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List of Abbreviations

BPM	Business Process Management
BPR	Business Process Reengineering
BPI	Business Process Improvement
IT	Information Technology
SAM	Strategic Alignment Model
BSC	Balanced scorecard
IS	Information System
SME	Small and Medium Enterprise

1 Introduction

To stay competitive in today's economy, companies need to align their Business processes with strategy, and leverage information technology potential. Thus leveraging processes for strategic advantage is an imperative (Garvin, 1985). But an approach which depicts the aspects that need to be addressed to create alignment between strategy and business processes, especially in small and medium enterprises (SMEs), is missing (Trienekens et al., 2004; Cheng & Chiu, 2008). Therefore this paper covers the defined knowledge gap.

The objective of this chapter is to set the scene for our thesis. This chapter describes the purpose and objectives of our study and, accordingly, argues the problem or the issue that the paper aims at solving. Attention is also given here to how we conducted the research and how we limited the scope of the project. Finally an outline of the report provides an overview of the remaining chapters.

1.1 Background

Nowadays, companies are operating in a turbulent, imbalanced and conflicting environment. Competition within industries is threatening previously well established market segments. The risk that customers substitute former well established products is higher than ever before (Vernadat, 2002). Information technology has also evolved and new technologies like internet provide new market places and new opportunities to reach the customer. Moreover, customers are now aware of the quality and the price of goods (Vernadat, 2002). It is then vital for companies to deliver the right product to the right customer at the right time. The right product refers to a product/item with a high quality that fits customer's needs. In addition, companies must reduce their time-to-market in order to remain competitive. Due to those high conflicting requirements, many companies and especially manufacturing companies have started considering various new product designs, manufacturing and management strategies (Vernadat, 2002).

One way of surviving in this situation, (illustrated by the "Quality-Cost-Delay" paradigm (Vernadat, 2002)) is to better manage the business processes (Business Process Management) and make a strategic use of Information Technology. And to ensure good performance, business processes need to be aligned with business strategies. The rationale behind this idea is that business processes can help an organization to achieve efficiency and effectiveness in its business operations, when properly designed (Grover & Otim, 2009). Furthermore business processes should fit organisation strategy. The strategic alignment of business processes refers to the idea that the organisation should create consistency between strategy and business processes. In fact processes are customer-focused; the main idea is to provide the best service to the customer by avoiding waste along the value chain. Thus strategic alignment of business processes provides four specific advantages for the company: (1) a shorter time-to-market, (2) lower cost advantage, (3) high quality product, and (4) improved customer satisfaction (Cleveland, 2006; Kettinger & Teng, 1998; Garvin, 1995).

Although the strategic impact of business process has been widely discussed, most reviews of business process projects (which encompass Business Process Management (BPM), Business Process Improvement (BPI), Business Process Reengineering (BPR), or Business Process Redesign) indicate that as many as 60 to 80% of those initiatives have resulted into breakdown (Kettinger & Teng, 1998; Abdolvand, Albadvi, & Ferdowi, 2008; Karim et al., 2007; Macintosh & Maclean, 1999). Besides, there is no approved strategic oriented approach that explicitly links business strategy with business process (Trienekens et al., 2004). This therefore presents an opportunity to investigate the aspects that need to be addressed for aligning business processes with strategy. Due to the high failure rate mentioned above and the lack of approved approach, the following research questions have been formulated:

1. Why should organisations align business processes and strategy?
2. What are the critical success factors and challenges in BPM, BPI, BPR, Business and IT alignment?
3. What aspects should (or need to) be addressed to create alignment between business process and business strategy?

1.2 Purpose/Objectives

The aim of this work is to identify important factors that practitioners and researchers in the field of Business Process Management (BPM) should pay attention to, while aligning business processes with business strategy in SMEs. In order to achieve our aim, the following objectives should be reached:

- Developing a theoretical approach for aligning business process with strategy.
- Evaluating the developed approach by conducting an empirical study within SMEs located in Jönköping.

