



¹ Formerly the project title was "Competitive Advantages by applying an IT governance framework based on a Coherency Management paradigm", but due to changes in the problem statement and the scope of the project, I have chosen to alter the title of the project.

Table of Contents

1 Prelude & Problem	5
1.1 The Purpose of This Work	5
1.2 Who Should Read This Work	5
1.3 Problem Statement	5
1.4 The Relation to the Concept of E-business.	6
2 Methodology	
2.1 Delimitation.	
3 The Paradigm	
3.1 Applying the Paradigm.	
3.2 Premises of the Paradigm	
4 Corporate Strategy	
4.1 The Introduction.	
4.2 The Enterprise	
4.3 The Concept of Strategic Planning	
4.4 Schools of Strategic Thought	
4.5 The Concept of Competitive Advantage	
4.6 The Breakout Strategy.	
4.7 Systemic Thinking	
4.8 The Business Model.	
4.9 Leadership.	
4.10 Communication.	
4.11 Discussion of the Breakout Strategy	
4.12 On Corporate Strategy	
5 IT Strategy	
5.1 The Relationship Between Strategy & Governance	
5.2 The IT strategy	
5.3 The Separated Strategy Approach.	
5.3.1 Findings for the Separated Strategy Approach	
5.4 The Integrated Strategy Approach	
5.4.1 The Alignment Phase.	
5.4.2 Value Adding.	
5.4.3 The Change Management Phase.	
5.5 Findings of the Integrated Strategy Approach	28
5.6 On IT strategy	
6 IT - Governance.	
6.1 Forms of governance	
6.2 Discussion of IT Governance.	
6.2.1 Criticism of IT and Competitive Advantage	
6.3 On IT Governance.	
7 Organization & Workforce Planning	
7.1 The Role of Management.	
7.2 The Organization and Its Properties.	
7.3 Transforming the Enterprise.	
7.4 On Organization and Its Impact.	
8 Enterprise Architecture	
8.1 Integrated Governance and Enterprise Architecture	
8.2 Implementing Enterprise Architecture	
8.3 The Holistic Perspective	
0.5 The Hondie I disposition	マノ

8.4 On Enterprise Architecture	49
9 Coherency Management	
9.1 The Concept of Coherency Management	
9.2 Going from IT to Holistic Management	
9.3 Institutionalizing Coherency Management	
9.4 On Coherency Management	
10 A Framework for Implementing Integrated Governance	
10.1 Integrated Governance.	
10.2 The Framework	59
10.3 Iterations Towards a Sustainable Competitive Advantage	61
10.4 Virtues of Integrated Governance	
10.4.1 Producibility	
10.4.2 Adaptability	65
10.4.3 Compatibility	
11 Conclusion	66
11.1 What is Integrated Governance?	66
11.2 How is integrated governance combined with Coherency Management?	67
11.3 How can Integrated Governance and Coherency Management be combined in a single	
framework?	68
11.4 How does the Integrated Governance Enable an Organization to Achieve Competitive	
Advantage?	68
12 Discussion	
12.1 What Can be Learned From This Review?	70
12.2 Further Studies.	71
13 Appendix	72
14 Enclosure 1	73
14.1 Schools of Strategic Thought	73
14.1.1 The Design School	73
14.1.1.1 Premises	74
14.1.1.2 Critique	74
14.1.2 The Planning School	75
14.1.2.1 Premises	75
14.1.2.2 Critique	76
14.1.3 The Entrepreneur School	77
14.1.3.1 Premise	77
14.1.3.2 Critique	78
14.2 The Strategic Schools.	78
14.3 Four Forms of Breakout Strategy	80
15 Enclosure 2	
15.1 The Separated Strategy Approach	
15.2 The Integrated Strategy Approach.	
15.2.1 The Strategy Articulation Process.	
15.2.2 The Alignment Phase.	89
15.2.3 Value Adding	
15.2.4 The Change Management Phase.	92
15.2.5 The Implementation Phase	94

1 Prelude & Problem

There are many organizations that experience problems with gaining strategic advantages by applying IT – governance, and the organizations often experience that IT in one way or the other is considered a liability and a notable risk for the organization instead of an advantage and an enabler.

Authors and theoretics suggests various frameworks that in one way or the other should give the executive group or middle management the initiative to persuade stakeholders to understand the need of IT as an enabler but fail to recognize that their particular framework doesn't suit an integrated approach to governance.

I have chosen to investigate the problem through a literature review where I will work with various theoretical approaches to how IT-governance and Enterprise Architecture can be combined to create an approach that enables the organization to gain a competitive advantage. It is ab approach on how to implement a holistic style of management through Integrated Governance.

In my effort to operationalize this literature review, I have articulated a problem statement (p. 5).

1.1 The Purpose of This Work

This project and this paper is a pre-study of my master thesis that I plan to write this autumn (Autumn 2010 and beginning of the year 2011). I will make use of the hermeneutic paradigm to investigate the individual texts and to make sense of the study across various disciplines².

1.2 Who Should Read This Work

This document targets the decision makers in the organization e.g., the CEO, CIO, Board of Directors, the middle managers or those in charge of strategic programs and projects.

They can make use of this work for inspiration on how to initiate and mature their own governance programs.

1.3 Problem Statement

This project will focus on how IT governance and Coherency Management can be combined to create a framework that can lead to a competitive advantage. I have articulated four questions that will aide me in the operationalization of this study.

1) What is integrated governance?

² The various disciplines will be organized and dealt with in the next chapter.

- 2) How is integrated governance combined with Coherency Management?
- 3) How can Integrated Governance and Coherency Management be combined in a single framework?
- 4) How does the integrated governance enable an organization to achieve competitive advantage?

1.4 The Relation to the Concept of E-business

This paper is based on the assumption that Information Technology can enable competitive advantages when applied correctly.

The assumption has led me to believe that IT and Integrated Governance is a part of the concept of e-business since the enterprise choses to take charge of its information technology and use IT to optimize its business processes. When changing the processes to alter the business processes then the enterprise needs to handle policies for how the enterprises can make rational decisions that impacts the enterprise positively in the future.

Chaffey defines e-business as a concept of which an enterprise is designing its processes around and upon information technologies and integrate the processes with ICT.

"When a business has fully integrated information and communication technologies (ICTs) into their operations, potentially redesigning its business processes around ICT or completely reinventing its business model e-business, is understood to be the integration of all these activities with the internal processes of business through ICT (DTI, 2000)"

- Chaffey (Chaffey 2009, p. 13).

This has led to my classification that this study is e-business related since it is in between Information Technology, Business and Policy. This is illustrated blow.

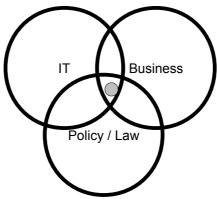


Illustration 1: The identification of e-business.

2 Methodology

This study is designed as a literature review. In the review I will investigate various theories from the sphere of strategic planning & management, technology planning, IT-governance, workforce planning and Enterprise Architecture. The sequence of literature is presented in the illustration below. It is notable that I have worked with the assumption that strategic management (corporate strategy) is the leading form of strategy and the other strategies have to be aligned with it.

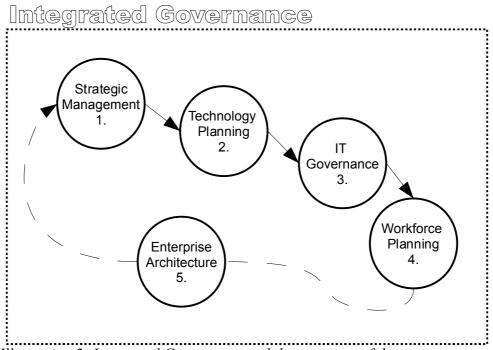


Illustration 2: Integrated Governance and the sequence of theory.

To uncover how this paper will approach the concept of integrated governance then I have outlined what the five chapters will deal with.

- 5) Strategic Management. The chapter is dealing with strategic management (Mintzberg 1995 & 2009, Porter 1985) and the schools and aspects of strategic management.
- 6) Technology Planning (IT strategy). The chapter is dealing with IT strategies (Potts 2009, Ross & Weill 2009) and how IT strategies can be articulated.
- 7) IT Governance. The chapter is dealing with how the IT strategy can be applied. Technically the theories presented by Ross & Weill (2004) will be discussed.
- 8) Work Force Planning. The chapter is dealing with how the organization (people) change to work within the boundaries of the enterprise and integrated governance (Orton & Weick 1990 and Hamel 2008).

- 9) Enterprise Architecture. The chapter is dealing with how Enterprise Architecture can deal with integrated governance (Bernard 2004) and make holistic management possible.
- 10) Coherency Management and the competitive advantages of maturing Enterprise Architecture (Doucet et al. 2009).
- 11) Implementing the framework in the organization. The chapter will be dealing with an approach that is based on the assumptions and understanding of the individual pieces of theory.

Thereto will a chapter dealing with the conclusion be included and likewise will a chapter dealing with a discussion of the findings of this paper be included in the paper.

2.1 Delimitation

When working with this literature review I will only deal with the theoretical approach and therefore not include cases or operationalize the theory on a particular case.

3 The Paradigm

I have chosen to work with the hermeneutics paradigm. This means that each individual text I will be working with in this literature review can be seen both in its individual texts or in a larger context (Sonnichsen 2009, pp. 4-5).

3.1 Applying the Paradigm

I plan to read the books on the various discipline ahead of when I am writing the review of the literature in the particular field. I will then try to add available sources to each of the disciplines and form that write a short conclusion for each discipline. The literature review will be concluded through a formal conclusion on the problem statement, but also through a model dealing with integrated governance and how it is achieved in an enterprise.

3.2 Premises of the Paradigm

According to Sonnichsen then the hermeneutic circle consist of 7 principles that have to be dealt with. The first principle is dealt with in the individual texts in their individual contexts and the texts have as well to be seen in a larger context. This can be identified as a positive circle. The second principle is that when the analytical approach to a text and the analytical process ends with the text when it gives a logical meaning. The third principle of the hermeneutic circle is to test the interpretation in the overall context and in the context of what was written by the author in his context. The fourth principle has to be applied and it deals with how the text deals with itself in its context. The fifth principle deals with the understanding of the text and as such it is important to understand the text in full. The sixth principle deals with the interpretation of what the author of the review believes is the interpretation and it deals with what prejudice the interpreter (author of the review) brings with him. The seventh and last principle deals with the addition of creativity and value through meaning to the individual texts and the overall context.

4 Corporate Strategy

4.1 The Introduction

This chapter deals with corporate strategy and how corporate strategy is articulated, what role it plays and what particular strategic schools that exist. Thereto is the idea of "competitive advantage" be presented and how the enterprise should focus on apply them. The last part of the chapter is dealing with a systemic approach on corporate strategy.

4.2 The Enterprise

Before the initial ideas on corporate strategy is presented then it is a necessity to define what an enterprise is. The term enterprise will be used through this review as describing companies, corporations and social systems (organizational structure and culture) that through their activities provide products or services.

The enterprise is an organization that is based on the social systems of the organization but includes more e.g., technical infrastructure (IT, Machines, Cars etc.) and administration and economy. An enterprise can be both within the public sector and private sector and it can be in between.

The definition is that an enterprise is a social system (organization) that includes the technical, economic and administrative aspects. In the same time the purpose of an enterprise is to create value. Value is defined as being what is assumed as value by the customer. A customer can be both within a social system (with in an organization) or to customers outside the enterprise. In this perspective both public sector enterprises and private sector enterprises can generate value. The difference between the two sectors is that the private enterprise has to generate revenue through selling products to the consumers and the consumers decide if the product is good enough. The enterprise within the public sector are usually substituted by government and can therefore keep on surviving even if it the economic fundament for the enterprise even if the enterprise doesn't generate profits.

The *corporate strategy* is synonymous with the concept of a business strategy and can be defined as a plan for how the enterprise is supposed to do business.

4.3 The Concept of Strategic Planning

Strategic planning is defined as being the session of which the executives or other members within the enterprise defines how an enterprise will reach its goals, and from that it can be deduced that strategic planning is the process of which the enterprise is defining its strategy.

Mintzberg uses in his work "The Raise and Fall of Strategic Planning" different views of what strategic planning is and how it can be applied in a modern context.

One of the arguments that Mintzberg applies is that strategic planning might not be relevant for the market since the market might be exposed to hyper competition. Hyper competition is a series of actions within the domino of which the enterprise operates.

Minztberg came to the conclusion that the enterprise and its strategy can be determined by its projects compared to its strategic plan, likewise can the leaders within the enterprise be a sign of what the strategy deals with (Mintzberg 1995, p. 110).

Enterprises that over emphasizes the strategic planning process misses the embodiment of the strategy. The embodiment is how the leaders act within the social system to implement the strategic plan. It is arguable if the top management is not committed to change the enterprise to cope with the challenges and changes that are within its domino then the strategic planning process is meaningless.

4.4 Schools of Strategic Thought

Mintzberg et al. has developed a nuanced view of how the various strategic schools that have been developed over time, and therefore I have chosen to include their views in this literature review. I have chosen to work with the design school, planning school and the entrepreneur school. The reason for this is that found these schools mostly relevant for the purpose of integrated governance. You can read more about the three schools I have chosen to work within the **first enclosure**.

The three schools I have chosen as being relevant to this study in integrated governance is the design school, the planning school and the entrepreneur school. My reason for working with these schools where that they all contains qualities that are important to develop a significant strategy. In the other hand the schools do also contain various weaknesses that are addressed in the enclosure.

One major weakness that all of the three strategic schools are characterized by is that they hardly address the enterprise in a systemic way, the only exception is the entrepreneurial school. The entrepreneurial school might think in systemic approach because of the enterprise is a small entity and therefore manageable; however it also suffers from that most of the strategical approaches are tacit, and normally the strategies that are composed aren't probed within a systematic method. Due the 'unlimited power' that the manager and founder of the entrepreneur organization has then it is difficult for individuals who might have a slightly different approach to the strategy articulation to

come with suggestions to improve the strategy.

The systemic approach needs to be a part of how the enterprise is transforming while the enterprise is changing while the corporate strategy is implemented.

When addressing the enterprise in a systemic approach then it is a necessity to think and work with a systemic approach, this might lead to the adaption of the idea that a centralized planned strategy and implementation approach is close to impossible for a complex enterprise that operates in a Schumpeterian competition (Minztberg 2008, p. 110). In such situations then it is likely that the enterprise will have to use the business projects to be the guiding approach to what the enterprise wants to achieve. Doucet et al (2009) argues that it is likely that the enterprise of the future will see much more activity and initiatives in the domain of the enterprise.

The primary focus of any good strategy has to be working towards gaining a competitive advantage. Michael E. Porter proposes an interesting definition on what strategy is all about and that is what the next section deals with.

4.5 The Concept of Competitive Advantage

For an enterprise cannot sustain a leading position within its industry if the enterprise hasn't a competitive advantage. Porter discusses in his 1998 paper "Back to Strategy" that is focusing on operational efficiency will not lead to a competitive advantage.

When speaking of competitive advantage then it is a necessity to understand that a competitive advantage can only be enabled through several processes (activities within the enterprise) and the competitive advantage has to be sustainable before the enterprise will be able to achieve success.

It is therefore important that the management of the enterprise addresses that they should do more than just one particular process or activity well, the enterprise needs to address its activities in a holistic way e.g., working with efficiency, process redesign, adapt processes to cope with the newest technology and last but not least trying to cope with hiring the right people. Compared to holistic management then enterprise needs to seek new address integrated governance since it has to align various forms of governance, management and leadership to achieve that the business processes and activities can enable the enterprise with a competitive advantage. One significant element that can't be neglected in working with processes is the business model, and that is what Finkelstein et al. (2007) addresses in the book and strategic approach titled "The Breakout Strategy" that will be handled in the next section.

In relation to Enterprise Architecture then the systemic approach will be dealt with through the

uncovering process and through integrated governance that has been enabled by the holistic view of how the enterprise works.

4.6 The Breakout Strategy

Finkelstein et al. (Finkelstein et al. 2007, pp.8-16; 184) argues that the enterprise's leadership has to see their business model and value proposition as a systemic model or approach. The Breakout Strategy can be identified as being within the entrepreneur school, since it gives the impression that the founder should be the leading force in applying the strategy; however the strategy is also targeting mature enterprises that have gone beyond the entrepreneurial state. Finkelstein et al argues that the enterprise (regardless of size and situation) can achieve a breakout in a specific industry. The breakout strategy defines that the systemic approach can be used to identify how the business model of the enterprise can be changed so it fits with those customers the enterprise wants (and needs) to achieve better market results.

First of all lets establish the necessary assumptions needed to understand the concept of what a strategy is. A strategy is a tool for how an enterprise (business, public institution, government institution or other form of organization) to realize the goals that the executive team³ of the enterprise has articulated.

The Breakout Strategy can be identified as belonging to the school that is defined by Mintzberg as the entrepreneur school. This is based on an assumption that Finkelstein et al. (Finkelstein et al. 2007. p. 8) works with the that deals with the local leaders in the enterprise have to act as entrepreneurs that identifies, develop and enforce an updated business model.

As such Finkelstein et al. emphasizes that they have applied their theories on cases that have both prevailed and failed. As such the authors applies their theories to explain what happened and what didn't happen.

The primary messages of the book is that the enterprise, its decision makers and the acting employees needs to think as the customers and think of how they add value through their entire value chain.

When working with the concept of applying a coherent approach to govern the enterprise then the enterprise needs to address elements like the business model (the core component) and leadership component is extremely important to deal with.

³ It's notable that the executive team also covers the leaders or owner of small enterprises that haven't a team of executives.

4.7 Systemic Thinking

The concept of systemic thinking is represented by the business model and through the ideas on implementation that Finkelstein et al. (Finkelstein et al. 2007, pp. 8-16) focuses on that the leader (or leaders) needs to take charge and enable change through their actions (embodiment). Thereto is notable that the business model is build upon six different aspects of the value the enterprise as a whole deliver to its customers. As such the six aspects enforces the enterprise to view on what part it has to build up and what part it can limit in its struggle to achieve better results.

The idea on systemic thinking is compatible with the concept of Enterprise Architecture since the problems that might occur in the enterprise needs to be solved to enable the enterprise to achieve its goals.

The corporate strategy needs to address the enterprise in a systemic way otherwise will the enterprise become more fragmented (incoherent).

