies	
Ideology*							
Fasen er							
under næste							
Idea	Courtship	Entrepreneur	Prospector		Conception		
generation/		ial stage			and		
Resource				First stage	Developmen		
Access					t		
Developmen							
t of idea							
Identificatio							
n of market							
opportunitie							
s							

**Tabel 3: Opsummering Pre-birth fasen** 

#### 1.2.1 ADIZES

	Fase	KPI	Kompetencebr	Læring	Værktøje	Begreber	Faldgruppe
	skift		ug		r		r
Adizes:	Idea		Dreaming			No	Aborted
Courtshi	create		Exitement			organisatio	idea
p	d					n	
	Sellin	Read		Reinforcing		In love	Aborted
	g idea	y to		Commitme		Missionary	idea
		birth		nt		Thrust	

Tabel 4: Courtship fasen (Adizes, 1979).

Adizes konkluderer, at der ingen organisation endnu er i denne fase. Han sammenligner denne fase med en flyvemaskine, der har behov for kraft før den kan lette. Ligeledes har entreprenøren behov for kraft og tillid på sig selv og opbygge et netværk der kan hjælpe ham med at udføre hans idé. Entreprenøren handler som en missionær: "searching for audience to convert". Han er forelsket i idéen.

# 1.2.2 QUINN & CAMERON

	Fase	KP	Kompetencebr	Lærin	Værktøj	Begreber	Faldgrupp
	skift	Ι	ug	g	er		er
Quinn &	Ressour				Flexibilit	Marshalling	
Cameron:	ce				y;	of resurces	
Entrepreneur	aquisitio				Readines	Lots of ideas	
ial stage	n				S	Entrepreneur	
						ial activities	
						Little	
						planning and	
						control	
						Formation of	
						a "niche"	
						Prime mover	
						has power	

Tabel 5: Entrepreneurial fasen (Quinn & Cameron, 1983).

Quinn og Cameron er en opsummering af life-cycle modeller. Den mest brugbare, er opdellingen mellem entrepreneurial og collectivity faserne, som viser at der er noget der sker før virksomhedsfødslen. Videre samler de en masse begreber om områderne. Der introduceres at der er flere måder at opnå effektivitet på. Som Mintzberg også er inde på. For iværksætteren er det med midlet fleksibilitet af nå målet ressource acquisition.

#### 1.2.3 GARNSEY

	Fase	KP	Kompetencebru	Lærin	Værktøje	Begreber	Faldgruppe
	skift	I	g	g	r		r
Garnsey:	Lock		Market awarenes			Search:	
Ressourc	-in på		Demonstrate uses			Opportunitie	
e Access	idé.		Organise support			s and	
						resourcing	
						prospects	
						Choice of	
						sector	
						No strategy,	
						respond	

Tabel 6: Ressource Access fasen (Garnsey, 1998).

Problems centered around the perception of opportunities and resourcing prospects. Som Quinn og Cameron også foreslår. Altså at idéskabelse og det at kunne få resurser til idéen er en iterativ proces. Der bliver gået mere ind I de kompetencer der er behov for I fasen for at kunne slå til. Det skal bemærkes, at Garnsey er fra Jura studierne.

## 1.2.4 KIMBERLY

	Fase skift	KPI	Kompetencebrug	Læring	Værktøjer	Begreber	Faldgrupper
Kimberly: First stage						Marshalling of resources Creation of an ideology	

Foreslår, at de første skridt i organisationsudviklingen sker før organisationen er skabt. Det drejer sig om marshalling of resources and the formation of an ideology.

Svært at danne sig ud fra Artikel!

# 1.2.5 TORBERT

	Fase skift	KP	Kom	Læring	Værktøjer	Begreber	Faldgrupp
		I	pete nceb rug				er
Torbert: Fantasies	Får spændend e idé Selling				Dreams, fantasies about future, initial visions Informal		
	idea building commitm ent, finding a potential team				conversations with friends, work associates		
	Developm ent of business concept				Diffuse collaboration  – discussing or working with others on occasional, related projects to explore shared interests		
	Business plan				Episodic exploration of varied parts of the social environment to see how they relate to fantasies, where opportunities exist, what potential consequences of action would be	Market potential	

Torbert bygger hans teori på Erikson som er en teoretiker indenfor området "individual development". Torbert er god til at beskrive hvad der sker lige inden investeringen som er næste fase.