1.3 Limitations

Most BPM research has been carried out in large-scale multinational corporations (Cheng & Chiu, 2008; Garvin, 1995). Thus the current literature emphasizes successful alignment factors in large international groups like Ford Motor Co., CIGNA, and Wal-Mart (Al-Mashari & Zairi, 1999); Xerox, USAA, Pepsi (Garvin, 1995). The novelty of our study lies on analysing BPM issues in SMEs within several industries. In this light, the findings of our study span from theoretical views (literature review) to practice (empirical study). This study highlights the important aspects to address for successful alignment of strategy with business processes in SMEs. However the generalizability of our results still needs to be tested. Furthermore, aspects identified in this study may not be exhaustive; there might be alternatives that could be found later. The proposed approach in this paper is not intended as a step-by-step guide for achieving alignment between business processes and strategy. Rather, it is hoped that important aspects which can guide entrepreneurs towards the right direction, (when they attempt to achieve alignment) will be highlighted and explained.

1.4 Thesis outline

This thesis is divided into seven main chapters. The literature review is the basis for developing of our approach for aligning business processes with strategy. The approach is then empirically tested based on interviews. Because of that linear and iterative process, the method chapter is the pivot of our work. We therefore start by describing the research method. Basically, the idea is to explain the steps we have followed to come up with the final result. We describe the research approach, the method used to gather data, and finally the approach for analysing the results.

Thereafter, the third chapter motivates our study, explains the concepts that are used in our approach, and depicts important alignment factors in the literature. In this light, we start by positioning our study in the domain of business and IT alignment. Then we explain the concepts of strategy and business process. We explain as well two strategic notions used to create fit, namely, value chain and balanced scorecard (BSC). We close this third chapter with an overview of the critical success factors for aligning business processes with strategy.

Based on the critical success factors and challenges described at the end of the second chapter, and the concepts of value chain and BSC, we describe our approach in the fourth chapter. We explain each of the aspects that are important to achieve alignment, namely people, management, IT infrastructure, organisational culture, and organisational structure. We describe the relations between those aspects as well.

The fifth chapter presents the empirical results with four case studies, namely Intersport Jönköping-AREA, ARKITEKOPIA AB, Flintab AB and Handelsbanken Jönköping. Each case is described within categories which are shaped from the structure of the questionnaire.

The sixth chapter analyses the relevant aspects of the approach. The idea is to match and validate the empirical results with the theoretical framework. Thus the most important aspects are explained as well as the less important.

Finally the seventh chapter presents a summary of the result found during this thesis, indeed our empirically study.

2 Research Method

When moving from the research problem on a conceptual level to empirical research, questions such as: "*How to proceed?*" and "*How to do it?*" arise (Ghauri & Gronhaug, 2005). This chapter presents the overall strategy of collecting empirical data needed to answer the research problem under scrutiny (Ghauri & Gronhaug, 2005). Basically the work has been divided into four main stages. The first stage consists of all activities that we have been following to develop our approach. In the second stage we describe the strategy to gather empirical data in order to validate our approach. The third stage explains how empirical findings have been documented. Finally the fourth stage portrays the method of analysing the results.

2.1 Stage 1- Developing the approach

With regards to the wide area of business and IT alignment, we put emphasis on building our own ideas and restrict our scope to the strategic alignment of business processes with strategy. The formulation of the problem is the result of a literature review of papers in strategic alignment, process management, enterprise modelling, process modelling, etc. This section addresses the steps following the problem formulation, namely the literature review and the development of the framework.

2.1.1 Literature Review

The aim of this phase was to ground and motivate our work. Attention here has been to get a broader understanding of the strategic alignment of business processes and strategy. This means, on the one hand that the problem will be positioned and motivated within the framework of business and IT alignment. Secondly issues and developments in strategy as well as business process will be investigated under the alignment scope. The following salient points which summarise information gathered from the literature review where used to guide the development of the proposed approach in chapter four.