When combining Enterprise Architecture with an approach as the "Breakout Strategy" then it is clear that the managers and the enterprise architects needs to address the business model, the leadership and how the changes are communicated to the managers, the middle managers and the employees. These issues are dealt with below.

4.8 The Business Model

According to Finkelstein et al then the business model is build around six different elements that in total defines what value the enterprise provides to its customers.

The six components of the business model are price, features (of the service or products), quality, support, availability and reputation. Within each of these six components are there five options within each of the components e.g., for the price component Premium, Premium competitive, Competitive, Competitive / Leader and last the Leader⁴.

Finkelstein et al. (Finkelstein 2007, p.184) identifies (correctly) that the vision of the future has an impact on how the enterprise's business model should be like and the executives should consider the six components when they are articulating the corporate strategy.

The business model can therefore be identified as one of the core elements in an approach to create an integrated form of governance in the enterprise.

⁴ Price Leader which means that the prices are the lowest within the industry.

4.9 Leadership

As such the theories presented in the breakout strategy are focused on that the leadership of the enterprise (top management or what is defined as the executive group) has to show that their intentions are and they have to win over the employees. Finkelstein et al. argues that British Airways as a case where the CEO failed to win over the employees and as such he (and the executive team) faced challenges. The breakout strategy deals with winning over opposing fractions. Intentions needs to be shown through communication and through action. A combination of this will enable the management to win over the hearts and minds of the employees in the enterprise.

4.10 Communication

Finkelstein et al emphasizes that communication of the values (Finkelstein et al. 2007, p. 145 - 154), goals and vision to the employees so they are able to react to the vision and aide the enterprise by behaving according to the vision.

This is compatible with the view that John P. Kotter (Kotter 2008, pp. 44 - 61) presents in his book "A Sense of Urgency" where he suggests that the approach to spread the urgency to change through communicating feelings through lectures, person to person contact and videos of people who express (often distress or negative feelings) on the products or services the enterprise produces. The core problem to overcome is to communicate feelings to the crowd.

Communication needs to be addressed to other actors within the enterprise. This means that the members of the enterprise needs to address to communicate the urgency with management and middle management. When working with this then it is a necessity to work with mature the organization culture.

The issue of the fractal organization will be discussed in the chapter on work force planning.

4.11 Discussion of the Breakout Strategy

An Enterprise Architect⁵ can make use of the breakout strategy since it has the approach to systemic thinking. It is notable that the approach can be used to either aide the enterprise architect with explaining how enterprise architecture and integrated governance can aide the enterprise with optimizing its business model and avoid failure in the effort to change. In the same time does Finkelstein et al. handle the issues of the current state (in Enterprise Architecture known as the to be state) and how the enterprise evolves into a new and better enterprise that is able to achieve the

⁵ This includes the Chief Enterprise Architect.

goals of the particular enterprise.

The Enterprise Architect should be aware of that the business model defines several elements that impacts how the enterprise should adapt to the market and how it operates. The operation model can in some aspect be defined as the business model or at least there is an overlap. The operation model is discussed by Ross & Weill (Ross & Weill 2004, 2009 & Ross et al 2006) and as such it serves as a map or conceptual idea on how the enterprise operates.

Bernard (Bernard 2005, p. 33) defines integrated governance as being a part of strategic planning, Enterprise Architecture, workforce planning, capital planning and security. The Enterprise Architect can make use of the breakout strategy to articulate a vision for how the AS – IS state of the enterprise architecture should be dealt with and how the transition from the AS – IS state to the TO – BE state can be done.

As such the Enterprise Architect should be aware of that the enterprise shouldn't move from the AS - IS situation through a so called big bang change where everything is changed in the same time. The reason for this is that when big bang change occur then it often fails. Therefore big bang change should be considered a risk and as such the enterprise architect and the coherency architect should avoid using the approach. Instead should the focus be on how the enterprise should move gradually to achieve its approach and by such the program for change should accept this focus.

4.12 On Corporate Strategy

Conclusively the corporate strategy can be articulated through different means and by different actors. The question of how the enterprise sees itself and how it adapts to its domino then the various strategic schools can be applied in different ways. Mintzberg argues that the various strategic schools have both strengths (advantages) and weaknesses (disadvantages). There are some characteristics that can be understood and be applied to achieve advantages in the way the strategy is implemented.

An example could be that the combination of elements from the design school like the explicit strategy together with the leadership of the entrepreneur school and blend it with knowledgeable advice from the planning school. This approach will be discussed in detailed will in the implementation chapter.

It is debatable if strategic planning (corporate strategy) is suitable when the there is constant change or 'hyper competition' and if the strategy is the driver for what projects that are initiated or if the projects are the driver of the corporate strategy. For me it seems that the projects are the embodiment of the strategy (idealistically) and as such it is the embodiment of the strategy that enables behavior and value. Therefore it can be argued when or if there is a misalignment between the corporate strategy and the projects then it is a sign of that the projects that is the true strategy and the explicit strategy is a meaningless artifact.

It is notable that Finkelstein et al argues that the business model needs to be taken into consideration, so the decision makers are able to make the proper choices on how to position the enterprise and adjust the various elements of the enterprise to create synergy.

The primary issue for the corporate strategy is to make a plan for how the enterprise will go from the state it is in to a new desirable state. The plans made to initiate the various business projects and since any given group of executives work with strategy, then it is important to incorporate the idea on how to align the various plans, tactics and strategies needs to be coherent. The business model is a starting point that drives the rest of the enterprise.

The next chapter will be dealing with IT strategy. The primary focus will be on two different perspectives on IT strategy and how these can contribute to enable integrated governance, and through that holistic management.

5 IT Strategy

This chapter deals with the IT strategy, how the IT strategy is articulated, and what approaches that can be used. Two approaches will be dealt with which I have chosen to define as the integrated strategy approach (Potts) and the separated strategy approach (Ross & Weill).

5.1 The Relationship Between Strategy & Governance

Strategy is dealing with business planning (corporate strategy) where governance is the embodiment of the decisions needed to be take to support the transformation of the enterprise from what it was to a desired state. As such I chose to differ between strategy and governance. This chapter is dealing with strategy and therefore the chapter will be dealing with the concept of planning and how to view plans in comparison to what role the plans will have in the business transformation process.

5.2 The IT strategy

When it comes to IT strategy my findings suggest that there are many views on what an IT strategy should be designed for and what it should emphasize on when it comes to optimization of IT usage in the enterprise.

The first view claims that the enterprise needs a strategy separated from the corporate strategy (this is represented by Ross & Weill's view on IT strategy) where the opposing view argues that the IT strategy shouldn't be separated from the corporate strategy since most modern companies can't avoid the usage of information technology to perform the business enterprise.

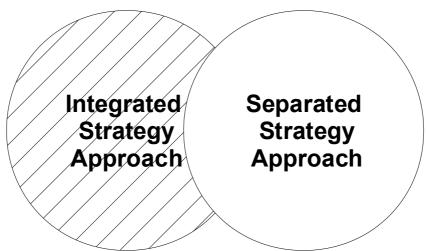


Illustration 3: The opposing views.

The opposing views do share ideas on why it is important to understand and handle information technology; however the theorists argue against one another since the two approaches sees each

other as a returning to old ideas and world views. McKeen and Smith (McKeen and Smith 2003, pp. 8 - 13) argues that Information technology can now be found in every aspects of an enterprise's budgets and assets, and therefore is IT an asset that needs to be governed.

In general the theorists within the separated strategy approach claims and believes that the organization's usage of information technology needs to be predicted and dealt with from an IT strategy (separated from the corporate strategy) a person has to be held responsible for the drift and develop of IT systems⁶ and the platforms that organizes the enterprise. Likewise do the theorists within the separated strategy approach argue that Information Technology is a complex phenomenon that needs to be dealt with through specialists, and people who are able to bridge the gap between IT and "the business".

5.3 The Separated Strategy Approach

Details on how this particular strategic approach works and how it addresses the various issues can be found in enclosure two. This particular section deals with how the separated strategy approach deals with the context of integrated governance.

When working with this particular approach then Ross & Weill (2009) works with the assumption that any enterprise has an operating model. The operating model has to be dealt with through an investigation that the executives and the IT managers go through to uncover how the business works, and through that the IT managers and executives develops some combined approach to how the business projects are aligned with the IT project. In the enclosure it is shown that the enterprise can have four different generic operating model that each are organized around how mature the enterprise and its IT-usage is. Ross & Weill has reused this model from their book "Enterprise Architecture as a Strategy" (2006) and it basically exposes that IT should be the key driver to change the enterprise and its business process and its business model. So far the business and IT leaders have usually made use of old principles and processes that where developed in the early part of the 20th century and usually this means that the usage of technology has led to that the business processes has been a hybrid that hasn't lead to any benefits what so ever.

In a context of integrated governance, then the enterprise has to address how the enterprise works, and the alignment of the business processes can from the perspective that Scott A. Bernard works with in his approach to Enterprise Architecture aide the enterprise with moving from the AS-IS situation to the TO – BE situation.

The reason for why it is a necessity to keep the two strategies separated is that IT is rather complex,

⁶ Including Information Systems.

and it needs experts to understand the more detailed approach to handle the technical architecture. The technical architecture includes information systems (business systems MIS) and servers, computers and more technical systems that is the foundation of the enterprise.

Ross & Weill argues that the higher and better aligned the business processes and the IT – processes have been aligned and grouped the more likely is it that the enterprise will be able to reuse its combined operating model in new markets through easy deployable components. The coherent view of business and IT processes should enable a competitive advantage according to the research that Ross & Weill presents.

From Ross & Weill it can be concluded that it is the governance process that is mostly important, and the IT strategy is to articulate on how to en-capsule the vision of where the enterprise will be moving towards. In the other hand the governance process

In response to this rather IT – centric approach to strategy, Nicholas G. Carr published an article and later a book that basically concludes that IT (and technology) generally doesn't lead to any form of competitive advantage since it was easy to copy the technology and apply it in competing enterprises. Likewise does he conclude that it is the usage of technology in the enterprise's business process is what makes the competitive advantage. An IT strategy developed within this approach will be explicit in a document that will be presented to a selected few who are accountable for how IT and business interact. In the same time the articulation process is typically based on a centralized process that doesn't include emergent strategies and emergent issues in the domain that the enterprise operates in.

The strategy is just a way to think on how to make plans, the implementation of the strategy needs to be done through IT-governance, which the next chapter will be dealing with.

There is however a small problem with the approach where the enterprise approaches the usage of the separated strategy. The integrated strategy approach deals with that the IT-strategy has to be a part of the corporate strategy. *The integrated strategy approach is dealt with in the next section*.

5.3.1 Findings for the Separated Strategy Approach

In the separated strategy approach the following can be concluded in relation to integrated governance.

- 1. Both the business side of the enterprise and representatives from the IT department has to communicate and uncover what particular projects that needs to be imitated to create coherent management.
- 2. The operating model is a form of uncovering of the enterprise architecture, and apparently there are four forms of operating models that impacts how well an enterprise is able to deploy business processes and IT to achieve a competitive advantage.
- 3. IT is too complex to be managed by business managers, and therefore should the IT strategy be articulated by the IT-managers, based on collaboration with the business managers.
- 4. The operating model can have four different levels of maturity and according to the leading theorists within this approach, then it is very likely that the enterprise will be able to achieve that business processes and IT services are perfectly aligned and can therefore become somehow generic and universal. Therefore can these theoretically be deployed anywhere the enterprise might want to locate.
- 5. The competitive advantage will prevail through the knowledge of how the enterprise works and distribute the information to those actors who need it, and how to reuse the information and information systems to identify how the enterprise should act.

The next section deals with the integrated strategy approach and it build upon the idea business and IT can't be separated, and that gives some problems with how the strategy should be articulated.

5.4 The Integrated Strategy Approach

The integrated approach deals with that the focus of an enterprise shouldn't be to separate the corporate strategy into several different forms of explicit plans and ideas. This means that the corporate strategy should include the usage of IT. The integrated strategy approach has been based on the book "Fruition" by Chris Potts. The book is written as a novel, and Chris Potts have added a few pages in the end of each chapter detailing with what can be learned from each of the chapters. I wrote a blog post (Sjoelin 2010) dealing with a review of the book, I have chosen to make use of a modified edition of the blog post to deal with the integrated strategy approach.

Potts worked with many interesting points through his novel and I have chosen to organize them around themes as the strategy articulation process, the alignment phase, the value adding phase, and the implementation phase. These phases are dealt with in detail in the second enclosure.

According to Potts then it is a necessity to address the feedback that comes from the environment

that the enterprise operates within, likewise should the levels of the enterprise e.g., there shouldn't be a misfit between on mixing the operational level or the strategic level of the enterprise. When the CIO or other form of IT manager articulates the IT strategy (at least as it has been done through the separatist approach) then he or she shouldn't assume or calculate with that a lack of interest is equivalent to a trust in the work he or she does.

When working with the separatist approach (and moving on towards the integrated approach to strategy) it is important that the strategist doesn't assume that an explicit strategy is equal to a strategy. When working with a coherent strategic approach on IT then it is a necessity to deal with the those actors who owns the business processes and understand their mindset. Likewise will an articulated strategy show what mindset the strategist has, and from an IT point of view then it is a necessity to understand that if the IT department is managed as an external entity (supplier) then it is likely that the rest of the enterprise will treat the IT – department as such and therefore not give the IT department any influence in the creation of the corporate strategy.

From an integrated governance point of view then it is clear that it gives no value what so ever to treat the IT department as an external entity (you can benchmark it as an external supplier as you can with all other departments in an enterprise) and compared to what McKeen and Smith says in their book then it would be futile to force IT (an increasing part of the company's assets) away from the strategy session. Potts raises the problem with having two different strategies by promoting the idea that IT is involved in almost all activities an enterprise in the wester economy is build upon. It is therefore meaningless not to integrate IT in the corporate strategy.

When the CIO is in the articulation process, then it is a necessity for the CIO to investigate if the enterprise isn't already fulfilling the vision that has been agreed on. In this process it is a necessity to investigate the business model and how the enterprise is and its architecture is designed e.g., is the technical architecture geared to enable further growth.

Likewise does it become a necessity to validate the promise (or promises) of the strategy the CIO has articulated. If the promise is misaligned from what the rest of the executive group then it is likely that the strategy will be rejected or if it is implemented then it will lead to misalignment. A strategical misalignment will lead to a general misalignment. This argue is compatible with Bernard's view on how Enterprise Architecture is dealt with. When the top of the pyramid (the executives) gives orders then it will go down the layers of the enterprise.

When working with a holistic view in mind then the investment process is key to work with. Potts argue that if the investment process workings well in the enterprise then it is very likely that the

enterprise will use IT (governing IT) well. From this perspective then it can be concluded that the investment process has to be included in any form of integrated governance, and those who are involved in the decision making should put extra attention to the investment planning process and implementation. When implementing the various investments into the enterprise then it is a necessity to anchor the responsibility and accountability of investing into the executive group so they will be able maximizing the value of the investments.

Therefore it can be concluded that IT and the business is one and the same thing, and therefore can't a separation of the strategies not exist with any meaning. Likewise can it be concluded that the integrated strategy approach deals with the embodiment of the strategy and not developing documents containing various issues of the strategy. In addition it can be concluded that the strategy can't be dealing with "IT and the Business" and it has to include how it deals with the end customers who buys the products the enterprise manufacture. Likewise does the Potts emphasize that the executive team of the enterprise needs to take charge.

From an enterprise architecture perspective (enterprise architecture is a part of the approach to integrated governance) it is likely that the chief architect and the rest of the architects needs to act as a form of social links between the various decision makers and those who have to live and work with the decisions taken by the members of the decision makers.

This leads to the Alignment phase of the strategy development process.

5.4.1 The Alignment Phase

When the CIO or other IT leader works with the section of developing the IT-strategy it is a necessity to understand the pace of change in the domain of the enterprise and that has an influence on the pace of change of the corporate strategy. When working with integrated governance it is important to view the corporate strategy as the central strategy that all other forms of strategies needs to be aligned with. This means that the CIO needs to understand that the corporate strategy will change as fast (at least the embodiment of the strategy) as the executives in the enterprise realize that the competitors have initiated new campaigns to conquer market shares.

The pace of change has a significant effect on how well Integrated Governance can be implemented, and it can lead to that the holistic management approach needs be agile. However the only way to enable the decision makers to make plans that are coherent is through the usage of an enterprise wide Enterprise Architecture program since it uncover how the enterprise works.

The mindset of the decision makers might change over time (Potts 2008, p. 44) and sometimes the

pace it takes for a stakeholder to change their minds might be very little. This might become a problem for how to enable the holistic management through integrated governance since a commitment to integrated governance is time and resource consuming activity.

In this case it is important for the IT organization (since it is often from the IT organization that the concept of the Enterprise Architecture is implemented) proves that it brings value to the enterprise and that the IT organization is on the same team as the rest of the enterprise.

The CIO has to understand that the focus of working with the IT strategy is that the corporate strategy is focusing on exploiting information technology to create value, to make profits and to restructure the organization of the enterprise. The focus of the other executives and the CEO is not to enhance technology or develop the technological architecture if it doesn't lead to some form of value. When it comes to the understand of value then the value can be defined of portfolio of measurement and types of measurement. When working with the budgeting it is likely that the other executives will be of the opinion that the enterprise spends a random amount of money on IT since IT is intangible.

When working with a strategy implementation or articulation then it is a necessity to work with the communication and language since these two elements have a great impact on how the strategy can be understood and how actors will interact with the strategy. Likewise is it a necessity to understand the various strategies the different executives come with have some form of value. The various do also have something distinctive to offer. Likewise is it a necessity to articulate the strategy to a particular audience so they understand what the strategy is all about.

Corporate strategy has a tendency to change rather often, and to avoid a gap between the IT strategy and the corporate strategy then the CIO needs to keep informed on the changes and cope with changes. If the corporate strategy works with solving a particular problem then the IT strategy needs to address this particular problem as well, when working with the business the IT department has to focus on being a part of the business and not an external entity; if the IT department is viewed as an external entity then it is likely that CIO can't influence the corporate strategy, and the CIO will therefore become an underdog.

When working with implementation of strategy in an enterprise then it will be dealt with through projects; most organizations often tend to be rather good at articulating business cases and developing the projects; however when making use of the projects then most organizations loses.

Likewise should the CIO be aware of that there are different forms of stakeholders and each of them might have their own agenda and their own background. Therefore should the CIO customize the IT

strategy for each of the stakeholders. When working with measuring the IT strategy and the business processes then the CIO should be working with various types of measurement.