## 1.2.6 KAZANJIAN & DRAZIN

	Fase skift	KP	Kompetenceb	Læri	Værktøj	Begreber	Faldgrup
		I	rug	ng	er		per
Kazanjian & Drazin: Conceptio n and Developm ent	Idea generation /					Structures and formality non-existent. Focus invention and development of a product/technol ogy.	
	Resource Access  Identificati on of market opportuniti es					Securing of adequate financial backing the identification of market opportunities	
Infant	Getting the financial backers					Directed by founder  Construction of a prototype  Selling product and business idea to financial backers	

Har blandet birth og Pre-birth faserne. Det man kan få ud af teorien er, som også Adizes er inde på, at skellet mellem birth kan ske på forskellige tidspunkter, den finansielle backing kan være et resultat af et udviklet produkt til et marked, eller den kan være søgt før.

#### 1.3 BIRTH

Fase/For	Greiner	Adizes	Miller &	Quinn &	Garnsey	Kimberl	Torbert	Churchil
fatter			Friesen	Camero		y		1 &
				n				Lewis
Infant	Creativit	Infant	Birth	Collectiv				
Go-Go	у	Go-Go		ity				
Establis								
hing								

#### 1.3.1 GREINER

	Fase	KP	Kompetencebr	Læring	Værktøje	Begrebe	Faldgrupper
	skift	I	ug		r	r	
Greiner:	Creating		Technically or		Market	Informal	
Creativit	a		entrepreneurial		feetback	Energy	
y	product						
	Creating						
	a market						
	Securrin			Efficiencies			Unwanted
	g capital			of			management
				manufacturi			responsibiliti
	Locate a			ng			es
	business			Financial			Hate to step
	leader			control			aside
				Staff control			

Tabel 7: Creativity fasen (Greiner, 1972).

Greiner har fokus på ledelses stilen. Hvor entreprenøren huserer i den første fase. Derfor er skridtet ud af fasen behovet for en business leader. Fordi lederen ikke ønsker management ansvaret. Greiner griber ind efter at virksomheden er startet. Derfor er han ikke interessant. Den første fase, kan sammenlignes helt op til establishing, hvor krisen starter ved behovet for mere kontrol og ansvar fra toppen.

## 1.3.2 MILLER & FREISEN

	Fase skift	KPI	Kompeten cebrug	Læring	Værktøjer	Begreber	Faldgrupp er
Miller & Friesen: Birth	Become a viable entity	En række af KPI'er!				Young Dominated by their owners Simple and informal	

Tabel 8: Birth fasen (Miller & Friesen, 1984).

Miller og Friesen er en sammenfatning af life-cycle materialet og et longitudinal study på dette. Som viser gode træk indenfor faserne fra birth og frem. Han kan bidrage med en række af KPI'er og virksomhedsfokus fra birth og frem!

#### 1.3.3 CHURCHILL & LEWIS

	Fase skift	KPI	Kompeten	Læring	Værktøjer	Begreber	Faldgrupp
			cebrug				er
Churchill & Lewis: Existence	Become a viable business:	Customer acceptance or product capability				Obtain customers Deliver products Expand to a much broader	Not enough start-up capital Accept the demand on time,
						sales base Start-up capital Newly started Remain alive	finances, and energy
Survival							

Tabel 9: Existence fasen (Churchill & Lewis, The Five Stages of Small Business Growth, 1983) og (Churchill, 1997).

Churchill og Lewis starter deres model ved virksomhedens fødsel. Styrken i deres model er ejerens rolle. Med faldgrupperne accept the demand on time, finances and energy. Og senere er villigheden til at træde til side i en levebrødsvirksomhed eller sætter den mod vækst.

### 1.4 AUTOCRACY

## 1.4.1 MINTZBERG

	Fase skift	KPI	Kompeten cebrug	Læring	Værktøjer	Begreber	Faldgrupp er
Mintzberg	After					Ideology	
:	departure					of leader	
	of a					Control	
	charismatic					Passive	
	leader					external	
	Inherent					coalition	
	precarious					Personal	
	ness					internal	
						coalition	

Tabel 10: Autocracy fasen (Mintzberg, Power and Organization Life Cycles, 1984).

Mintzberg fokuserer på magt, hvor styring sker gennem magt. Ledelsen skifter gennem en politisk arena til en anden type ledelse. Mintzbergs største tiltag er muligheden for flere typer organisationer og organisationsmuligheder i forhold til at stabilisere magten internt, så konflikter undgås og fokus kan ligge på produktionen.

# **ENCLOSURES**

6 ENCLOSURE - (PLAYSCAPES, STRATEGI 2005, 2005)

7 ENCLOSURE - (PLAYSCAPES APS, PLAYSCAPES IDENTITET, MISSION, VISION STRATEGIARBEJDE, 2006)