- The importance of business processes in business and IT alignment.
- The developments in strategic management research which address aligning strategy and its execution
- The challenges and critical success factors in business and IT alignment, process management (business process management, business process improvement, business process reengineering).

2.1.2 Developing the approach

The approach developed in this study is the result of a qualitative and exploratory research (Ghauri & Gronhaug, 2005). The research is exploratory since the question that is answered here is a "what" question. The focus has been on identifying the categories, the concepts and the relations between the concepts, in order to create alignment. Thus we argue that a deductive reasoning (alike top-down approach) is

adopted, because we have built our approach from existing knowledge (Ghauri & Gronhaug, 2005). By existing knowledge we mean all information gathered from literature review, which helps us to narrow down to specific part of the thesis (which represents an approach for aligning business process with strategy).

The close connection between data collection and analysis is an important feature of qualitative research (Immy Holloway, 1997). This kind of research is a process in which data collection and analysis are performed in parallel. Basically, we have examined the literature about the challenges and critical factors in BPM and business and IT alignment. From that literature, we drew up categories and concepts and as long as new concepts were being discovered, improvements were constantly being made to our approach. We have used some of the studies examining successful BPM cases. Al-Mashari and Zairi (1999) in their paper "*BPR implementation process: an analysis of key success and failures factors*" have come up with a comprehensive paper which summarises success factors for strategic business process management, that is now a reference for many scholars. They have reviewed the study of many scholars on BPR implementation. We also used the work of scholars like Kettinger and Teng (1998) in "*Aligning BPR to Strategy: a Framework for Analysis*", Kettinger and Grover (1995) in "*Toward a Theory of Business Process Change Management*", Cheng and Chiu (2008), Trkman (2010), and Luftman (1999) in "*Enablers and Inhibitors of business-IT alignment*".

The resulted approach has grounded and guided the empirical study. The next section explains the next step in our research process, which is "conducting data collection".

2.2 Stage 2 - Conducting data collection

Research involves choices, problematic choices. McGrath (1982) has studied some of those tricky questions. Accordingly, we had to make choices regarding the following aspects:

- Do we gather information through case study or survey?
- How to formulate the questions; structured, semi-structured or unstructured?
- Who should be interviewed? How to select the cases? How many cases should be included?

The issue here was to choose whether we should use a survey or a case study. Survey, as research strategy in quantitative study, requires collecting huge amounts of data in order to get statistical generalization. Besides, the limitation of surveys is their inability to investigate the context (Yin, 1988). In contrast, Qualitative research is relevant when "prior insights about the phenomenon under scrutiny are modest" (Ghauri & Gronhaug, 2005). In our study the context in which some decisions are made is important because it helps to understand 'how" and "why" companies value one factor over another. Therefore a case study as a research strategy in qualitative research has been selected. A case study is an "empirical inquiry that investigates a contemporary phenomenon within its real-life context" (Yin, 1988).

In order to corroborate our approach in the industry, we developed a semi-structured questionnaire, which aims to get the feedback from managers of SMEs about the aspects in the framework. Then the questionnaire was used as support for conducting interviews.

2.2.1 Designing the questionnaire

As earlier mentioned, the questionnaire was designed on the basis of the requirements argued in our approach. The questionnaire had two main objectives; first it was intended to validate the alignment factors in the framework. Second it was interesting to capture aspects that had not been mentioned in the literature but were important for companies. In this light the questionnaire is grounded on the developed approach. It contains structured questions which address general information about the company, the extent to which the company cares about business processes and IT, and the relevance of the identified alignment factors for the company (appendix 1). Open questions, like how and why, follow the structured questions, in order the gather both the reasons underlying the importance of each factor for the company and the uncovered aspects in the framework. A more detailed description of the questionnaire is given in appendix 1.

2.2.2 Collecting case study evidence

Evidence for case study may come from different sources, namely documents, archive records, interviews, direct observation, participant-observation, and physical artifacts (Yin, 1988). Interviews are an essential source of case study evidence. They can provide shortcuts to the prior history of the situation, so that the investigator can readily identify other relevant sources of evidence (Yin, 1988). But they might be subjects of problem bias, poor recall, and poor and inaccurate articulation.