This leads to the value adding phase that deals with how the IT strategy will create value for the enterprise. As it has been discussed in this section then it is a necessity to demonstrate the value of IT to the other executives.

5.4.2 Value Adding

The business side (if you can differ between business and IT) expects service to be provided to them from the IT organization. To make sure that the expectation on what to receive from IT department then service level agreements needs to be articulated. The service level agreements needs to be incorporated into the strategy. Most corporate strategies are about numbers and the IT strategy should also be about numbers initially.

Usually there is a gap between those who creates value for the enterprise and those who spends the value (profits) and this leads to misalignment.

In the investment process it becomes rather urgently that the CIO is able to distinguish the IT-investments from the usual business investments. In relation to Integrated Governance it is rather important to be able to see what sections of the enterprise that invests in various projects, and what part of the enterprise the investment enhances. When working with the IT-investments then the CIO has to make use of the same approach to evaluate the investment as the enterprise use for other sorts of investment, otherwise the approach will make any comparable value. According to Potts then IT investments are not that different from investments in machinery, cars, office supplies etc.

Likewise when investigating the return on investments (Potts 2008, p. 159) then the CIO and the rest of the executive group has to understand that the strategical projects aren't necessary those projects that are generating the highest return on investment and likewise should the executives try to investigate the cause and effect of the investments.

From an Integrated Governance perspective it is important for the executive team to understand how their investments impact the overall performance of the enterprise. If they don't approach the investment planning while they make their decisions on how to evolve and develop the enterprise, then it is very likely that the enterprise will grow incoherent and fragmentation will become a larger obstacle in gaining alignment, agility and assurance. These three abilities are the most important to achieve any form of competitive advantage. In addition to what has been discussed the CIO should be working with establishing relationships and he or she should be working with breaking down the

stereotypes the rest of the executive team might have regarding IT, and likewise should the CIO working with breaking down his or her own stereotypes of the other executives and their workareas. To communicate in a sensible way with the other executives then the CIO should be working with the identifying costs invested in business and IT identify any correlation if it is possible. Likewise should the cause and effect be explored if it is possible.

This leads to the change management phase, that in many cases is the most critical phase since it deals with implementation, and it deals with changing the attitude towards the project, service or process that has been altered over time.

5.4.3 The Change Management Phase

When working with change management it is important that the CIO involves the other stakeholders in the enterprise Potts 2008, p.72). It is a necessity to understand that working with changing the activities in the enterprise involves other stakeholders than the executive group such as the employees, middle managers and external persons or organizations who interact with the particular process. When working with the change management approach, then the focus shouldn't be abut numbers but on what the CIO knows and doesn't know in relation to the particular processes.

When articulating the IT strategy and later on implementing the strategy then it is a necessity to work with an iterative approach (Potts 2008, p. 81) which also can be applied to the approach on Integrated Governance. Before the transformation of the enterprise starts then it is a necessity for the CIO to understand how the rest of the executive group understands measuring and budgeting the When working with Integrated Governance the CIO has to make sure to break down the image of the IT department as a department that promises a lot but never keeps its promises, and that the IT

department cares about the business side. Chris Potts introduces and interesting argument (Potts

2008, p. 175) that 100% alignment among the various strategies in the enterprise can become a rather dangerous phenomenon, and when the strategies are aligned then it is a rather rare phenomenon as well. The CIO has to be one of those people who can influence other stakeholders in the enterprise to change their behavior and as such act as a change agent and opinion former. When working with the IT strategy then it is a necessity to understand that a new IT strategy will result in a demand for a new operating model (Potts 2008, 175). In relation to integrated governance then it can be clarified that social networks and uncovering and defining how the IT systems and processes have to work after the strategy has been implemented.

The change process will mainly be dealing with challenging the orthodoxy of how things are done in the enterprise; however the focus is also the largest obstacle that the CIO will be dealing with through his or her work with the change management process (Potts 2008. p. 180). When working with the assumptions on changing the focus on working with internal investments compared to Information then the CIO should mainly focus on the investments part. Potts (Potts 2008, p. 191) argues for the implementation of a Chief Internal Investments Officer (CIIO), and usually the CIO could be a good candidate for this position; However if the CIO is not read to transform and challenge his views then it is a necessity to make somebody else take the lead of the internal investments position. What is more important is that the de facto strategy is formed by the CIO through his actions and is therefore not what is written on a piece of paper.

There is only one strategy that means something and that is what the CIO does (embodiment of strategy). Potts is of the opinion that it is rare that any kind or any type of strategy can achieve 100% alignment. The CIO should put special attention to the investments of the enterprise, and that means that his role might change from being the IT manager to becoming and investment manager, Potts suggests the title Chief Internal Investments Officer.

In relation to the discussion of the integrated strategy approach then there are some findings that needs to be clarified.

5.5 Findings of the Integrated Strategy Approach

The discussion has led to the understanding of how the integrated strategy approach works.

- 1) The CIO needs to think holistically when he or she is working with articulating the enterprise's IT strategy. The CIO needs to think in how the enterprise usually handles investments. It is through the allocation of resources and investments that makes the enterprise able to become more coherent.
- 2) The CIO needs to work with interpersonal relations both when it comes to the transformation process (change management) and when it comes to the investigation and understanding of how the executive team thinks, and how the employees and middle managers are thinking and acting when facing change.
- 3) The CIO needs to address the ideas of incorporating IT into the corporate strategy. Likewise will he or she need to challenge the orthodoxy that usually exist among the non-IT executives and the IT-manager. Typically they see IT as something opposing the rest of the organization by promising one thing and then never deliver it. If the IT department is seen as such then it is very likely that it will have no influence in the strategy formulation.
- 4) Strategies aren't on paper they are the actions the various stakeholders make. Strategies are

the embodiment of actions.

The next section deals with IT strategy and how the two approaches are dealt with in relation to working with integrated governance.

5.6 On IT strategy

The separated strategy approach advocates the articulation of an explicit IT strategy and of such most executives and IT managers plan IT to be something apart of the enterprise and acting as an organization within the organization. This can only be avoided by the IT department (or departments depending on size of the enterprise) through forcing the leadership of the IT-department to think in relation of the enterprise and think of IT as an internal investment. Likewise is it discussable what an explicit and well designed IT strategy is good for if it isn't aligned with the business and understood by the executives.

It is arguable if the separated strategical approach is worth much for an enterprise besides that the CIO can prove to the CFO and COO that there are some business processes and projects that are supported by IT.

To ensure the enterprise makes use of a different approach than through the explicit IT strategy. The alternative is the integrated strategy approach where the focus is the embodiment of the corporate strategy in an IT context. The embodiment is done through governance and a clear focus on internal investments.

Likewise does Potts argue that the CIO role should be abolished and replaced with the role of the chief Internal Investments Officer (CIIO) that is in control of realizing the benefits and predictions of investment internally in the enterprise. According to Potts should this aide the enterprise with realizing the promise (and premises) that the business cases stated the investment would.

The separated strategy approach does however focus on that the IT strategy has to understand the organization from the IT department's point of view. That forces he or she to understand the risks and therefore has to think on how to mitigate the risks through planning.

If the optimal strategic approach might be a combination of the two approaches of where the CIO articulates few but precise principles that are enforced through IT governance and through culture within the enterprise.

The articulation of principles are compatible with the concept of Enterprise Architecture (when used as a governance form).

Since Enterprise Architecture is not opposing the concept of the integrated or the separated approach to IT strategy then it is likely that they can be combined in a practical approach.

The practical approach will be dealt with in the chapter titled implementation.

The next chapter will be dealing with IT governance (or the embodiment of the IT strategy). The chapter will analyzing how Ross & Weill (Ross & Weill 2004) thinks of IT governance, and how their views can be applied in context of Integrated Governance.

6 IT - Governance

This chapter deals with how IT governance is a part of integrated governance and why IT is a necessity to govern.

As I have mentioned in the IT strategy chapter, McKeen and Smith (McKeen & Smith 2004, pp. 11 - 12) argues that IT is everywhere in the budgets of an enterprise since most assets are embedded in information and knowledge that the enterprise possess. The enterprise needs to handle their information and knowledge in a proper way to enable a competitive advantage. Strategies have no value if they aren't embodied in the actions of how the employees and the leadership behaves. In such IT strategy is enforced through governance. Ross & Weill (Ross & Weill 2009) argues IT governance is a way to ensure the right behavior in the enterprise while the employees and the managers engage in their respective activities.

According to Ross & Weill then there are six different forms of governance. If it is compared to what McKeen and Smith and the way they see IT then it is also an indicator for how the enterprise manage and utilizes its assets. Therefore should the enterprise's executives take IT governance into consideration when it engages in the value maximization of its internal investments.

Ross & Weill argues that behavior (embodiment of strategy) is better than explicit strategies. This means that the IT governance deals with how the members of the enterprise acts when they are using e.g., Information Technology to complete their tasks.

"Behaviors, not strategies, create value"

6. (Ross & Weill 2004, p. 6)

As such this means that the behavior has to be enforced through organizational responsibilities and commitment from committees or groups within the enterprise that has the power to decide what technologies can be invested in and made use of.

When it comes to the governance of the information technology then Ross & Weill defines the that IT governance is the most notable indicator to make use of for predicting the value of the Information Technology the enterprise has invested in.

"We conclude that effective IT governance is the single most important predictor of the value an organization generated from IT."

7. (Ross & Weill 2004, pp. 3-4)

When it comes to the concept of IT governance then Ross & Weill defines the concept as being the allocation of the decision rights and accountability for how investments in the enterprise IT should be. IT governance deals with how the employees and management makes use of Information Technology.

"IT governance: Specifying the decision rights and accountability framework to encourage desirable behavior in the use of IT."

8. (Ross & Weill 2004, p. 8)

6.1 Forms of governance

According to Ross & Weill there are two perspectives of IT governance. The first perspective is who can come with input to a decision making committee and needless to say the second is a perspective dealing with the decision making. Among the six forms of governance there are some forms that aren't as effective in complex enterprises as others. Thereby said that there are also some of the governance forms that suits small and medium sized enterprises and SOHOs⁷.

Ross & Weill characterizes the first form of governance (**Business monarchies**) as being the governance form where the executives dictates what systems to use and how to use them. The obvious downside is that the corporate executives don't necessarily knows anything about IT and the strategical aspect of technology. The advantage by making use of this particular governance form is that the enterprise might enforce the business goals in the decision making and by that aligning IT with business goals.

Ross & Weill defines the second form of governance (**IT monarchies**) as when the IT department of the enterprise is accountable and responsible for what IT systems that are desirable use and invest in. The advantage is that the IT department knows how the technology works and what it can be used for. The disadvantage is when the IT people is working with strategy then they often tends to put too much effort into technology instead of investing their attention to the needs of the business.

⁷ Small Offices – Home Offices.

Then Ross & Weill defines the third form of governance (Feudal) as when each line of business within the enterprise decides what IT systems to make use of and as such each division manager decides what particular software and hardware solutions that might be suitable for their line of business. As with the two governance forms there are both advantages and disadvantages. Needless to say that the disadvantage of this form of governance is that the IT platform (Technology Architecture) will be fragmented; however the advantage is that the enterprise's lines of business are able to optimize their particular sub-architectures to match the requirements of their particular activities. The disadvantage is that the high level of autonomy might lead to a lesser degree of interoperability and as such it might minimize the value of the data that the enterprise has accumulated.

Ross & Weill then defines the forth form of governance (**Federal**) as a governance form that works a bit like a parliamentary democracy and as such there is two sides that negotiate on what solutions that needs to be purchased, which to be decommissioned and which systems that needs to be altered to match the business projects that will drive the enterprise to reach it vision and thereby its goals. The two sides are the IT – managers and the business executives.

Ross & Weill then defines the fifth form of governance (**Duopoly**) as a governance form where the IT department is represented along side another faction within the enterprise. Ross & Weill makes use of an example of which there can be either executives or process people that represents the other faction. This form of governance gives the enterprise advantages and disadvantages. The obvious advantage is that it is more likely that the enterprise will be able to negotiate and align the goals of the IT side and the business side of the organization. The disadvantage can be that the two sides of the enterprise isn't able to combine a suitable mix between alignment, cost reduction and innovation.

Ross & Weill defines the sixth form of governance (**Anarchy**) as being a situation of which the enterprise has given (implicit or explicit) the power of deciding the usage of hardware, software and information systems to groups or individual users. Needless to say that there are quite a few disadvantages; however there might also be some advantages. An advantage could be that the individual user might be more productive since or she can make use of the software and solutions they have been fancying and probably used their own effort to learn and trusts.

Ross & Weill concludes in their survey that the top performers within any given industry makes use of either the duopoly or federal approach to input and decision making. Apparently it gives the enterprises the synergy among business and IT to understand develop the technological platform.

As mentioned in the former chapter dealing with IT strategy then there are reasons to believe that the share planning and governance of IT can be a liability instead of a value adding asset. This means that information technology shouldn't be governed as a separate thing since it might give the IT-leaders the impression that the IT-organization is somehow detached from the rest of the enterprise and as such sub-optimize.

IT investments can become strategically important for an enterprise, which is one of the conclusions of McAfee & Brynjolfsson's research on the subject (McAfee & Brynjolfsson 2008, p. 3-6). According to McAfee & Brynjolfsson then there are several approaches to how IT can enable a competitive advantage.

In his article from 2008 then there are several typical midsized American enterprises that makes use of IT to enable extraordinary services to its customers or through re-using data to innovate the enterprise's services. This only emphasizes the need to govern the technological architecture and make use of the governance to assure product innovation.

Typically enterprises, where the governance form has been too business focused ended up with, that old processes simply has been integrated directly to the IT systems meaning that there have been a rather little production increase and rather few benefits have been realized since the work systems⁸ and as such the executives of the enterprises needs to open up for advice from the IT organization and from consultants that can come with valid input on how IT can generate further value.

In the dilemma with administration (governance) and innovation of Enterprise Architecture Doucet et al. (Doucet et al. 2009, p. 494) argues that it is a rather fine act of balancing the stakeholders have to commit too to avoid to fall into any of the two ditches and as such the same can be said on IT governance.

Ross & Weill (Ross & Weill 2009, p. 11) that IT governance deals with six different elements. The first element is IT principles, the second element is IT architecture, the third element is IT Infrastructure Strategies, the fourth element is business application needs and the sixth and final element is IT investments.

All in all Ross & Weill argues that a combination of IT leaders and the business leaders (typically executives) to align the views of IT and business. The alignment will be able to ensure that the enterprise will govern its internal assets the right way. As such Ross & Weill believes that in all of the six elements the enterprise will be better of by applying the business side and the IT side in the

⁸ A work system is a social system of which one or more activities that transforms resources into services that can be used by either customers or other sections of the enterprise. As such an enterprise can be considered as one work systems but also as multiple as groups, departments and lines of business all can share the characteristics.

6.2 Discussion of IT Governance

IT governance can for many enterprises be a good way to handle and operationalize one of the most valuable assets for any enterprise (in reference to McKeen and Smith). However one important note that the executives should take into consideration is that governance designated (and strategy articulated) for IT might lead to sub-optmization. In the other hand if there isn't a focus on how the enterprise invests and develops its technological architecture then it is likely that the enterprise will use a lot of resources to 'fight fires' instead of enabling a competitive advantage. It is quite clear that the enterprise should put an effort into govern its IT since it can be allocated to any of the budgets the enterprise has and IT is a key enabler for how one of the most critical assets for most enterprises are managed (information & knowledge).

As it is with the strategy approach that Chris Potts advocates, that deals with that most activities of a modern western enterprise have to be supported by IT in some way. Likewise should the corporate strategy be followed by an internal investments plan instead of an IT-centric approach; this means that the enterprise as such needs to understand that the embodiment (governance) of the strategy and it needs to be prioritized highly. However the responsibilities should be organized around the COO, IT-managers and a CIIO⁹ assuming that the enterprise needs to maximize value of its assets due to the resources can be allocated to more strategical important programs that can move the enterprise closer to achieve its goals. The CIIO, IT – managers, COO and the CEO should underestimate Porter and his ideas on strategy isn't solely operational efficiency and as such they should carefully estimate each option that gives the enterprise the opportunity to innovate its business processes and innovate how IT can enable business to be done in new ways and make new products or services.

Since Porter is in the positioning school (Mintzberg 2009 p. 26) then it has to be taken into consideration that his views of strategy might not be aligned with the school of taught that is made use of internally in the enterprise.

6.2.1 Criticism of IT and Competitive Advantage

Technology in general is not suitable way for most enterprises to gain a competitive advantage since technology can be defused to competing enterprises (Carr 2005, p. 78). Likewise it does often happen when enterprises invest in IT then most of the gains from the investment is wrongfully re-

⁹ Chief Internal Investments Officer.

invested in lowering the prices of the enterprise's products to achieve a bigger market share or to force competitors away from the market space. This means that the consumers often get the lions share of the benefits of the investment. Since the competitors rather easily can match the usage of technology then will most enterprises face a price war (Carr 2005, p. 64).

Carr (Carr 2004, p 107-134) concludes that for most enterprises then it would be preferable to commit to these principles 1) Follow don't lead. 2) Focus on the risk and not on the opportunity (innovate when risks are low) and 3) spend less.

However what Carr neglects in his approach is that no enterprise is identical to one another and as such not all technology e.g., information systems can be diffused. Likewise it is the obliteration of the business processes and the work systems in combination with the deployment of IT that makes the enterprises able to compete with the rest of the enterprises.

6.3 On IT Governance

In conclusion that the investments in IT can become a great potential enabler for a competitive advantages for the enterprise. Likewise is it not possible for most modern enterprises to detach IT governance from integrated governance but in the other hand then IT governance shouldn't encourage the IT managers and the IT departments to detach themselves from the rest of the enterprise and as such become a barrier to the holistic management approach.

IT governance should be seen as a way to see how the enterprise can modify its processes and in the same time maximize the value of the resources the enterprise has invested in its Information Technology.

I have mentioned earlier in this literature review that plans for the sake of plans creates no value and the same can be said about IT strategy & governance. Therefore can't IT governance be ignored if the enterprise wants to maximize value (of their investments) and more efficient business processes; however what is debatable is what form of IT governance structure that should be applied in any given enterprise.