The goal of this empirical study is validate the theoretical approach in SMEs, Therefore a focused-based interview is an interview in which the respondent is interviewed for a short period of time. The interview is open-ended, but the interviewer is more likely to be following a certain set of questions derived from the case study protocol. “This kind of interview aims to corroborate certain facts that the investigator already thinks have been established” (Yin, 1988).

Since our empirical study aims to validate the theoretical approach in SMEs, we have had a focused-based interview with companies. The designed questionnaire was used as a guide when conducting the interview. Each interview lasted at least one hour since managers are generally busy. The companies that are subjects of our work evolve in different industries ranging from banking, retailing, production and engineering. Although it is not possible to generalize our results in one industry, it is possible to get a holistic view in SMEs because many industries are represented in the study.

Study of process and strategy alignment in SMEs is rarely covered in the current literature. Eight interviews have been performed, but four of them are analysed and discussed in our study. The following criteria have been used to select the cases:

- Companies are SMEs located in Jönköping
- They belong to various industries; the idea is to widen the extent of generalisation
- They have an experience in process improvement. This means they have launched at least one project to manage their activities in a better way.
- They make use of information technology to manage their business activities.
- The interviewee must have a position in the organisation which involves them in both business strategy formulation and business process improvement. They should have enough knowledge to explain "how" or "why" some choices have been made. Thus the interviewees consist of CEO or line managers.

2.3 Stage 3 – Empirical findings

After case study evidences had been collected, the next stage was to document empirical findings. As earlier argued, the questionnaire was structured within four sections. The first main section aims, on one hand at evaluating if the company has undertaken projects to manage its activities in a better way, on other hand estimating the benefits of aligning business processes with strategy to the organization. The second main section addresses the importance of strategy to the organisation. In the third section, attention is given to the importance of business processes. Finally the fourth main section examined the relevance of the identified alignment factors for the company.

Based on the structure of the questionnaire, the answers to the questions have been grouped by sections. The idea is to keep traceability between the answers from the questionnaire and their interpretation. Thus each case is presented with a background that provides the reader with Meta information about the company's market, overall strategy and history. The business process management project section depicts big organisational changes which have affected the way of performing business activities. The motivations of those projects are also described with the expected outcomes. The next category shortly describes the level of formalisation of both strategy and processes. Finally the importance of each alignment factor is discussed in the last section.

2.4 Stage 4 – Analysis and discussion

Analysing case study evidence is especially difficult because strategies and techniques have not been well defined in the past. Nevertheless, there are three dominant analytic techniques: pattern-matching, explanation building and time-series analysis (Yin, 1988). One analytic strategy is to rely on the theoretical propositions (Yin, 1988). Yin (1988) states that a proposition is theoretical guiding the case study analysis. In this light, our theoretical proposition, which is "all aspects in our approach shall be addressed to create alignment between business processes and strategy", has shaped data collection plan. Besides, Yin (1988) advocates that analysis must follow cross-experiment rather than within-experiment design and logic. Therefore we have performed a cross-case analysis in which the relevance of each alignment factor is discussed. The steps in analysis could be formalized as follows:

1. We have matched our theoretical approach with the sections of the cases description.
2. For each factor we would like to see how important the aspect in SMEs is. If more than 2 companies find a factor important, then we generalize it to all cases. When more than two companies think a factor is "not important" or "not important at all", then we conclude it is less importance to SMEs investigated.

2.5 Validity and generalization

2.5.1 Validity

Kidder (1981) has identified four tests to judge the quality of research design. These are construct validity, internal validity, external validity, and reliability. Internal validity is used for causal and explanatory studies only (Yin, 1988); it is then not relevant in this study. Construct validity refers to the correctness of the measured concept; we do not argue it in this research, tough. External validity refers to the domain to which a study's findings can be generalized (Yin, 1988), and reliability demonstrates that the collection procedures can be repeated with the same results (Yin, 1998).

External validity is obtained using replication logic in multiple-case studies (Yin, 1988). We have used four cases in our empirical study that have been selected so that it predicts similar results. This kind of selection leads to literal replication. Therefore we claim that our study has an external validity.

Yin (1988) argues that the use of case study protocol enhances reliability. This protocol includes both data collection protocol and case documentation procedure. Our data collection instrument is the questionnaire. This instrument has been refined along the research process. Besides, we have formalized the procedure for documenting each case. Thus we claim that using the same protocol, another investigator should get the same results. Our study is therefore reliable.

2.5.2 Generalization

Yin (1988) differentiates "analytic generalization" from "statistical generalization". In analytic generalization, a previously developed theory is used as a template with which to compare the empirical results of the case study. If two or more cases are shown to support the same theory, replication may be claimed (Yin, 1988).

The approach developed in this research has been used as template for analysing the four case study results. The findings of each case have been compared to one another, so that the final results represent the aspects corroborated by different cases. Our study can then be analytically generalized to SMEs located in Jönköping.

2.6 Closing remarks

This chapter has presented our research strategy that can be formalized in figure 1 above. The research approach used in this study (multiple case studies) is powerful to draw generalisations. The remaining chapters elaborate each step of the research from the theoretical framework to the analysis and discussion.

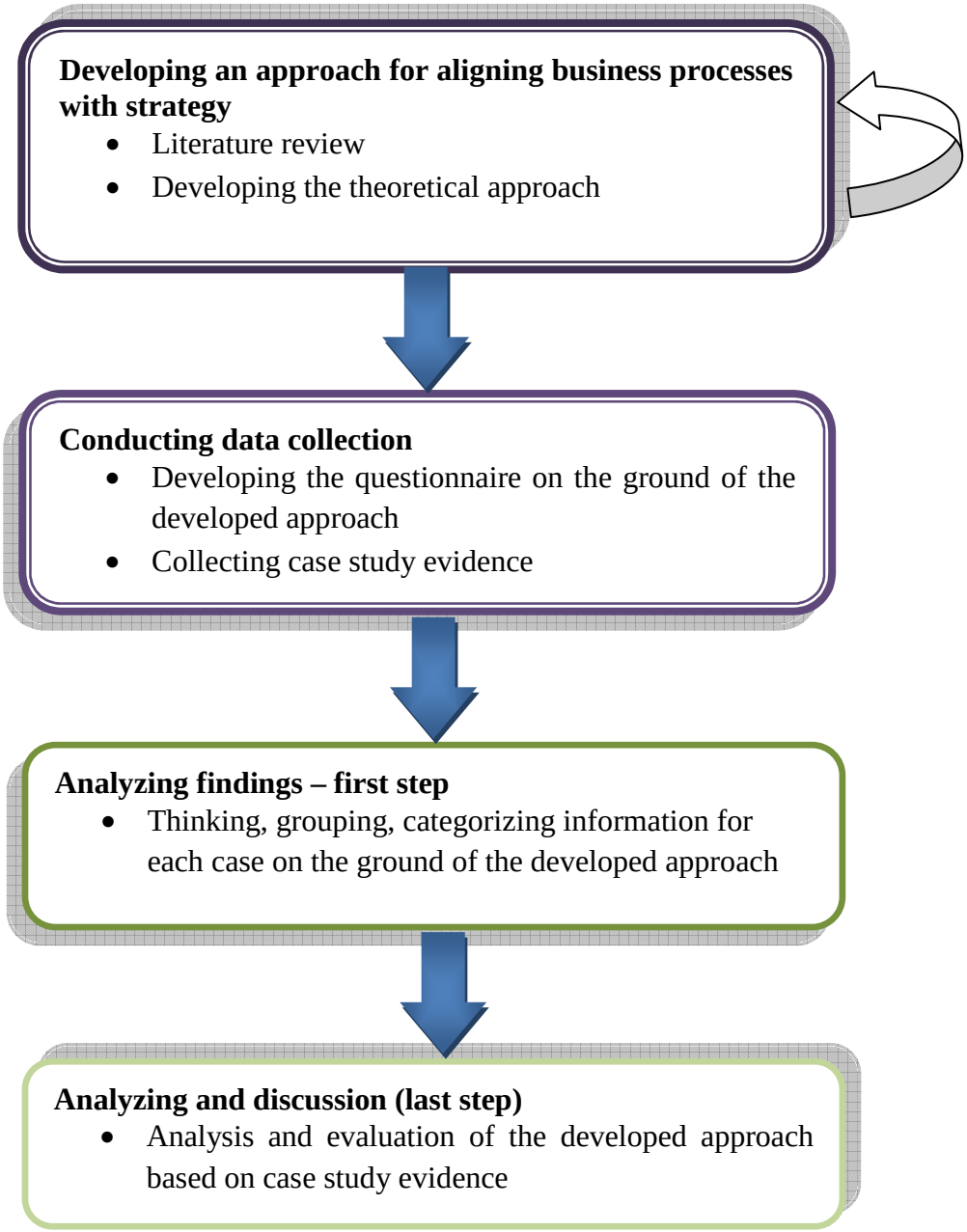

Figure 1: Research process

3 Alignment of strategy with business processes

This chapter provides the reader with the basic concepts which help to understand and position our study within the current research in strategic alignment. We first highlight the role of business processes in business and IT alignment. This motivates us to investigate, in the next section, the need for organisations to align business processes with strategy. Then we introduce the concept of strategy and two approaches for sustaining the fit between strategy and its execution. Finally we discuss the challenges in business and IT alignment as well as BPM.

3.1 Strategic alignment of business and Information Technology and the importance of business processes

Strategic alignment is mainly discussed between business and Information technology. This first section will describe the strategic alignment of business and IT through the strategy alignment model from Henderson & Venkatraman (1993). Then based of the four alignment perspectives in SAM, we will argue the crucial importance of business processes in ensuring the alignment of strategy and IT.