Small and medium sized enterprises might benefit from applying the business monarchy since the CEO often has the overview of the enterprise. However when the enterprises experience growth then the responsibilities will be detached from the CEO and given to other executives and middle managers which makes duopoly and the federal governance approach more convenient.

Peter Weill and Jeanne Ross argues that the top performers makes use of one or two of the six forms of governance; however it doesn't mean that the generic forms of governance can be applied to

achieve competitive advantage (especially if everyone does the same).

The executives have to take the IT governance into consideration though IT governance can't give the enterprise a competitive advantage. If IT governance can give the enterprise a competitive advantage then it has to be by binding other activities to it. To do this the enterprise has to make use of integrated governance and a way to do this can be through applying Enterprise Architecture.

Enterprise Architecture is both a form of documentation and a form of governance, and it works a meta model among different forms of strategies.

When the enterprise adapts an innovation then it will eventually adopt it to its own conditions so it fits with the culture, the structure and the processes within the enterprise. Therefore a generic approach to IT governance, integrated governance and Enterprise Architecture models will be modified.

The next chapter will be dealing with organizations and how these can be viewed and transformed. The chapter will be dealing with theories from John P. Kotter, Orton & Weick including the views that Gary Hamel has introduced on management.

7 Organization & Workforce Planning

This chapter deals with how the executives have to deal with the organization and the impact of organizations on Integrated Governance. The chapter introduces the role of management in relation to the organization, the role of the hiring process, and the role of changing the organization. In the end of the chapter a discussion on how these various elements impacts Integrate Governance is facilitated

7.1 The Role of Management

Gary Hamel works with an assumption in his book "The Future of Management" that the current form of organizations (what I so far has defined as work systems) are designed on assumptions dating back to the early beginning of management theory. The early beginning of management and organizational design was dominated by Frederick Taylor's approach on motivation and management of employees.

It is worth to mention that in his context Frederick Taylor worked with an assumption that dealt with professionalization of enterprises¹⁰ which in his opinion would make the enterprises more effective.

Taylor worked with an assumption that when employees was introduced to an incentive system that had many phases and many steps then the employees would work harder to perform according to the incentives program and as such show desirable behavior. Taylor was of the opinion that if the incentives were too big then the individuals would stop performing.

In the same time should the various business processes be analyzed through a strict time measurement (unit measurement) approach.

In the same period the car manufacture. Ford motors founded and led by Henry Ford saw the benefits of applying the Taylorist principles of management and adapted it to the Ford Motor company which became known as Fordism (Taylorism and Fordism have later become synonymous with one another). Fordism however was put into practice with the notion that the workers had to separated and their tasks had to be specialized so their effectiveness up and their specialism as well. The so called assembly lines was invented where the workforce was trained to do one particular thing well.

¹⁰ At the time most enterprises in the U.S. was based on four persons and most employees was found through the individuals social networks. Likewise was most of the workforce illiterate and could as such only receive instruction through oral commands and only do limited tasks.

The specialist approach gave an increased speed and unit quality and as such it also proved to be cost effective for the Ford Motor company. However the Taylorist approach did minimize the interaction the different employees had with one another and that led to that the employees and their approaches to solve problems where suppressed under the organizational hierarchy. The hierarchy was enforced through the organizational bureaucracy that according to Taylor was build upon the need to coordinate and communicate the various tasks.

After the peak of Taylorism then the focus changed from a rather mechanistic approach to the organizations and employees organizational literature has gone through several phases from arenas of power, culture and last but not least knowledge.

The current paradigm for viewing organizations deals with that each individual is a source of knowledge to the enterprise can benefit from the source.

Hamel argues that the structure of the enterprises is a left over from when Taylor and his disciples promoted.

7.2 The Organization and Its Properties

The organization as such has been changing over time from the early Taylorist and Fordist approach to a form of organization where the employees and managers all are knowledge workers. These knowledge workers have become the primary assets for most enterprises in the western and prowestern economies and as such they play a new powerful role since they in many ways outweighs the value of conventional assets. Since knowledge is portable and goes with the person of which the knowledge is embedded in.

The problem is to motivate the employees and the managers to work for the enterprise as long as it is profitable for the enterprise.

Hamel (Hamel 2007, pp. 88-96) argues that employees needs to be coached and their ideas needs to be taken seriously by the corporate executives. From that the enterprise will have to aide the establishment of a work environment that supports the employees and their projects. Hamel works with ideas such as an innovation democracy and employment strategies that support that only the best employees are hired and as such they contribute to the enterprise. This should give the enterprise a leap ahead of competitors.

Hamel argues (Hamel 2007, pp. 111 - 114) that giving the employees the time and resources to do their own projects will significantly aid the enterprise if some of the projects turns out to be something useable e.g., for new products or optimization.

When selecting the right employees can be crucial for innovation and how the enterprise works. Hamel uses Google as an example of how an enterprise with a "Bozo Free Zone" can work with avoiding employees who don't perform or behave accordingly to the standards of the enterprise (Hamel 2007, p. 108). Google interviews the potential employee and gives the person a lot of different tasks of which the individual have very little time to solve the problems. By such the managers that evaluate the candidate can see if the way the person solves the problems fits with the way Google works. The philosophy deals with that A-people attracts other A-people; however if the A-people starts to hire B-people and if the degeneration continues then C-people starts to enter the enterprise. Google believes that A-people are significantly more productive than B-people and initiate more valuable projects.

I have chosen to summarize the approaches that Hamel works with in the table below.

Strategic Approach	Desirable Outcome
Innovation Democracy	The enterprise creates a system of which the employees can vote for what projects they find interesting.
Only hire the best	The enterprise avoids hiring persons that the employees and the managers finds sub-standard. When testing the employees and then avoiding hiring substandard individuals then the enterprise contains a work environment for elitist employees who according to Hamel creates greater value.
Cultural Sponsors	When an employee is hired then let one of the experienced employees work as a cultural sponsor who aids the newly employed person with integrating with the business.
Employee projects	The organization should provide the resources and the opportunity for employees to work with their own projects. In that way the enterprise will ensure commitment and innovation.

Table 1: Strategies for employment.

The views on management that Hamel presents in his book is in many ways rather revolutionary; however the ideas and approaches that Hamel works with are generic. Generic approaches needs to be customized by enterprises. For quite a few enterprises the generic approach can't be made use of as intended since they do not have access to the same resources as those cases that Hamel makes user (Google, CEMEX, and W. L. Gore) and most likely no enterprises are alike since they are made up of people. The ideas can however be made use of to facilitate a discussion in the executive group and among the employees.

Hoverstadt does in his book "The Fractal Organization" (Hoverstadt 2008, pp. 14-15) advocates for

that the enterprise and its management are institutionalized through their education and their way of working to think in a particular pattern that is re-enforcing itself over time. Therefore can it be expected that managers and employees might become rather resilient when it comes to change their perception of how the enterprise works and how to act and solve on various problems.

Likewise does Hoverstadt (Hoverstadt 2008, pp. 42 - 48) advocate that it is necessity to secure that there is some form of stability and a form of instability to make sure the enterprise and its organization develops and adapts to changes in the domino of the enterprise. And when working with the articulation of a business strategy then it is a necessity that all levels of the enterprise participate in articulation on their own level. It is a necessity if the enterprise can address the various changes in its domain. For this there is needed a systemic approach and that can be done through communicating through the various departments and groups of people (Hoverstadt 2008, pp. 190-191).

This leads to how to change an enterprise into a desirable state, how the transformation of the enterprise can be done through the perspectives of various theories.

7.3 Transforming the Enterprise

When an enterprise has to be restructured or developed in a direction that the executives finds desirable then the there are several different approaches on how to an organization (the human side of the enterprise) works and it dictates what conditions that works.

The first approach to organizational change is properly also the mostly used approach and was originally articulated by John P. Kotter in his 1995 article "Leading Change: Why Change Efforts Fail". In the article Kotter promotes an eight step change framework that the executives has to take into consideration when changing organizations from their status quo.

Kotter's change framework is however based on Kurt Lewin's three step change framework (Borum 1995, p. 44) of which can only be used in organizations that can be classified as tightly integrated. Lewin's three step approach is build upon the idea that an organization can be unfreezed, moved and freezed into a new stage.

The eight phases (Kotter 1995, p. 61) are build upon the assumption that a crisis is needed to create a situation which the enterprise has to overcome. This will apparently make some of the employees ready to work in a new way if they are informed about the crisis in the correct manner and in the correct time. Below I have listed the eight phases:

"1) Establishing a sense of urgency.

- 2) Forming a guiding powerful coalition.
- 3) Creating a vision.
- 4) Communicating the vision.
- 5) Empowering others to act on the vision.
- 6) Planning for and creating short-term victories.
- 7) Consolidating improvements and producing still more change.
- 8) Institutionalizing new approaches."

The other view on organizational change is the loosely coupled systems (organization) and this form of enterprise can't be changed through a centralized approach since the loosely coupled system is only remotely attached to the components within the enterprise and these are often in interaction with external entities. However the question of how coupling can be debated.

"Tightly coupled systems are portrayed as having responsive components that do not act independently, whereas loosely coupled systems are portrayed as having independent components that do not act responsively"

- (Orton & Weick 1990 p. 205)

However since most modern enterprises are knowledge intensive enterprises (as dealt with in the former section) then it is a probability that the enterprise in some way or the other loosely coupled.

Karl Weick (Orton & Weick 1990) who is the other main author who I will make use of in this chapter claims that the loosely coupled enterprises needs to be dealt with in a different way than with change processes that have been based on Kurt Lewin. The reason for this is that the various semi-independent departments, groups or layers within the enterprise can be influenced by factors outside the enterprise. Orton & Weick argues that the enterprise as such has to give departments that have access to customers and suppliers some sort of freedom to interact. The freedom can turn to a dialectic (struggle for resources and power) among the departments.

Orton & Weick argues that there are eight types of coupling.

"Working with the voice of typology, we identify the eight most frequently recurring types of loose coupling: Loose coupling among individuals, among subunits, among organizations, between hierarchical levels, between organizations and environments, among ideas, between activities and between intentions and actions"

In their paper they predict that a dialectic approach on how the social systems in the enterprise have formed will aide the interpreter (observer) of the social system to understand the outcomes of the social system. In addition to this view on the social systems then Orton and Weick argues that the loosely coupled systems is a way to explain how the social systems have evolved over a period, and the approach should be used with a degree of caution if the observer plans to make use the approach to describe the properties of a social system (Orton & Weick 1990, p. 219).

"To assert that a system is loosely coupled is to predicate specific properties and a specific history to the system, rather than an absence of properties"

- (Orton & Weick 1990 p. 219)

Orton and Weick defines that there are some factors that needs to be taken into consideration when the observer looks for loosely coupled systems.

7.4 On Organization and Its Impact

The enterprise will as an organization not be able to change back to what the organization once was. Usually this means that organizations can't change back to what it once was perceived as, e.g., simple, stable and easy to govern. In the same time this means that organizations has become more complex, loosely coupled and this leads to some complications of how to change the enterprise further.

The executives need to understand that the organization and the way it operated can't necessarily changed easily or as a unified entity. The two different aspects (Lewin / Kotter versus Orton & Weick) can be combined in a framework for change. The framework can then be used to change the enterprise from the status quo to a desirable state that is matched in the vision for the corporation. The combined approach will be dealt with in detail in the chapter dealing with *Implementation*.

The organization has a great impact on how the enterprise is able to adapt to the changes in the enterprise and likewise has the structure of the enterprise a very big impact on how the enterprise is able to organize work and enabling the employees to contribute with innovation.

Therefore is it a necessity to deal with the organization and the management of the organizations to ensure that the enterprise can adapt to the challenges that occurs in the domino of the enterprise.

In relation to integrated governance the understanding of the organization and the way the organization works is extremely important. The organization and the various components of the

organization will be able to undermine the development and the implementation of Integrated Governance since the organization culture can hinter collaboration among the various departments, and the structure of the organization might enable sub-cultures that works against one another in the enterprise. Likewise is it important that the approach to Integrated Governance is supported by the executives and other managers in the organization; otherwise it will not be possible to implement Integrated Governance. In other words the understanding of how the organization works (structure, culture, management, middle management and employees) is a core component to working with Integrated Governance.

The next chapter will be dealing with Enterprise Architecture and how it can be applied to enable integrated governance. It is important to know that organization is one of the key components to make Enterprise Architecture work as more than a form of documentation.

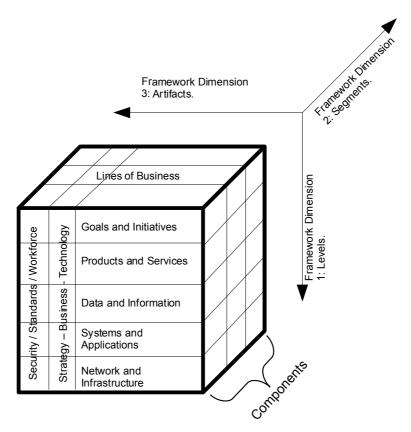
8 Enterprise Architecture

This chapter deals with Enterprise Architecture and what Enterprise Architecture can be used for in relation to establish a holistic management approach and Integrated Governance. So far this literature review has been dealing with how to create a coherent view of how the enterprise works, and how the enterprise can be improved through that.

There are two things that Enterprise Architecture can be defined as. According to Bernard (Bernard 2005, p. 33) Enterprise Architecture is both a form of documentation and a form of governance, depending on how the top of the enterprise decides to make use of Enterprise Architecture.

Bernard defines Enterprise Architecture as being Strategy + Technology + Business (Bernard 2005, p. 32) and as such these can be governed in a coherent matter when the enterprise has documented its initial enterprise architecture which is titled "as is" (Bernard 2005, 37).

Bernard makes use of what is known as the EA3 Cube to illustrate how an enterprise works.



Drawing 1: Bernard 2005, p. 38.

When making use of Enterprise Architecture then the enterprise has to allocate resources to an Enterprise Architecture program that as such works a collection of projects that moves the

enterprise and its different layers of architecture towards a desired stage.

Bernard argues that to move the architecture then an Enterprise Architecture Management Plan (Bernard 2005, p. 34) needs to be articulated. The plan is used to convince the stakeholders to buy into the concept and allocate the necessary resources and distribute the responsibility and accountability to implement the Enterprise Architecture program.

The accountability and the responsibilities needs to be distributed so various departments within the enterprise works together on completing the tasks.

In the EA 3 Cube framework there is the concept of an artifact, The artifacts can be a strategy, document, organization chart or a summary that is dealing with how enterprise works.

As it is shown in the drawing then the drawing is a rubrics cube of which there are lines of businesses (that can be departments and divisions) within the enterprise. In the top layer is the goals and initiatives. Below the is the products and services and below that is the data and information layer. The layer below of data and information is the systems and applications layer and the last layer is the network and infrastructure layer.

The assumption is that the goals and initiatives is the driving layer and the rest of the layers should ideally be aligned with the top layer.; however this is not the case for most enterprises that have experienced growth.

The drawing shows that there are some elements that goes through all the layers in the cube.

Strategy, business and technology will be embedded in each of the layers. The assumption is that these three elements are needed to ensure that the enterprise can perform the activities that combined produces the products or services that the customers or clients wants.

Likewise is the workforce, standards and security planning threads that can be found on every level of the cube (and thereby the enterprise).

The components can be within just one line of business and the it can be shared among various lines of business and various levels in the cube.

The EA 3 cube is a framework and is not tightly integrated to the concept of Enterprise Architecture, since there are many ofter frameworks that the Chief Architect can make use of. Examples of frameworks are TOGAF¹¹ and Zachman (these are generic) and there are examples of company specific frameworks that is hold inside enterprises.

11 The Open Group Architecture Framework.

Ross & Weill deals with Enterprise Architecture in their book "Enterprise Architecture as a Strategy" from 2006. In the book they address four different operating models that an enterprise can make use of to achieve a competitive advantage, and these are similar to those that are discussed in their book "IT-savvy". Ross & Weill are rather IT centric in their approach to Enterprise Architecture and since they promote it as an IT tool and not as "holistic business tool" then it can only be defined as being on the "Foundation Architecture" in reference to Doucet et al. (Doucet et al. 2009, pp.37).

This however doesn't exclude the usage of the ideas presented by Ross & Weill to support the strategic usage of Enterprise Architecture. It is notable that Ross & Weill don't present a particular framework for how to uncover the architectures of the enterprises. Neither do Ross & Weill present a particular methodology for how to approach the uncover the process.

To summarize the approach that Ross & Weill works with then core of using Enterprise Architecture is for eliminating the gaps and differences between the IT department's view of how the enterprise works and how "the business" perception of the activities. In relation to this then the IT – department and "the business" bridge the gaps between what works and what should be working to ensure that the enterprise is able achieve the goals and the vision that has been articulated for it.

This process is called "articulating the operating model" by Ross & Weill, and the operating model is what be defined as the "AS IS" architecture (as it was defined by Bernard). Ross & Weill then argues that the CIO should take charge and mature the Enterprise Architecture. It is my assumption that they through this process the CIO and "the business" executives initiate projects that matures the enterprise architecture from being fragmented to become something to become more agile and deployable to achieve best practice business processes and technology support for achieving the best possible results.

This leads to how integrated governance is combined with Enterprise Architectue.

8.1 Integrated Governance and Enterprise Architecture

When applying Enterprise Architecture to the enterprise then it can be used as a form of glue to make Integrated Governance work. Bernard (Bernard 2005, p. 33) argues that Integrated Governance is dealing with corporate strategy (chapter one), capital planning, security, workforce planning and program management.

In Bernard's view Enterprise Architecture is a branch of Integrated Governance but not an

integrated part of Integrated Governance.

It is however a necessity to make use of the qualities of Enterprise Architecture to communicate how the various organizational work systems and technological systems interact with one another to ensure the business processes can be performed.

It is therefore a necessity to think in a slightly different way and make sure that Enterprise Architecture becomes the key driver for Integrated Governance. Enterprise Architecture can result in a coherent overview of how the enterprise works and from that a vision for how the enterprise should be like in the future can be derived. This is done through making use of repositories that enables communication among the various actors within the enterprise, so they can create an understanding of how the enterprise works. The concept of governance can be realized through applying this holistic view of the enterprise in the decision making process. Likewise should the decision making process include some of the features that Scott Bernard discusses in relation management of the Enterprise Architecture Program e.g., scenario planning.

Integrated Governance that combines the strategies and planning processes to achieve that there aren't any forms of incoherency in the plans for how to change the enterprise.