3.1.1 Strategic alignment of business and Information technology

While different scholars have shown it differently, fit and its operationalization have been widely discussed in the strategic management field (e.g., Drazin et al., 1981). The fit here refers to strategic alignment; and the latter is phrased in strategy research with words such as *matched with, contingent upon, consistent with, fit, congruence,* and *co alignment* (Venkatraman, 1989).

Based on the argumentation about discrepancy between organizational context and technology most literatures have created the alignment between business and IT with different views (Orlikowski, 1997). The concept of strategic alignment was developed more than a decade ago (Niederman et al., 1991). Broadbent & Weill (1993) refer to alignment of business and IT strategy as "the extent to which business strategies are enabled, supported and stimulated by information strategies". The obtained fit between the organizational and technological infrastructure enhances business performance (Croteau et al., 2001).

a. The Strategic Alignment Model (SAM) of Henderson and Venkatraman

Information technology has evolved from traditional orientation of administrative support towards a more strategic role within the organization (Henderson & Venkatraman, 1993). Porter & Millar (1985) strongly advocate the strategic management of Information Technology, as the new technology is transforming the value chain, altering the rules of competition, creating a competitive advantage, and spawning whole new businesses. And realizing value from IT entails creating

alignment between the business and IT strategies of organizations (Henderson & Venkatraman, 1993).

Henderson & Venkatraman (1993) base their concept of SAM on the axiom that "strategic choices in the external and internal domains should be consistent". External domain refers to the position of an organization in the competitive product-market place arena, whereas internal domain deals with the administrative structure that supports strategy execution. Basically, SAM is defined in terms of four fundamental domains of strategic choice: business strategy, IT strategy, organizational infrastructure & processes, and IT infrastructure & processes (figure 2). Each domain consists of three components: Scope, governance and distinctive competencies at the external level (Henderson & Venkatraman, 1993), while skills, process and infrastructure are at the internal level. All components deem crucial as far as alignment is concerned. Luftman (2000) argues that each component enables successful implementation of business and IT/IS.