This leads to implementing Enterprise Architecture in an enterprise. I have mentioned earlier in this paper that organization culture has a great impact to the success rate of implementing Enterprise Architecture or for that matter any other change in business processes.

8.2 Implementing Enterprise Architecture

People and organizational culture is not easy to deal with since their purpose is to protect the members of the various departments and sections of the enterprise against change and the uncertainty of change.

It is likely when an Enterprise Architecture program has been initiated that the persons who are working with the program will face opposition and as such it is a necessity to communicate and face the opposition and come them down and try to make them understand what Enterprise Architecture is about and how it will impact their daily work life.

Therefore it is important to understand that not all factions within the enterprise that wants change or tries to promote their own agenda that isn't aligned with the agenda that the executives has established in the enterprise.

A generic approach to change will be dealt with in the chapter dealing with implementation.

8.3 The Holistic Perspective

One of the goals with implementing Enterprise Architecture in an enterprise is to give all the members of the enterprise access to see how the enterprise works and where the enterprise should be transformed into.

Bernard argues that the findings of the Enterprise Architecture program has to be shared in the enterprise. These findings have to be organized around the chosen framework that is easy to understand, link artifacts to one another and be viewed by different people in the same time. It is therefore it is a necessity to post it on the enterprise' intranet.

The question then becomes if the various artifacts are understood the same way by every employee and the same holistic view of the enterprise is understood simply by looking at the framework. The artifacts have been written by various actors within the enterprises and they have their specific backgrounds (academic, training and skills) and that will in many cases lead to competing understandings on what the enterprise really is and what it will become.

It is therefore not enough to create an online repository (Bernard 2005, p.45) it is a necessity to institutionalize the repository through introducing the employees to conferences and meetings where they engage one another in a pursuit to understand what the Enterprise Architecture really is.

This leads to the discussion on Enterprise Architecture, where Enterprise Architecture in the role of Integrated Governance is discussed.

8.4 On Enterprise Architecture

Enterprise Architecture is both a form of documentation and a form of management. Bernard sees it as a component of integrated governance but Enterprise Architecture can become the glue of Integrated Governance since it uncovers the state of the current structure of the Enterprise's Architecture. The uncovering process can enable the executives and management of the enterprise with the overview they need to align the various layers of the enterprise with one another. When the overview has been created then realistic plans can be made for how the enterprise should be transformed. Ross & Weill sees Enterprise Architecture as a tool for the IT department to bridge the gap between the IT department, and through the articulation of the operating model then the IT – department and "the business" identify the vision to work towards.

However it isn't that easy to transform an enterprise since the organization culture might be a barrier to the implementation of the holistic management approach. Organization cultures are often very

conservative and might therefore undermine the change efforts.

Usually Enterprise Architecture has been rather IT focused (technology focused) and as such Enterprise Architecture needs to focus on the organization, its structure and the way the enterprise works from a social point of view. Coherency Management deals with how Enterprise Architecture can be matured.

9 Coherency Management

This chapter deals with Coherency Management and how it can be used to maturing Enterprise Architecture to enable the enterprise to achieve more benefits by using Enterprise Architecture.

9.1 The Concept of Coherency Management

Coherency Management is dealing with taking charge of an enterprise's architecture so the enterprise can make use of the Enterprise Architecture to uncover how the enterprise works. The goal by applying Coherency Management is to achieve alignment, agility and assurance.

Doucet et al. who are the main authors of the theories behind Coherency Management argues that the enterprises in the future will be operating in environments that are dominated by frequently more competition and the customers will be demanding to be able to get a standardized (positive) service from the enterprise regardless of when or where they interface with it.

This will according to Doucet et al transform industries since only them that are able to adapt to the changes will be able to eventually survive the competition.

Doucet et al argues that every enterprise has an architecture, otherwise it wouldn't be able to process anything and that by not be able to do any business. The question is if the executives (management and leadership of the enterprise) takes charge of the architecture.

Doucet et al argues that there are three stages of Enterprise Architecture (not including the stage of non-applied Enterprise Architecture). The first stage is known as the Foundation Architecture.

The Foundation Architecture is characterized by that the IT-department has been working with Enterprise Architecture to uncover the business processes; however it is only the IT-department that is convinced that Enterprise Architecture can lead to benefits and eventually competitive advantages. Usually is the leader of the IT department positive about the usage of the Enterprise Architecture to align the IT projects with the business projects; however he has limited power and trust at the executive group and therefore the IT department that is making use of Enterprise Architecture. In the maturing process the CIO or other persons from the IT department convinces the executive group that Enterprise Architecture is the approach to make use of to improve the operations within the Enterprise.

In the transition then Doucet et al arguers that it might be a necessity to replace the CIO and CEO of the enterprise so they enforces the usage of the Enterprise Architecture program to uncover the architecture to minimize waste, redundancy and to eliminate the non-value adding processes.

The more mature stage of Enterprise Architecture is known as the **Extended Enterprise Architecture and it is characterized** by the business side of the architecture has embraced and adopted Enterprise Architecture to understand the enterprise and to develop the enterprise. There has been established a group of trained (expert) architecture that aides the various lines of business with documenting their part of the architecture.

The most advanced form of Enterprise Architecture is known as the **Embedded Architecture** stage, and it is characterized by that the enterprise applies Enterprise Architecture in every activity. To enforce this the enterprise has an Enterprise Architecture office that is located close to the COO, CIO and the CEO (in the organizational hierarchy). The office will likewise have a team of elitist group of Enterprise Architects that develops on the enterprise's Enterprise Architecture Framework and aids the various architects that are located in the lines of businesses. As such most white collar workers in the enterprise will have something to do with the architecture; however there is no need to rename their titles to Enterprise Architects, IT Architects or a like.

9.2 Going from IT to Holistic Management

When working Coherency Management then the Chief Enterprise Architect, the CIO and the Executives have to focus on the concept of the "Next Generation Enterprise Architecture", and that focuses primarily on applying Enterprise Architecture on to other areas in the enterprise e.g., governance of the organization, its strategy and the implementation of strategic processes.

The enterprise needs to go beyond the foundation architecture. To go from the foundation architecture then Doucet et al argues that the enterprise needs to address the question of how to win over the executive team and enforce the adaption of Enterprise Architecture to "the business".

Doucet et al (Doucet et al 2009, pp. 495-497) works with the idea to replace the CEO to work set an agenda supporting the initiation of Coherency Management. The first particular issue that needs to be address is the question of faith and trust into that Enterprise Architecture in relation to Coherency Management can mean a difference for how the management process can be dealt with, and that the Enterprise Architecture program can enforce the way decisions are taken. To be able to operate the coherency management program the CEO should allocate the resources and the proper responsibility to the Coherency Management group so they will be able to deal with problems of changing the enterprise and the work processes. When working with the change processes and the way to enforce Coherency Management then the necessary resources needs to be allocated so the "Elite Enterprise Architects" are able design the principles and guidelines needed to ensure other lesser experienced architects works. The CEO needs to ensure that short term wins are realized so

the rest of the organization is able to see that there is no other way than committing the resources to adapt the Coherency Management program Likewise should the CEO work with enabling various channels to make sure that managers, middle managers and the employees can suggest how the Coherency Management program can be improved.

This leads to the assumption that change has to come from the top of the enterprise, and this might be considered a bit in confrontation with the principles of the concept of Enterprise 2.0 where most of the change has been democratized, this is in line with the views of Gary Hamel, and his work "Innovation of Management" where he advocates for innovation democracy.

When the CEO has established a 'high – performance' Coherency Management group then it is a necessity to promote one of the architects to be the Chief Architect. Doucet et al argues that the Chief Architect has a five step agenda that has extreme prioritization. The transformation process has been focusing on making Enterprise Architecture go beyond IT to the rest of the enterprise (moving from the foundation architecture to the extended architecture). Likewise is it suggested that when working with the transformation process then the Chief Architect should focus on what the various stakeholders expect and should therefore work on influencing them. If the stakeholders thinks or assumes something rather differently than what the Coherency Management program will do for them, then it will automatically lead to a disappointment and that will eventually lead to the first failure. Thereto should the Chief Architect work with winning over the executives so they show an example to the rest of the enterprise and emphasize that there is no way back. When the initial executives have been won over then it is a necessity to ensure short term victories, the short term victories needs to be realized so the executives or other opposing fraction within the enterprise. Last but not least then the Chief Architect needs to address the issues of improvements that are suggested through the verification channels that the CEO has established. Continuously improvement is key to make sure that assurance, agility and alignment is established.

10 Steps of to Realize Coherency Management			
The CEO Perspective			
1	The CEO needs to believe that Coherency Management is critical.		
2	Establish a high performance Coherency Management group, and it is a necessity to delegate tasks and responsibility to it.		
3	Allocate resources to the group and to the change process.		
4	The CEO needs to make sure that the Coherency Management group works with deriving benefits.		
5	Institutionalize the feedback channels and verify.		
	The Chief Architect		
6	Transform the way the Enterprise makes use of Enterprise Architecture.		
7	Prepare how the managers, middle managers and the employees what to expect of Coherency Management and through that then help shape the expectations.		
8	Get the executives to approve and work with Coherency Management.		
9	Implement Coherency Management and make sure that the benefits are realized.		
10	The Chief Architect needs to address the issues of improvement of the Coherency Management Program.		

Table 2: The Approach. (based on Doucet et al 2009)

This leads to the discussion of institutionalizing Coherency Management.

9.3 Institutionalizing Coherency Management

Doucet et al argues that to transform the Enterprise's Enterprise Architecture program is through winning over the executives to understand the benefits of enterprise architecture. In the former section it was mentioned that the Extended Enterprise Architecture was the stage of where the business side of the enterprise realized that Enterprise Architecture could lead to benefits for the enterprise. This means that the business side makes use of Enterprise Architecture to uncover its activities and to optimize its business processes.

When the enterprise has adopted enterprise architecture and has allocated resources to a group of Enterprise Architects who handles the articulation of the principles and artifacts that represents how the enterprise works.

9.4 On Coherency Management

Coherency Management can be used to maturing the enterprise architecture. As such there are many initiatives that can be made use of to professionalize the enterprise and its architects. However there are rather few enterprises that have been able to apply Coherency Management in the more advanced stages and as such Coherency Management is a young and in many aspects untested theory.

Therefore is it with a feeling of uncertainty when the theory from the concept of Coherency Management is applied, and likewise is it difficult to test the theory (to avoid utopian thinking).

However there are some interesting issues with how the executives (especially the CEO) can institutionalize Enterprise Architecture by ensuring the right leadership of the IT department and making use of the COO to ensure to document processes and institutionalize the right EA thinking.

The concept of alignment, agility and assurance are all important to ensure that the enterprise is able to respond to changes in its environment and enable proactive measurements.

It is notable that Coherency Management and integrated governance is closely connected through that all strategic parts of the enterprise have to be 'glued' to a framework that institutionalize a specific mindset. Therefore do Enterprise Architecture, Coherency Management and Integrated Governance face the same types of problems such as factions within the enterprise that makes use of a dialectic approach for power and control of the organization resources and sees that a holistic view of management will undermine their empires. The syndrome of the fragmented and loosely coupled enterprise needs to be dealt with. Therefore should the faction that wants to implement Coherency Management need to undermine the barriers from the top of the enterprise (a top down approach) and a focus on making the employees to understand and embrace the changes (a bottom up approach) in the same time. Likewise does it seem like Coherency Management as a concept requires a centralized top management approach to handle the transformation process.

An approach for implementation of Integrated Governance will be dealt with in the next chapter. This particular approach will include thoughts on what the executives of the enterprise needs to take into consideration and it includes how the architect needs to work with ensuring that integrated governance is implemented in the right fashion so it enables the enterprise in achieving its goals.

10 A Framework for Implementing Integrated Governance

This chapter deals with Integrated Governance, and how Integrated Governance is implemented. The primary assumption in this chapter is that organizations are complex and therefore can't be dealt with through a generic change approach based solely on Kurt Lewin's theory on change.

Integrated Governance will be defined as the first thing and secondly will the framework be defined, and discussed.

10.1 Integrated Governance

The concept of Integrated Governance deals with making decisions that are rooted in facts on how the enterprise works, and making the various stakeholders in the organization work along side the decisions based on the facts. The process of Integrated Governance is to ensure that the various plans and actions taken to embody the plans are coherent. If the plans are misaligned (incoherent) then it will not give the enterprise any kind of sustainable competitive advantage.

E.g., what happens in an enterprise if the corporate strategy dictates that the enterprise has to become innovative, but in the same time the executives neglects decentralization or training so the employees are able to take part in innovation process. It is quite simple that such an incoherent approach will fail or at best not perform as well as expected.

Through this paper Integrated Governance has been defined as the corporate strategy, the IT strategy, IT governance and Enterprise Architecture. Enterprise Architecture has an important role in the work with Integrated Governance since Enterprise Architecture as a concept provides both a form of documentation that requires a repository (that is visible for the actors within the enterprise), that makes the actors within the enterprise able to get an understanding of how the enterprise looks like. Enterprise Architecture does also provide a form of management that addresses the Enterprise Architecture.

In addition to Enterprise Architecture can Coherency Management be added since the concept deals with how to mature the Enterprise Architecture, and to enable the decision makers in the enterprise to make better decisions, and act according to the decisions. This form of management can be labeled holistic management.

When one of the components of an enterprise changes then it is a necessity to revise the strategies and therefore has Integrated Governance to be a continues cycle of alignment and therefore also a continues process.

Integrated Governance, Enterprise Architecture and Coherency Management all suffers from the same major disadvantage which is that people don't think alike and a lot of effort needs to be allocated to change the way people think to make them abandon old paradigms.

People think differently in many different ways and seems to be willing to engage in dialectic activities that deals with power (and thereby control of resources) to promote their own agenda. It is therefore a necessity to address the fragmented organization, and address the issues of semantics.

When addressing the fragmented organization then it can be concluded that Integrated Governance includes the various discipline of transforming the organization. Likewise can it be concluded that Integrated Governance is not a utopian tool to solve all problems that an enterprise faces, since the concept depends on the component of the corporate strategy and the planning process of the corporate strategy. If the corporate strategy planning is flawed then the processes of achieving Integrated Governance flawed. The connections among the various planning components is illustrated on the next page, it is notable that corporate strategy is titled "Strategic Management".

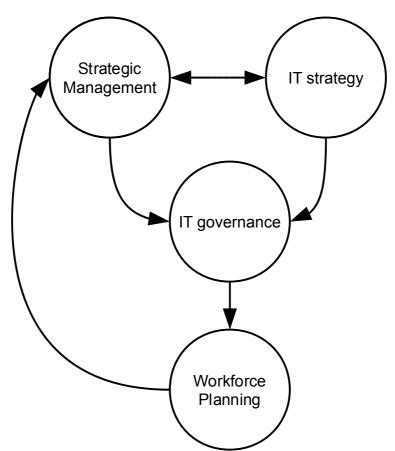


Illustration 4: Alignment of Planning and strategies.

The illustration above illustrates the assumption that the corporate strategy is the primary strategy, and all other plans and strategies needs to be aligned with the corporate strategy.

If the corporate strategy is flawed e.g., by being a rubber stamp plan or it is made solely to satisfy stakeholders, then it is very likely that Integrated Governance can't be achieved, since the corporate strategy and the actions taken by the executives will not enforce a commitment to holistic management.

I have mentioned earlier that the concept of Integrated Governance embeds the concept of corporate strategy, the concept of the IT strategy, the concept of the IT governance process and workforce planning and not to forget Enterprise Architecture when these elements have been aligned into a meaningful . When making use of these concepts to create a coherent overview of the enterprise then it is possible to achieve a holistic form of management.

When defining what Integrated Governance deals with then it can be defined as uncovering the Enterprise Architecture, illustrate the gaps among the various components of the decision making process and ensure coherent embodiment of the actions taken to transform the enterprise from a state of incoherency to a desired coherent state. Below is a quote that defines Integrated Governance in one sentence:

"The concept of Integrated Governance deals with making decisions that are rooted in facts on how the enterprise works, and make the various stakeholders in the organization work along side the decisions based on the facts."

- (Sjoelin 2010, p. 66)

To avoid flaws in the strategic management phase (corporate strategy) then it is a necessity to address the business model. The business model needs to address the enterprise in a coherent fashion e.g., how the enterprise creates values for its customers and what parts of the enterprise that handles customer interaction and sends the information to the responsible stakeholders that handles the production and quality control. The business model might be a good indicator for where in the organization decentralization is needed and when.

Likewise can it become a necessity to make use of tools across the various strategic schools e.g., the business model from the "Breakout Strategy" in combination with the communication approach of the design school and the ability to develop a scenario of the corporate strategy through a valid analytical model from the planning school combined with the human intuition of the entrepreneur school.

The model above does indicate that there might be a separatist approach to IT strategy has been applied; however that isn't the case. When working with the integrated strategy approach then the

strategists needs to understand how to create a corporate strategy that creates synergies with IT. Therefore is the IT strategy and the elements that usually characterize an IT strategy needed to influence the corporate strategy. This is illustrated by the link that goes both ways for the strategic management section and the IT strategy section.

Below both the strategic management and IT strategy components is the IT governance component. The reason for this particular flow is that IT governance embodies both the IT strategy and the corporate strategy. As it has been dealt with in the IT governance chapter then Mckeen and Smith argues then IT will become tightly coupled with almost every aspect of the enterprise, and therefore is it likely that the corporate strategy of the enterprise will have to embody the IT strategy, to enable coherent investment and governance of the IT assets.

As mentioned earlier then the workforce planning component deals with attracting and organizing employees that enables the enterprise to achieve its goals; however it does also deal with how to change the organization structure and culture to enable the transformation from the "AS IS" to the "TO BE" state.

The link between workforce planning and the strategic management component is dealing with when the transformation state has been reached (and during the transformation) then it will eventually impact the corporate strategy. It is very likely that the corporate strategy will change during the transformation period due to changes in the domain of the enterprise. The changes have to be taken into consideration otherwise will the plans and the implementation of the plans be out of context with the enterprise is in.

This leads to the explanation of the Integrated Governance framework. The explanation will detail the framework and it will the flow and various elements of the framework be discussed.

10.2 The Framework

In the framework then there are eight steps and the eight steps are organized into various sections of interest for implementing Integrated Governance.