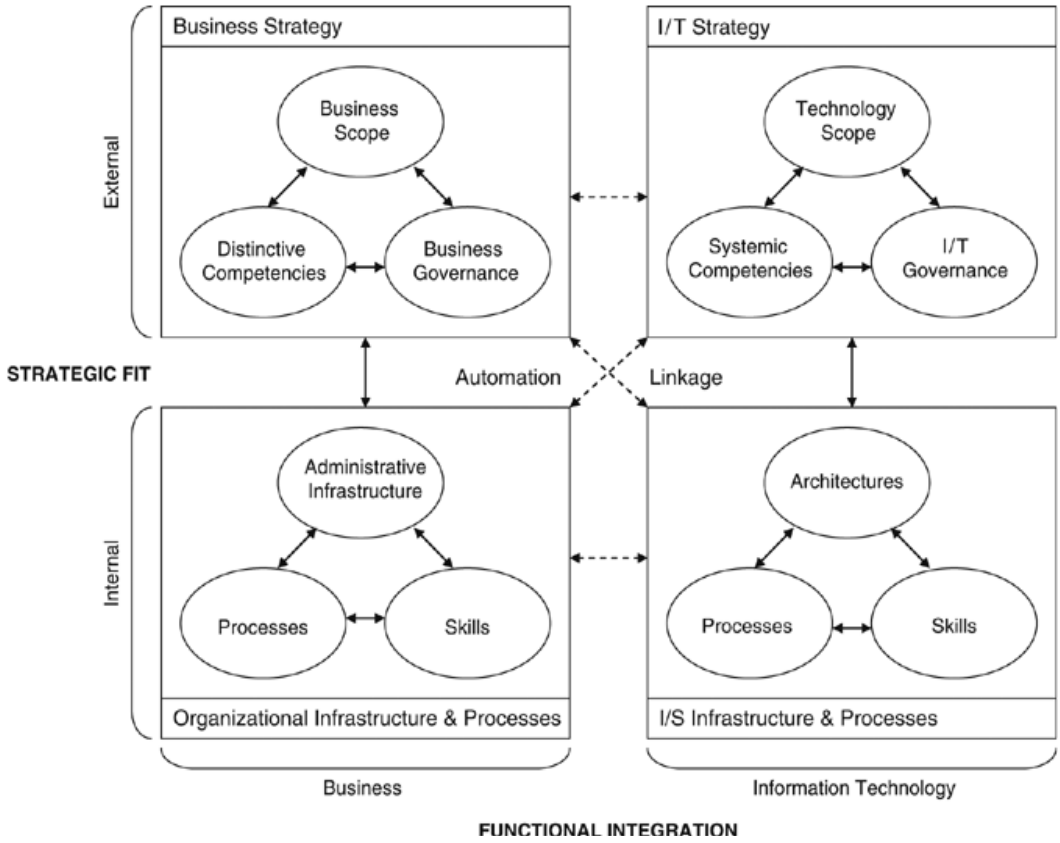

Figure 2: Strategic Alignment Model (adapted from Henderson & Venkatraman, 1993)

b. The four fundamental domains of SAM

On the external level, Henderson & Venkatraman (1993) describe business strategy with three components. Business scope refers to everything that has an impact on the environment, including: potential customers, suppliers, market, and products. The business governance argues about how companies manage the relations between the stakeholders, senior management; indeed, how the firm alliance with strategic partners are formed. And the third one is Distinctive competencies, which refers to

whatever makes the business successful in the market place, like brand and product development. The second component of external domain is IT Strategy, which is composed of Technology scope, Distinctive competencies and IT governance (Shamekh, 2008).

In the Internal domain, SAM consists of Organizational Infrastructure and Processes, and IS/IT infrastructure. The first includes administrative structure, business processes, and human resource skills. Administrative structure refers to how firms organize their business in order to be vertical, horizontal, and matrix. All activities which are performed in the organization are refereed to business process, like values added activities and process improvement. And at last the human resource skills emphasize on how companies train, educate, motivate their objectives in order to accomplish them. The last component, IT infrastructure, is composed of IS infrastructure, process and skills.