The first step (step zero) deals with the external pressure from the domain of the enterprise e.g., the demand for new products, lower prices on the products, new competitors, and competitor moves that matches or out matches the actions taken by the enterprise or similar.

When the external pressure is present then it is up to the executives to take action and siege the moment, and initiate a force for internal pressure. The internal pressure is a feeling and an agenda

that attracts leading factions within the enterprise.

The next step deals with establishing an **Enterprise Architecture group**, and estimate the **value** of the **Enterprise Architecture**.

It is a necessity to establish both an Enterprise Architecture group and estimating the value due to establishing responsibility and accountability to the group to lead and take charge of process of documenting and then transforming the enterprise. Likewise has the CIO or other executive who supports the program need to establish the economic benefits of the Enterprise Architecture program. These benefits have to include scenarios so the executive team is able to make intelligent choices. To make intelligent choices the executives needs scenarios to enable them with a views on what happens if they choose one scenario over the other. The economic benefits should be a part of how the executive team to build trust and justify the establishment of the Enterprise Architecture program. From a change management approach it is a necessity to have the argument ready to win over opposing factions with in the enterprise. When step one has been completed then it is possible to go on to step two. The Enterprise Architecture. The agenda in step two is to begin changing the enterprise through Enterprise Architecture program. The transformation of the enterprise comes through that the EA group has been established, the Chief Enterprise Architect and a tram of Enterprise Architects have started to document how the Enterprise Architecture is designed and what connections there are among the various components of the enterprise. It is worth to mention that when choosing a framework then it implies that the Chief Architect also choses a method for how to document the Enterprise Architecture.

Step three basically deals with using Enterprise Architecture as a form of governance. Through the framework the Enterprise Architects are able to identify redundant functions, inefficient processes and gaps among various functions. The issues identified in step three needs to be addressed by articulating and establish a series of projects. The projects have to be organized in a program and through the delivery and implementation of each of the projects the enterprise is able to incrementally to move towards what is defined as the "TO – BE" state. The "TO – BE" state is defined on what is assumed to be the corporate strategy e.g., through analyzing the embodiment of the strategy. The processes of aligning the strategies through a systemic approach is dealt with in step four. Needless to say that the program should be scoping on Integrated Governance.

In step four the process of Integrated Governance begins since the Enterprise Architects begins to redesign and align the strategic scopes of the enterprise, through that they transform the structure, culture and tasks the enterprise handles. When the strategic scope and alignment has been defined,

then the organization has to be transformed to suite the strategic context. After the organization has been transformed the enterprise (the structure, the culture and the tasks) then the repository is updated and exposed to the stakeholders. When this is done then yet another rotation can take place when or if there are emergent strategies or changes that have occurred during the transformation period. If there have been no changes then the structure of the enterprise has to be institutionalized so the employees can get use to the changes and act according to the changes. The reason for why the repository is titled "R" is that the enterprise might have to implement more than one repository to enable the uncovering and understanding process.

In the mean time the Chief Enterprise Architect has to move on to step five.

Step five deals with creating a system that enables the executives and the Chief Architect to address the changes, especially if the transformation process can be done better, and in step six it will be possible to organize the suggestions into projects that together with a re-starting the cycle be able to achieve a systemic step closer to the extended architecture, and when the extended architecture is achieved then it is assumed that three to five cycles from achieving the embedded architecture state.

The embedded architecture state will ensure us that the enterprise will achieve assurance, alignment and agility. When applying these three factors correctly the enterprise will be able to achieve a sustainable competitive advantage.

10.3 Iterations Towards a Sustainable Competitive Advantage

As I have mentioned above then it is a necessity to work with the assumption that an enterprise can't achieve a sustainable competitive advantage through a short period when working with the IGIA¹² framework. Herzum mentioned in his paper on Enterprise Architecture maturity that rebuilding or re-structuring an Enterprise Architecture can't be compared to rebuilding a four person family house, but it can be compared to rebuilding an entire skyscraper (Herzum 2003, p. 3).

When maturing an Enterprise Architecture then it has to be assumed that the enterprise has to go through a 'skyscraper' re-construction a few times before it matures from the basic architecture to the extended architecture. Likewise will it probably take about five times or more for an enterprise to mature its architecture to the embedded architecture.

The time it takes to iterate one cycle of the IGIA – framework is flexible for each enterprise that goes through it. There are many factors that influences how fast the cycle can be completed. The primary factor is the allocation of resources to the cycle, the second factor deals with the will to

¹² Integrated Governance Implementation Approach

change that is located within the enterprise, and the last factor will be how well the individuals in the enterprise are able to adjust to the program and act according to the program.

As I have mentioned with the school of corporate strategy then the corporate strategy process should be taking emerging strategies into consideration, and adapt when changes happens in the domain of the enterprise. This does also applies for working with the iterations of the IGIA framework. If there occurs major changes in the domain of the enterprise then the project programs have to change according to it.

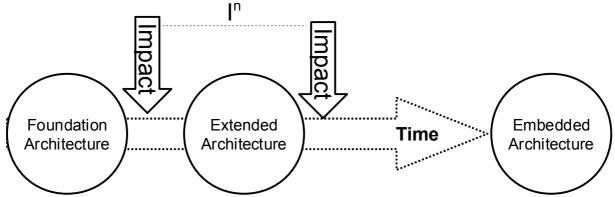


Illustration 5: Impacts of changes in the domain of the enterprise.

The illustration above shows that there are some issues (emergent strategies, emergent problems, emergent approaches) that can occur during the process that works towards the extended and embedded architecture. Doucet et al deduced that the changes in the domain of the enterprise will increase overtime, and that is the reason for why impacts will increase over time which is illustrated by the dotted line between the two arrows and is associated with the text Iⁿ.

Time is a factor when working in an industry that experience Schumpeterian competition since the enterprise needs to address the moves that its competitors initiate overtime. Therefore it is unsuitable for many enterprises to make use of formal process for articulation of a corporate strategy or organizing visions for how an enterprise plans to transform to achieve a competitive advantage.

The Chief Enterprise Architect needs to address this in his considerations and work with re-wiring the enterprise.

The IGIA-framework is presented on the next page.

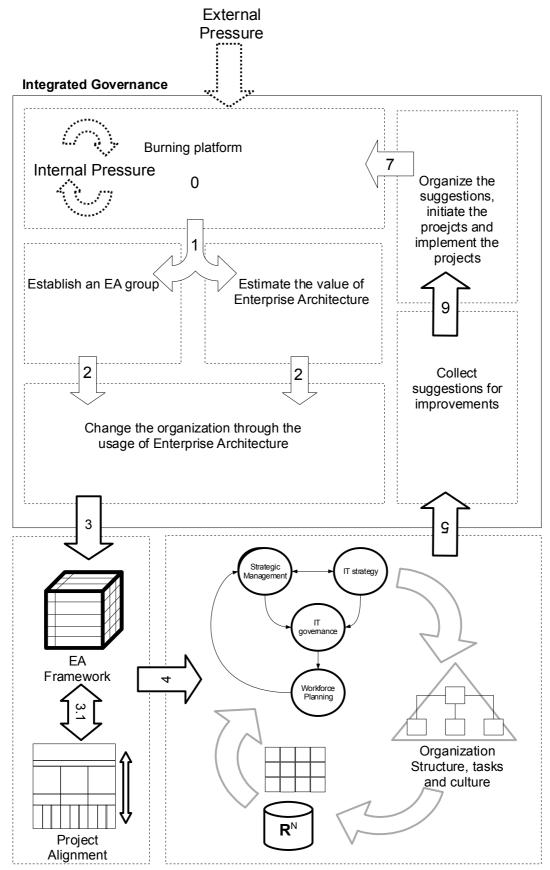


Illustration 6: The Integrated Governance Implementation Approach (IGIA)

The flow between the different section have is at a high level, and the flow appears only to flow in

one direction. To avoid misalignment between the conceptual plans, projects and the implementation then it is a necessity act accordingly when risks of misalignment have been identified and change the content and scope of the transformation. For each of the steps the accountable actors needs to think on how they can ensure that the processes they establish is ensured through quality measurement. The awareness of problems with the quality needs to be identified and this can only be done, if the actors establish feedback loops for each of the processes (in this case each of the steps). In that way some feedback processes have been established before step five and six. From step three to step five it is possible to go back across several of the steps and within each of them. It is a necessity to establish and enforce the feedback channels otherwise will the approach to integrated governance grow out of context.

10.4 Virtues of Integrated Governance

There are three major virtues of Integrated Governance. The first one is the concept of producibility, the second one is adaptability and the last virtue is compatibility.

10.4.1 Producibility

The concept of producibility deals with being able to produce results from the framework. How often can an enterprise be able to produce something similar (in this case a competitive advantage) through going through a set of instructions or what can be defined as a change program or Integrated Governance program? The more likely the success rate it the better it is for the enterprise that undertakes it but in the same time it will lead to more enterprises will pursue and achieve Integrated Governance.

It is discussable if enterprises that are as different as people can make use of a generic approach to achieve results, but in the same it might possible for the enterprise to make use of the approach in when it articulates its own Integrated Governance program and use the IGIA framework as an example.

When the executives are articulating its own customized approach to Integrated Governance then, the chief architect should take it into consideration how they design their method to achieve the sustainable competitive advantage. The method has to be produceable since it has to be consisted like the Enterprise Architecture framework. If the enterprise is not able to produce results consistently with its Integrated Governance program then it will be hard to justify the further allocation of resources to the program.

10.4.2 Adaptability

The second virtue is the concept of adapting to the strategic situation for the enterprise, and likewise does the adaptability deal with adapting the framework to the individual enterprise.

One of the greatest challenges to achieving a sustainable competitive advantage is adapting the framework in a proper and efficient way.

10.4.3 Compatibility

When working with the IGIA – framework the primary question will become if the enterprise is compatible with implementing the framework. The enterprise needs to work with its compatibility through organizational transformation. The question then becomes when an enterprise isn't compatible with the IGIA – framework?

If an enterprise suffers from too much dialectic struggle among the executives and actors within the enterprise. A dialectic struggle that is fueled by external organization e.g., a trade union. The reason for why the enterprise is incompatible is because the struggle for promoting sub-optimized agendas will be hard to overcome and it will eventually undermine the holistic management approach.

This leads to the conclusion of the literature review.

11 Conclusion

This chapter is the conclusion of the literature review. I will answer the questions stated in the problem statement.

11.1 What is Integrated Governance?

Integrated Governance is a form of governance that includes corporate strategy, IT – strategy, IT governance and workforce planning. There are various ways to handle integrated governance and to achieve integrated governance; in this paper one particular approach has been articulated. Many complex enterprises often have detached strategies for the various departments and the various lines of business. The managers in the enterprises often act differently and not aligned to the strategies that have been articulated, and this leads to misalignment. To cope with the concept of Integrated Governance, it is likely that Enterprise Architecture can be a key.

Enterprise Architecture is both a form of documentation and a form of governance if it is applied correctly. The focus of Integrated Governance and Enterprise Architecture is to enforce a holistic management style that ensures a coherent governance of the enterprise.

Throughout this review the concept of strategy schools and IT strategies have been dealt with and according Potts then the embodiment of the corporate strategy is the most important thing when it comes to the IT strategy. Potts argues if it is a necessity to detach the corporate strategy from the corporate strategy since most enterprises in our part of the world would have to make use of IT somehow to support its business processes. Therefore it would be meaningless not to incorporate IT as a part of the corporate strategy.

As it was discussed in the IT governance chapter then it is desirable to make use of governance models where the IT department and the executives from the business collaborate on defining what needs to be done with the enterprise's IT architecture, strategy and IT investments etc.

However the generic approaches that Ross & Weill gives might not suit all enterprises since enterprises are as unique as the persons who are in them. Therefore should any given governance approach (integrated governance, Enterprise Architecture and IT governance) be adapted and then adopted by the enterprise.

In the adoption of any generic approaches the executives have to understand that there might be some resistance to change and as such there are two views on how to solve the question of transforming the enterprise the best way. Assuming that the enterprise is a loosely coupled system

where there are various forms of the coupling present. To cope with change then it can be considered a necessity to make use of the approach dealt with in the *Chapter on A Framework for Implementing Integrated Governance*.

The approach needs to deal with in a way where a top down approach addresses an executive commitment to changing the enterprise, that in the same time addresses the social networks within the enterprise. The social networks needs to be addressed to make people adapt to the changes that needs to occur within the enterprise to enable holistic management and by that Integrated Governance.

Enterprise Architecture can be the glue that holds integrated governance together, and the Coherency Management can be the way to mature the enterprise architecture to re-enforce Integrated

Governance.

The essence of Integrated Governance can be summed up in the quotation below.

"The concept of integrated governance deals with making decisions that are rooted in facts on how the enterprise works, and making the various stakeholders in the organization work along side the decisions based on the facts."

- (Sjoelin 2010, p. 66)

11.2 How is integrated governance combined with Coherency Management?

Integrated Governance can be institutionalized through Enterprise Architecture and enforce a desirable holistic approach to management. Coherency Management deals with maturing the way Enterprise Architecture is dealt with in the enterprise.

Integrated Governance needs to be put into a context where Enterprise Architecture is the framework that enables the implementation and processes of Integrated Governance.

Coherency Management deals with the maturity of the architecture through organizational development, and how the enterprise make sense of using enterprise architecture to achieve assurance, agility and alignment.

Coherency Management has three stages for the maturity of the Enterprise Architecture and if the executives invest their trust into using an explicit approach to achieve a coherent approach to do

things.

In other words, the executives and enterprise architects needs to take Integrated Governance into consideration and apply Enterprise Architecture as a form of glue that ensures a coherent view. When Enterprise Architecture has been applied then the enterprise can start working with the concept of Coherency Management.

Integrated Governance shares the concept of addressing other parts of the enterprise than just the IT department and its needs to align the IT projects with the corporate projects (both are the embodiment of strategy)

11.3 How can Integrated Governance and Coherency Management be combined in a single framework?

Integrated Governance can be integrated with Coherency Management through using Enterprise Architecture so it becomes the glue that binds the various components of the enterprise. Coherency Management is then the process of maturing the Enterprise Architecture to make the foundation for implementing the holistic management approach.

A suggestion for a framework dealing with articulating a framework dealing with integrated governance and that deals with elements of Coherency Management has been addressed in the chapter dealing with a framework for Integrated Governance.

To answer the question above then when articulating a framework that deals with both coherency management and Integrated Governance then the issues of organization theory (culture, structure and power) and issues of how to implement Enterprise Architecture through the framework. The approach is coherent with usage of Enterprise Architecture since the approach has been based on the assumption that holistic management is an integral part of Integrated Governance (since the purpose is to align the components that the enterprise consist of).

A potential framework needs to work with establishing a formal Enterprise Architecture group and establish a Chief Architect that will be able to administrate the group and take charge of various tasks in the enterprise.

11.4 How does the Integrated Governance Enable an Organization to Achieve Competitive Advantage?

Integrated governance can enable competitive advantage for the enterprise through enforcing holistic management.

However as it was mentioned in the corporate strategy and the IT strategy chapter then one single process or activity can ensure a sustainable competitive advantage (note that short-term competitive advantages often becomes expensive to achieve and investments in IT turns out to be) and therefore should the enterprise focus on configure a suitable amount processes or activities to enable a competitive advantage.

The assumption on working with Integrated Governance is that the concept as such enables the enterprise and its executives with a holistic view over the enterprise. The executive will then make use of this view to make better decisions.

When combined with Enterprise Architecture and Coherency Management an approach to align the components of the enterprise to create synergy, the synergy is used in combination with the concept of agility (the ability to adjust and adapt to the changes in the domain) and assurance in the enterprise is doing what is needed to treat its customers and partners the right way in each and every time they interact.

When it comes to Coherency Management then it is notable that no enterprise so far has been able to implemented the embedded architecture, and the competitive advantages by implementing Coherency Management is yet to be seen.

However the benefits of Integrated Governance is not to be disputed if the executives face the challenge of working with the holistic view of the enterprise and change what is needed.

This leads to a discussion on what this paper can be used for, what needs to be done to investigate the topic of Integrated Governance even further.

12 Discussion

This chapter deals with what can be learned by reading this literature review, and what needs to be done to generalize the findings of the literature review, so the findings one day can be applied in enterprises across the globe.

12.1 What Can be Learned From This Review?

This review has been based on assumptions that Integrated Governance deals with aligning the strategic approach and governance processes. The paper has also worked with delimitation of what kind of strategies and forms of management that can be applied to Integrated Governance, and it is very likely that many more forms of governance can be integrated to the concept of Integrated Governance.

The delimitation might have had an impact on the general findings of how the strategies align and interact. However the literature review suggests that integrated governance can lead to a sustainable competitive advantage since it will lead to a coherent and holistic management approach to governance of the enterprise.

The literature review does also suggest that most enterprises aren't as simple as the members of the executives believe the enterprise might be. The enhanced complexity leads to complications when the enterprise will go through a transformation process.

The transformation process needs to be addressed through applying different theories from different fields of theory e.g., innovation theory, organizational theory and systemic theory.

Likewise does the paper suggests that Enterprise Architecture and Coherency Management can be used to enable holistic management through Integrated Governance.

Therefore should the executives or change agents in any enterprise re-think their approaches to change and how they usually articulate strategies and policies. If they don't change the way they think about the organization, management and transformation then it is very likely that their enterprises will experience loss of competitiveness and eventually die out due to lack of adaption and agility.

In other is Integrated Governance a kind of paradigm shift, and those enterprises that will not adapt to the new conditions of doing business and governing enterprises will die out.

12.2 Further Studies

The concept of Integrated Governance and how to achieve a sustainable competitive advantage has to be investigated further by scientific study e.g., through the work with a master thesis, or for that matter through a scientific program e.g., through a PhD scholarship.

It is my intention to make further studies in integrated governance. In a sense I consider this paper a pre-study to my master thesis.

13 Appendix

Bernard, S.A., 2005. *An Introduction To Enterprise Architecture: Second Edition* 2nd ed., AuthorHouse.

Finkelstein, S., Harvey, C. & Lawton, T., 2006. *Breakout Strategy: Meeting the Challenge of Double-Digit Growth*, McGraw-Hill Professional.

Herzum, P., 2003. Applying Enterprise Architecture. Cutter Consortium Executive Report, 6(3), 36.

Mintzberg, H., 2000. The Rise and Fall of Strategic Planning, Financial Times/ Prentice Hall.

McAfee, A. & Brynjolfsson, E., 2008. Investing in the IT that makes a competitive difference. *Harvard Business Review*, 86(7/8), 98–107.

Kotter, J.P., 2008. A Sense of Urgency, Harvard Business School Press.

Mintzberg, H., Ahlstrand, P.B. & Lampel, J.B., 2008. *Strategy Safari: The Complete Guide Through the Wilds of Strategic Management* 2nd ed., Financial Times/ Prentice Hall.

Newell, S. et al., 2007. *Managing Knowledge Work* 1st ed., New York: Palgrave MacMillan. Porter, M.E., 1985. *Competitive Advantage: Creating and Sustaining Superior Performance*, New York: Free Press.

Porter, M.E., 1996. What Is Strategy? *Harvard Business Review*, 74(6), 61-78. Available at: http://esc-web.lib.cbs.dk/login?url=http://search.ebscohost.com/login.aspx?

direct=true&db=bth&AN=9611187954&site=ehost-live&scope=site [Accessed January 26, 2010].

Sjoelin, P. F. T, 2010. The IT Strategy: An Articulation of the IT Strategy from a Coherency Architect's Point of View.

Sonnichsen, 2009. The Future of Enterprise Resource Planning.

Orton & Weick, 1990. Loosely Coupled Systems: A Conceptualization. Academy of Management Review.

Weill, P. & Ross, J.W., 2004. IT Governance: How Top Performers Manage IT Decision Rights for Superior Results, Harvard Business School Press.

Weill, P. & Ross, J., 2009. IT Savvy: What Top Executives Must Know to Go from Pain to Gain, Harvard Business School Press.

14 Enclosure 1

This enclosure deals with the strategic schools that Mintzberg characterize in his book "Strategy Safari" from 2009.

14.1 Schools of Strategic Thought

Mintzberg et al. has developed a nuanced view of how the various strategic schools that have been developed over time, and therefore I have chosen to include their views in this literature review. I have chosen to work with the design school, planning school and the entrepreneur school. The reason for this is that found these schools mostly relevant for the purpose of integrated governance.

14.1.1 The Design School

The design school is according to Mintzberg one of the dominating schools. The school has been build upon the idea of using case studies as a way to communicate the foundations of how the school works.

The most basic model of this particular school is the SWOT-model since the foundation and basic assumption on how to create a good strategy in the design school is to articulate a strategy that handles the barriers and difficulties that is identified in the environment of the enterprise.

Likewise is it a necessity to bridge the gap between the internal competences and the barriers the enterprise faces (Mintzberg 2008, pp. 25 - 27). Mintzberg deduces that there are four factors that can stress test the strategy within the 'design school' and it is a requirement to address the strategy through that:

- 1) Consistency which means that the strategy shouldn't show any inconsistency between goals and policies.
- 2) Consonance which means the strategy needs to be adapt to changes in the domino and in the enterprise .
- 3) Advantage means that the strategy should focus on creating a sustainable competitive advantage within a selected area and
- 4) Feasibility means that the strategy shouldn't create problems (e.g., sub optimization) within the enterprise nor should it overtax resources. The primary objective of the design school is to keep the strategy clear, simple and specific (Mintzberg 2008, p. 28).

14.1.1.1 Premises

According to Mintzberg (Mintzberg 2008, pp. 30 - 33) there are seven premises of the design school:

- 1) Deliberate process of consensus thought.
- 2) The CEO is the chief executive and as such he should have the ultimate responsibility and control.
- 3) The strategy formation has to be kept simple and informal.
- 4) The strategy has to be unique.
- 5) The design process is completed when the strategy is seen as a perspective.
- 6) The strategy has to be kept simple and explicit.
- 7) When the strategy is fully formulated (explicit, unique, full blown (coherent), simple and build on the consensus) can the strategy be implemented.

As such the design school do suggest the top management commitment through that the CEO has to be considered the one responsible for articulating and developing the strategy; however the premises does neglect the fact that the CEO can't know everything in the enterprise and how the enterprise acts. Secondly does the premises suggest that a strategy has to be explicit and this can be understood as the strategy has to be put on paper; though the strategy is on paper then it doesn't ensure that the strategy is embodied in the actions of the CEO, executives, middle managers or workers in the enterprise. As such the design school is not entirely out of scope with how a strategy should be articulated since it emphasizes simplicity (which aides the communication process and in which can assist in winning over other parts of the organization that might be hostile to change).

14.1.1.2 Critique

Mintzberg (Mintzberg 2008, pp. 35-44) does initiate a critique of the design school and as such it is criticized for not justifying learning in the process of executing the strategy and not for taking emergent strategies into consideration after the formulation phase has ended. In addition to that then the strategy school emphasize too much on case studies and on the SWOT-model as a way to design and position and enterprise.

Likewise does the design school dictate that the structure of the enterprise should change form when strategy is altered. Mintzberg emphasizes that most organizations as such can't just "clean the black board" and start all over on a new beginning which is a result to organization culture.

I addition detaching the strategy from those who work with the customers / clients can lead to that strategy becomes obsolete and that is enforced through an explicit strategy will limit the ability to adapt to changes in the environment under and during the implementation of the strategy. Doucet et al. (Doucet et al. 2009, p. 416) argues that competition and the changes in the domino will change more frequently and as such the strategy has to be adapted and therefore does it seem unreasonable to work on with the assumption of an explicit strategy.

The meaning of developing a strategy and then detach it from those who work with those who brings money to the enterprise and to the and detaching the strategy formulation from the integration (implementation) of the strategy is at best a utopian idea since implementation has to lead embodiment of the strategy in the enterprise.

This leads to the planning school.

14.1.2 The Planning School

According to Mintzberg is the Planning School one of the preferred schools for consultants and as such it is relevant for this literature review since it has a profound impact on how the enterprise and the responsible people within the enterprise should react and interact to the strategies.

Mintzberg characterize the school where the planners are detached from the production. Likewise is it stereotypical that the planners are neither from the workforce near the production or located near the top executives. The general principle is that the planners are located to do 'objective'¹³ planning that gives the top executives intelligent choices to choice from and as such a lot of power and resources have to be allocated to the planning group.

It is a problem that the planners are detached from the enterprise and as such they (as it is with the design school) are working with ideas that are not based on the situation in the core¹⁴ of the organization.

14.1.2.1 Premises

Mintzberg (Mintzberg 2008, p. 60) defines three premises that are characterized by the planning school. The first premise deals with Strategy is a result of a controlled, conscious process of formal planning that has been converted into to distinct steps. These steps are supported checklists and supported by techniques. The second premise is that in principle the responsibility for the overall process is allocated to the CEO; however the implementation of the strategy lies with the planning

¹³ Planning based on hard facts.

¹⁴ The core is based on the production section (the floor) of the organization.s

staff. The third premise deals with that strategies appear full blown from this process and these have to be made explicit so the proper attention can be invested in relation to objectives, budgets, programs, and operating plans of various kinds.

The premises are based on that the planners have a lot of power within the enterprise and the value added function of the CEO can then be discussed since he only has the over all responsibility, and the planers have the responsibility and the power to change the enterprise. It seems out of touch with reality if the CEO is out of touch with the articulation of the strategy then he will lose touch with how the enterprise operates and as such will not be able to commit himself to the solution. From a different perspective then a professional planner might be better to identify how the domain of the enterprise will change.

14.1.2.2 Critique

Mintzberg criticized this particular strategy school by that the enterprise and the planers where too detached from one another to make any form of synergy. Likewise did Mintzberg criticize that there was an assumption on that planning was the entire process of the strategy making.

As mentioned under the premises (Mintzberg 2008, p. 71) then there are some issues with giving power of strategy formulation to the planning staff since they have a tendency to keep the executives out of the loop and instead of planning they build empires within the enterprise. Mintzberg then emphasize that the process of formulating the strategy became the dominating focus and as such the focus from the strategy and strategic reality was demoted. Likewise does Mintzberg criticize the planning school for not producing any results by the usage of the various formulation processes and the plans didn't focus enough on business development (natural growth) but on Mergers & Acquisition.

Thereto did the planning school focus too much on choosing a strategy instead of choosing the best strategic choice. Often did the planners neglect the barriers of the organizational structure and culture.

Mintzberg's critique of the planning school can be justified by planning that doesn't take the organization and its structure into consideration doesn't cover the entire specter of the domino of enterprise. Advantages of the planning school can be made on the assumption that professionals working with planning can make intelligent and holistic plans that can give the executives (CEO and other top level managers) intelligent choices when coming to strategy.

Mintzberg criticizes (Mintzberg 2008, p. 75 – 76) that the planning school focus too much on the

hard facts in their planning process and therefore does Mintzberg concludes that hard facts can't be used without combination of human (subjective) judgement.

This leads to the discussion of the entrepreneur school.

14.1.3 The Entrepreneur School

Likewise is the entrepreneur school important to this literature review since the school is build upon how the leader of the enterprise acts and enforces strategy. The leader is according to Mintzberg a person who wants to change the status quo; however in some cases the entrepreneur might share characteristics with sociopaths and psychopaths which might end up being a disadvantage for the enterprise. The management style and the characteristics can lead to an unfortunate employment strategy since leaders and managers have a tendency to hire persons that reminds of themselves. As such that can lead to group conformity and as such the group will be taking un-necessary risks (Newell et al 2002, pp. 51-52).

14.1.3.1 Premise

Mintzberg argues that there are six premises that characterizes the entrepreneur school:

- 1) The entrepreneur has the vision and it is often embodied in the mind of the CEO (who acts as the entrepreneur).
- 2) The strategy articulated by the leader; however it isn't always clear how the leader develops the vision that is the strategy.
- 3) The vision is often maintained and enforced by the leader who works with the vision single minded and as such also develops the strategy to become single minded.
- 4) The entrepreneurial strategy often focus on how to develop a strategic position as a smaller start up enterprise and not as such on growing or maturing the enterprise.
- 5) The organization is designed to handle the orders of the leader and as such the power structures and social links are designed to comfort the leadership and respond to the demands of the leadership.
- 6) The entrepreneur strategy often focuses on a niche approach.

The six premises have great significants on how the school can be interpreted and how the strategist acts and handles when changes in the domino. As such the premises for the entrepreneur strategy is based on that there is tremendous power and resources allocated to the CEO who can force the Small or Medium Seized Enterprise (SME) or the more mature and complex enterprise to alter the

strategy and the 'direction of movement'.

14.1.3.2 Critique

The primary critique of the entrepreneur school is that it relies too much on a single person (the CEO) who is portrayed as the primary driver for the enterprise. Likewise might the entrepreneur have a biased and unrealistic understanding of how the enterprise works.

When the enterprise and its strategy is extremely dependent on one particular person and if this person suddenly leaves the enterprise then the enterprise as such wouldn't have any effective leadership or strategy (Mintzberg 2008, p.152).

This leads to the discussion of the three strategy schools and as such I attend to discuss what elements of the schools that can be made use of in comparison to integrated governance and Coherency Management.

14.2 The Strategic Schools

Below I have summarized (premisses) the schools and afterwards I will be discussing the schools and which of the schools that can be used for the further study of integrated governance.

The Design School	The Planning School	The Entrepreneur School
1) Deliberate process of	1) Strategy is a result of a	1) The entrepreneur has the vision
consensus thought.	controlled, conscious process of formal planning that has been	and it is often embodied in the
2) The CEO is the chief executive	converted into to distinct steps.	mind of the CEO (who acts as the
and as such he should have the	These steps are supported checklists and supported by	entrepreneur).
ultimate responsibility and control.	techniques.	2) The strategy articulated by the
3) The strategy formation has to	2) In principle the responsibility for	leader; however it isn't always
be kept simple and informal.	the overall process lies at the CEO; however the implementation	clear how the leader develops the
	of the strategy lies with the planning staff.	vision that is the strategy.
4) The strategy has to be unique.	planning stan.	3) The vision is often maintained
5) The design process is	from this process and as such	and enforced by the leader who
completed when the strategy is	these have to be made explicit so	works with the vision single
seen as a perspective.	the proper attention to objectives, budgets, programs, and operating	minded and as such also develops
6) The strategy has to be kept	plans of various kinds.	the strategy single minded.
simple and explicit.		4) The entrepreneurial strategy
7) When the strategy is fully		often focus on how to develop a
formulated (explicit, unique, full		strategic position as a smaller start
blown (coherent), simple and build		up enterprise and not as such on
on the consensus) can the		growing or maturing the enterprise.
strategy be implemented.		5) The organization is designed to
		handle the orders of the leader
		and as such the power structures
		and social links are designed to
		comfort the leadership and
		respond to the demands of the
		leadership.
		6) The entrepreneur strategy often
		focuses on a niche approach.

Table 3: Premisses of the strategic schools.

The schools have various advantages and disadvantages that have to be taken into consideration for the executive team and the enterprise architects.

As such a combination of the design school, entrepreneur school and the planning school would be desirable if the enterprise should succeed with the transformation. Since the power and responsibility and the desire (need for the speciality) for an explicit strategy, the power of the entrepreneur CEO and the guidance of experts to advice the executives on the intelligent choices

they should be working with and in the end select.

14.3 Four Forms of Breakout Strategy

Finkelstein et al (Finkelstein et al 2009, p. 20) defines four different forms for the breakout strategy to be applied and the breakout strategy have four different conditions. The breakout strategy can be used in a market that is narrow and its beginning (and as such subordinate) to the established market and their industries. Typically the two forms of conditions (taking by storm, expanding horizon) are to be found in the narrow market. In the broad market then the laggard to leader and shifting shape form is to be found.

Initial Industry Standing

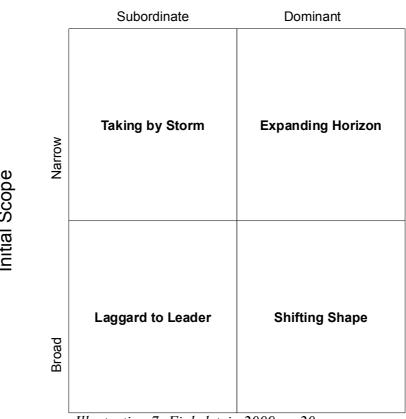


Illustration 7: Finkelstein 2009, p. 20.

Thereto does Finkelstein et al defines four forms of breakout companies and as such also four forms of breakout strategies. The four different break out forms are organized on emergent markets and established markets. The emergent markets are characterized by that the enterprise that is within them is able to work with a new form of technology, service or market space that is adaptable to the product or service the enterprise sells. The established markets are characterized by that they are mature markets such as there are enterprises that competes on gaining market share. Typically will the industry go into a spiral where the products are seen as commodities and as such commodities

are sold primarily based on the price of the product.

Growth Opportunities

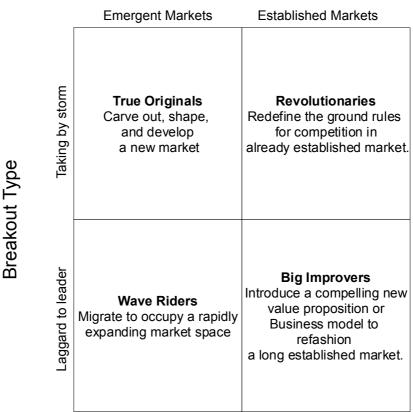


Illustration 8: Finkelstein et al. 2009, p. 33.

For the particular markets the forms of breakouts are characterized as the true originals, revolutionaries, the wave raiders and the big improvements.

The originals usually shapes and develop a new market e.g., by inventing new superior services e.g., they go from a red ocean to a blue ocean. In the same time the revolutionaries in an established market re-invent their enterprise in a way that makes the enterprise able to compete by differentiating the products or services.

The wave riders work with the assumption that they find market space and the market space over time will expand. The big improvers include enterprises that is able to define a business model and value proposition. Likewise is it able to refashion its business model.

15 Enclosure 2

This enclosure deals with two different approaches to IT strategy and how the various approaches might seem alike and where they differs from one another.

15.1 The Separated Strategy Approach

Ross & Weill argues that the enterprise has an operating model, and it is up to the CIO and the executives to define the operating model. The operating model needs to be established from the vision that has been articulated for the enterprise.

The operating model is defined as an approach to which the executives (typically the CIO) has to engage a process that uncovers the vision and from that the CIO has to address the questions of how the reach an integrated platform through a strategy (typically IT related), and how to address the various stakeholders. Thereto has the CIO to address the questions of how to utilize the facilities, how to market the IT – and changes (outside the firm), how to scout for employees and opportunities, and how the enterprise should gain profit and growth.

"Developing an IT-savvy firm is a similar exercise. First you have to define a vision. Then you address how you will create an integrated platform of strategy, players, facilities, marketing, scouting, and training to profit and growth"

- (Ross & Weill 2009, p. 22)

In addition to this then Ross & Weill defines four generic approaches to operating models. The first operating model is titled diversification, the second operating model is titled coordination, the third operating model is titled replication and the fourth operating model is titled unification.

As such Ross & Weill makes use of a model that are designed around two axes. The first axis deals with business process standardization and the second axis deals with business process integration. For both axes there is the separation of low and high.

One point that Ross & Weill emphasizes in their works on IT strategy (represented in the book IT-savvy) that information technology are only good for two things. The first thing is that IT is good for standardization and second IT is good for integration. These two issues are represented in the illustration below.

Business P	High	Coordination	Unification
Business Process Integration	Low	Diversification	Replication
atior		Low	High
Business Process Standardization			

Illustration 9: Ross & Weill 2009, p. 35.

The coordination operating model is characterized by that the enterprise has business lines that each operates as unique businesses but to gain a competitive advantage then the business lines needs to know of the business transactions (sharing data).

The diversification operating model is characterized by diversification is characterized by that the enterprise has different lines of business that have different customers and owns different expertise. Ross & Weill emphasizes that the key focus of the IT platform has to be on delivering economies of scale through using the same platform through the business; however in the same time give the lines of business the independence as it needs to operate effectively within their contexts.

The unification operating model is characterized by an enterprise that have the same kind of customers, and the enterprise has been able to establish the same kind of business processes across the enterprise (even from country to country). The primary goal for the IT-platform is to enforce standard business processes and sharing of data across the enterprise.

The replication operating model is characterized by that the enterprise has made use of an independent approach to business establishment. The lines of business within the framework of the enterprise are similar. The primary focus that Ross & Weill emphasizes in for the IT-platform for this particular operating model.

When it comes to the role of the operating model, then it is worth to consider that Ross & Weill considers the operating model as the primary tool for strategic direction for both the corporate strategy and the digitized platform. As such they claim that when the vision and later the corporate

strategy has been articulated then the operating model can be a source for alignment between the corporate requirements and the corporate usage of IT.

"Selecting an operating model is a commitment ti a way of doing business. That can be daunting choice, but its not possible to build a digitized platform without choosing an operating model. And choosing an operating model pays off."

- (Ross & Weill 2009, p. 40)

Ross & Weill argues that enterprises are able to achieve competitive advantage by using Information Technology as such they describe that enterprises that have firm understanding of how their IT-platform and IT-usage is working often do better in competition than enterprises that don't understand their IT-platform or IT-usage.

"Relative to all others, firms with a strong digitized platform have 17 percent greater alignment between strategic capabilities they claim they need and the capabilities have implemented — a metric positively correlated with profitability. These firms also reported higher operational efficiency (31 percent), customer intimacy (33 percent), product leadership (34 percent), and strategic agility (29 percent)."

- (Ross & Weill 2009, p. 40)

The single best thing that enterprises that have chosen an operating model do is that the enterprises knows what will not be changing over time, and they are able to identify the requirements for the enterprise and how it should construct its digitized platform and business processes.

"By defining what is stable about your firm's business processes and choosing an operating model, you establish the integration and standardization requirements for a digitized platform."

- (Ross & Weill 2009, p. 41)

Ross & Weill argues that when the business leaders understand the IT platform then they aide with innovating the enterprise's business model. Their method to investigate this has been through analyzing a series of case studies from across the globe. Ross & Weill has generalized the findings of the cases to conclude that their approach has lead to success.

Ross & Weill then discuss the process for budgeting the digitized platform but more importantly

how to build the platform. Ross & Weill (Ross & Weill 2009, p. 67) claims that the building of the enterprise digitized platform is a process (or rather a program) that is rather resource demanding. The enterprise should be focusing on a change program that emphasizes the changes in the right places.

"Only this time, you're taking your hundreds, thousands, or ten thousands of colleagues with you on your journey toward disciplined, world-class, end-to-end business processes. We refer to this adventure as your IT savvy journey"

- (Ross & Weill 2009, p. 67)

The IT journey has four stages and to reach each stage then the enterprise has to put an effort into it. The effort can be cost full both in time and money and therefore the enterprise's executives have to invest their trust and their commitment. In any organization change effort is this the case and this has to be addressed by the leadership and middle managers before the enterprise begins on their 'journey'.

The first stage on the journey is titled localizing, the second stage is titled standardizing, the third stage is titled optimizing, and the fourth stage is titled reusing.

The first stage is characterized by that the enterprise has a lot of different solutions that are optimized for the particular line of business. It is typically the head of the line of business that have decided what systems that have been interesting and usable for the particular lines of business.

Typically will there be problems with sharing data across the enterprise.

"Localizing: Firms rapidly grow new systems as they respond to customer demands and seek to establish their unique value proposition."

- (Ross & Weill 2009, p. 70)

This leads to the standardizing stage.

The question of standardization often comes when the enterprise faces competition and as such needs to go through the cost of operations and as such the enterprise will try to minimize the cost of IT. Standardization can lead to economies of scale, and the enterprise will be able to achieve a cost effective approach.

"Standardizing: Firms retreat from rapid fire responses and look for the IT efficiencies through technology through standardization and shared infrastructure."

- (Ross & Weill 2009, p. 70)

This leads to the optimizing stage.

The optimizing stage is when the enterprise as such sees the relation and benefits of business processes and IT-alignment. The enterprise will be starting with developing particular business processes that are designed from scratch with Information Technology in mind, and these processes are build on the concept of information technology can be an enabler of more efficient and effective processes.

"Optimizing: Firms implement disciplined enterprise processes and shared data as prescribed by their operating model."

- (Ross & Weill 2009, p. 71)

This leads to the last stage of the IT – operating platform titled reusing.

The reusing operating platform is dealing with that the enterprise sees an idea in making principles for how the future business processes are to be designed as such the business processes have embedded technology into them. As such the enterprise aims at making the processes universally deployable in any given context in any given line of business or market.

"Reusing: Firms starts to think of their business processes as reusable components that they can customize for new, but related, business opportunities."

- (Ross & Weill 2009, p. 71)

Below are the four stages illustrated.

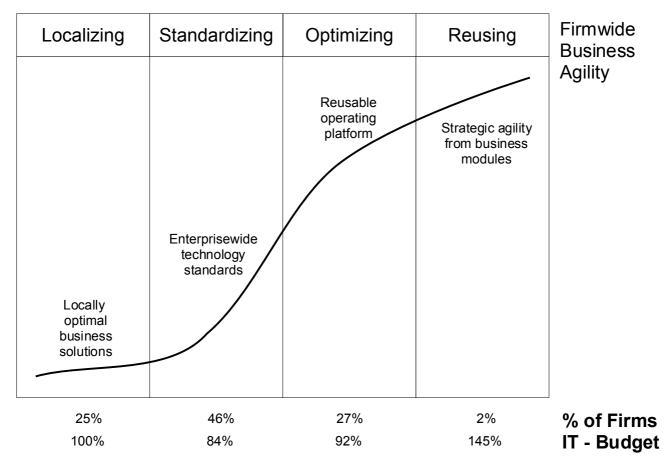


Illustration 10: Ross & Weill 2009, p. 71.

Local liberty for the business units is according to Ross & Weill lowest in the optimizing stage; however when moving toward the reusing stage. It is needless to say when the lines of business is within the localizing stage has the highest amount of autonomy and flexibility (Ross & Weill 2009, p. 86), but how effective is the enterprise if the data can't be shared or a coherent view can't be compiled due to differences in enterprise systems. Likewise is it debatable if there are only four stages (operating models) that an enterprise can make use of. The four operating models do all have advantages but also disadvantages and it is up for the corporation and its strategic approach on the markets (domino) it operates that is of interest.

This leads to the integrated strategy approach, that have some opposing ideas on what an IT strategy is and how it is deployed in an enterprise.

15.2 The Integrated Strategy Approach

The integrated approach deals with that the focus of an enterprise shouldn't be to separate the corporate strategy into several different forms of explicit plans and ideas. This means that the corporate strategy should include the usage of IT. The integrated strategy approach has been based on the book "Fruition" by Chris Potts. The book is written as novel, and Chris Potts have added a

few pages in the end of each chapter detailing with what can be learned from each of the chapters. I wrote a blog post (Sjoelin 2010)) dealing with a review of the book, I have chosen to make use of a modified edition of the blog post to deal with the integrated strategy approach.

15.2.1 The Strategy Articulation Process

Potts argue that during the articulation process of the IT strategy there are 15 steps and issues that needs to be dealt with (Potts 2008, p. 13):

- 7) Most robust strategies emphasize high value on its environmental feedback.
- 8) Make sure the strategy is meaningful to the stakeholders of the strategy.
- 9) Distinguish between the strategic level and the operational level thinking.
- 10) Disinterest should never be understood as trust.

The following five statements are based on Potts's book "fruITion" (Potts 2008, p. 25):

- 11) A document that contains the strategy is not the strategy.
- 12) The language used to articulate a strategy shows the mindset of which the person who articulated made use of (or has).
- 13) If the host organization (enterprise) has an IT strategy then it is necessary to include all of the Information Technology the organization (enterprise) makes use of.
- 14) It is an imperative that the IT strategy has to summarized in one meaningful sentence; otherwise the strategy needs to be reworked.
- 15) If the organization (enterprise) has an IT roadmap then it is imperative that the driver of the roadmap isn't the suppliers but the tactical goals and strategies of the organization.
- 16) If the CIO runs the IT department as an external business (loosely coupled to the enterprise) then the enterprise will threat the IT department as an external entity.

The following three statements are based on Potts's book "fruITion" (Potts 2008, p. 54):

- 11) Shape the strategy by exploring why the company isn't already fulfilling its promise.
- 12) The CIO should validate who the promise is "talking about".
- 13) Build the strategy on a model that emphasize the customer and supplier perspective and never the "Business and IT" perspective. The over all reason for this is that the organization and IT department is one and the same.

The following four statements are based on Potts's "fruITion" (Potts 2008, p. 204):

- 14) If the organization manages its investments well then it is likely that the most appropriate technology will be selected.
- 15) The organization should assign an executive accountability for maximizing the total value the company creates by its internal investments in change.

Therefore it can be concluded that IT and the business is one and the same thing, and therefore can't a separation of the strategies not exist with any meaning. Likewise can it be concluded that the integrated strategy approach deals with the embodiment of the strategy and not developing documents containing various issues of the strategy. In addition it can be concluded that the strategy can't be dealing with "IT and the Business" and it has to include how it deals with the end customers who buys the products the enterprise manufacture. Likewise does the Potts emphasize that the executive team of the enterprise needs to take charge.

This leads to the Alignment phase.

15.2.2 The Alignment Phase

Potts argues that there need to be an alignment between the corporate strategy and the IT strategy and for that he stated seventeen statements that needs to be addressed:

- 1) Never under estimate the pace (of change) of the corporate strategy.
- 2) The strategy has to be compatible that stakeholders change their minds.
- 3) Build the IT strategy on a promise and not on aims.
- 4) If the IT strategy is organized around solving a particular problem, then it is a necessity that the IT strategy also solves the problem.
- 5) Are the persons who develops and articulates the strategy (strategists) game players?

This section is based on the definitions that Potts deals with in his work "FruITion" (Potts 2008, p. 44):

- 6) If the business side of the organization perceives the IT department as an external supplier then it is likely that the IT department and the CIO can't influence the corporate strategy.
- 7) Different kinds of strategies needs different types of strategists.
- 8) The CIO should know his relative strengths and weaknesses when it comes to analysis and synthesis. In a strategy it is the synthesis part that is the most important thing to handle.

9) If the IT department or organization (enterprise) have issues with identifying what value the IT brings to the organization then it is likely that the organization (enterprise) experience wider business related problems.

This section is based on the definitions that Potts deals with in his work "FruITion" (Potts 2008, p. 61):

- 10) A corporate strategy that is focused on exploiting IT is focused on value, money and organization. The corporate strategy is not focusing on technology.
- 11) The directors of a company is an independent community that adds value to the company.
- 12) Value is defined as a portfolio of measures and types.
- 13) The "business side" of an organization will in many cases assume the money the enterprise is spending on IT is a random number.

This section is based on the definitions that Potts deals with in his work "FruITion" (Potts 2008, p.124):

- 14) Each stakeholder in a strategy has something distinctive to offer.
- 15) Language and communications are critical to a strategy's success.
- 16) The concept of theoretical, practical and abstraction depends on the audience. The strategy should be articulated and aligned to the audience.
- 17) People in organizations develops the projects rather fine but they tend not to make the most out of the projects when the projects have been implemented.

Corporate strategy has a tendency to change rather often, and to avoid a gap between the IT strategy and the corporate strategy then the CIO needs to keep informed on the changes and cope with changes. If the corporate strategy works with solving a particular problem then the IT strategy needs to address this particular problem as well, when working with the business the IT department has to focus on being a part of the business and not an external entity; if the IT department is viewed as an external entity then it is likely that CIO can't influence the corporate strategy, and the CIO will therefore become an underdog.

When working with implementation of strategy in an enterprise then it will be dealt with through projects; most organizations often tend to be rather good at articulating business cases and developing the projects; however when making use of the projects then most organizations loses.

Likewise should the CIO be aware of that there are different forms of stakeholders and each of them

might have their own agenda and their own background. Therefore should the CIO customize the IT strategy for each of the stakeholders. When working with measuring the IT strategy and the business processes then the CIO should be working with various types of measurement.

This leads to the value adding phase.

15.2.3 Value Adding

Potts argues that value needs to be visible for the corporate part of the enterprise. The executives need to understand how IT adds value (Potts 2008, p. 70):

- 1) Many relationships are based on perceptions and high profile characteristics.
- 2) The business side of the organization expects service and therefore should service levels between the IT department as a supplier and the customers be negotiated and incorporated into the strategy.
- 3) The corporate strategy is about numbers. The focus of the IT strategy should be the same.
- 4) Often there is a gap between those in the enterprise who adds value and those who spends the value. Is that also the case for the IT strategy?

This section is based on the definitions that Potts deals with in his work "FruITion" (Potts 2008, p. 159):

- 5) The CIO should make use of color coding to distinguish the business investments from the IT investments.
- 6) The CIO should prove that looking and managing the IT investment as something apart from the business investment isn't sufficient.
- 7) The CIO should show that the strategic projects aren't necessary those projects that aggregate the highest ROI.
- 8) Explorer the cause and effect with of IT investments and business investments.

The CIO should be working with establishing relationships and he or she should be working with breaking down the stereotypes the rest of the executive team might have regarding IT, and likewise should the CIO working with breaking down his or her own stereotypes of the other executives and their work-areas. To communicate in a sensible way with the other executives then the CIO should be working with the identifying costs invested in business and IT identify any correlation if it is

possible. Likewise should the cause and effect be explored if it is possible.

This leads to the change management phase.

15.2.4 The Change Management Phase

Potts argues that when a strategy has been articulated then changes needs to be implemented so the enterprise is aligned with the strategy. The employees will eventually be the stakeholders that determines if the implementation will become a success (Potts 2008, p.72):

- 1) When changes occur (as it will with the implementation of a new strategy) then the change process will also impact the employees (and managers) personal life.
- 2) Numbers is a dispassionate way to analyze the strategic landscape with. It should include what the CIO and the enterprise knows and doesn't know.

This section is based on the definitions that Potts deals with in his work "FruITion" (Potts 2008, p.81):

- 3) The IT strategy has to be articulated in an iterative approach.
- 4) Look at the numbers in the budget and evaluate if they speak for themselves.
- 5) The CIO has to explore how the company budgets, manages, and measures business change that comes through IT related projects.

This section is based on the definitions that Potts deals with in his work "FruITion" (Potts 2008, p.175):

- 6) The CIO has to cause other people to change.
- 7) The CIO should know what he would die in the ditch for.
- 8) The business side of the organization often experience the IT side of the organization as being "promising a lot and never keeps the promises and it doesn't care about the business side".
- 9) 100% alignment among strategies can be dangerous and it occurs rarely that the strategies are 100% aligned.
- 10) The future role of the CIO is not assured.
- 11) The CIO has to understand that there are competencies else where in the enterprise that is in duplication of the those competencies that are in the IT department.

12) The new strategy for IT demands a new operation model.

This section is based on the definitions that Potts deals with in his work "FruITion" (Potts 2008, p.180):

- 13) Strategists deal only in success and so should the CIO.
- 14) It can be hard for the CIO and the Coherency Architect to challenge the orthodoxies of the organization.
- 15) If the CIO will not cross the bridge then let someone else take care of the investments.

This section is based on the definitions that Potts deals with in his work "FruITion" (Potts 2008, p.182):

- 16) Leading strategy can be a lonely job.
- 17) The over all focus of a strategy is about winning. If the CIO is not committed 100% to achieving the strategy then it is not really a strategy.

This section is based on the definitions that Potts deals with in his work "FruITion" (Potts 2008, p.191):

- 18) Set down your Promise, Principles and Tactics for the key stakeholders to explore and ratify.
- 19) The stakeholders want to see the combination of ideas in relation to the organizational system.
- 20) The strategy can look like the obvious but it is important that the CIO or Coherency Architect emphasize that the strategy isn't applied.
- 21) The CIO should test the best practice of the industry.
- 22) The strategy is what the CIO or does (de facto strategy).

There is only one strategy that means something and that is what the CIO does (embodiment of strategy). Potts is of the opinion that it is rare that any kind or any type of strategy can achieve 100% alignment. The CIO should put special attention to the investments of the enterprise, and that means that his role might change from being the IT manager to becoming and investment manager, Potts suggests the title Chief Internal Investments Officer.

This leads to the implementation phase.

15.2.5 The Implementation Phase

Potts argues that the stakeholders needs be convinced and invest their trust into the strategy (Potts 2008, p.96):

- 1) Use the "Promise, Principles and Tactics" framework while the strategy is in the articulation process and when it is about to become executed.
- 2) The "Promise and Principles are the stabile core of the strategy. Tactics are more fluent or adaptable when it comes to events.
- 3) Address each of the stakeholders individually (preferable personally) before the stakeholders are addressed as a group.
- 4) Lead the execution of a strategy don't manage it.
- 5) When it comes to the investigation of IT investments then start with identifying value and then work backwards. When using a spreadsheet then the focus should be on columns and not on rows. This should help create the overview that is needed (according to Potts).

This section is based on the definitions that Potts deals with in his work "FruITion" (Potts 2008, p.103):

- 6) The strategist (CIO) is the embodiment of the strategy.
- 7) Organize the collaboration around one set of numbers and strategic themes; however each person who works with the strategy should be given the opportunity to have an influence on that part of the strategy that they work with.

This section is based on the definitions that Potts deals with in his work "FruITion" (Potts 2008, p.115):

- 8) A relationship is owned by two people.
- 9) Experimenting with the numbers (in the budget) can uncover a new understanding of the problem.
- 10) The CIO should make use of a bottom up value portfolio.
- 11) The CIO should evaluate the investment strategy to sparkle a discussion on what priorities the organization (enterprise) has.
- 12) The CIO should be focusing on the exposing the scenarios for what will happen if the investment strategy is changed.

This section is based on the definitions that Potts deals with in his work "FruITion" (Potts 2008, p.134):

- 13) Strategy is essential about options and opportunities and it is not about being right.
- 14) Take the lessons for what didn't work as expected.
- 15) The relationships that people builds are influenced of previous events and relationships.
- 16) Look for the subtleties in the responses of the stakeholders.

The CIO should be working with different views on how IT strategy should be dealt with in relation to changes in the way the enterprise invests in. When working with IT then the most important thing the CIO should be thinking of is the embodiment of his actions (as earlier mentioned then this means the embodiment of strategy). When working with several different persons in the executive branch of the enterprise then it is a necessity that the CIO understands that the relationships are owned by two people and can't be controlled by third parties.

In relation to investigating the value of the investments then it is a necessity to work with a bottom up value portfolio and each of the investments needs to be investigated.

This leads to the discussion of IT strategy.



A Way to Achieve Competitive Advantage!

Peter Flemming Teunissen Sjoelin



Blogger at **CoherencyArchitect.com** and currently pursuing a Master of Science in Information Technology, E-business at the IT University of Copenhagen.