The strategic alignment model moves beyond the simple identification of dominant domains, and considers the fit of all components in order to work as a whole unit. Scholars advocate two dimensions in strategic linkage: Strategic fit (vertical) and functional integration (horizontal) (Coleman & Papp, 2004; Henderson & Venkatraman, 1989). Strategic fit determines interrelationship between internal and external components, hence it could determine business infrastructure by the usage of the strategy. Versus the second, horizontal linkage is for integrating business and functional domains in order to explore how managers are interrelated (Ward & Peppard, 2002). Hence, this linkage is describing the ability of the business to keep its position in the marketplace and sustain a competitive advantage by leveraging the use of IT.

Effective management of IT/IS requires a balance among the choices made across all four domains (Henderson & Venkatraman, 1993). The next section will describe different perspectives of strategic alignment, which give more knowledge to the subject and provide future insights for guiding management practice in the area of IT and strategy alignment.

c. Alignment perspectives in SAM

Henderson & Venkatraman (1993) classify alignment perspectives under two categories: business strategy driven perspectives, which consists of strategy execution and technological potential, and IT strategy driven perspectives, which encompasses both competitive potential and service level (figure 3).

Furthermore, Coleman & Papp (2004) argue about eight perspectives instead of four, and they add Organization IT infrastructure, IT infrastructure Strategy, IT organization infrastructure and Organization infrastructure strategy, which, all emphasize on IT blocks rather than Strategy. All those perspectives are working on organizational level on SAM and they only occur when three of four domains are in alignment. Avison et al. (2002) observe that changes can't occur just on one domain without impacting on the rest; and at least it must be shown in two domains. However they claim that those perspectives are based on simultaneous assessment and are composed of three components designing the blocks; Anchor, Pivot, and Impact (Avison et al., 2002).

- **Strategy Execution**
Strategy Execution is the first perspective. Business Strategy is the driver of this perspective as anchor domain. Not to forget, organizational infrastructure (pivot domain) and IT/IS infrastructure (impact) are parts of this perspective. This perspective corresponds to the classical top-down approach in strategic management. Henderson & Venkatraman (1993) stated that the main feature in strategy execution is that IT/IS is responsible to undergo changes, which are happening on business process. And eventually, the focus of this perspective is on either transformation of the business or information technology planning (Coleman & Papp, 2004).

- **Technology Potential**
Technology potential is also driven by business strategy. The direction here starts from the technological potential as an (Anchor), IT as (pivot) and IT infrastructure (impact). The top manager is responsible for providing technology vision, which should support business strategy (Henderson & Venkatraman, 1993). The focus in this perspective is on establishing strategic fit for information technology, where IT strategy is used to enable new business strategy; thus showing the value of information technology that rests on its contribution to the business final product or service (Henderson & Venkatraman, 1993; Luftman et al. 1993; Coleman & Papp, 2006).

- **Competitive Potential**
The competitive potential represents the third perspective. This perspective suggests interrelationships between IT strategy as anchor domain, business strategy as pivot, and organizational infrastructure and processes as impacted domain. This perspective is concerned with “the exploitation of emerging new information technology capabilities to influence or enable new business strategy, and thus creating competitive advantage to the business" (Henderson & Venkatraman, 1993). It’s the role of management to envision how business strategy could be enhanced by number of emerging IT capabilities. (Henderson & Venkatraman, 1993; Luftman et al., 1993)

- **Service Level**
The fourth perspective is representing how to build a world-class IS service organization (Henderson & Venkatraman, 1993). The strategic fit here, creates the capabilities required to meet the needs of IS customers. Business strategy works in background by providing the direction to stimulate customer demand. The components of this perspective are related as follows: IT strategy is the anchor or basis, IT infrastructure is the pivot, and the organizational infrastructure is the impact area (Henderson & Venkatraman, 1993).

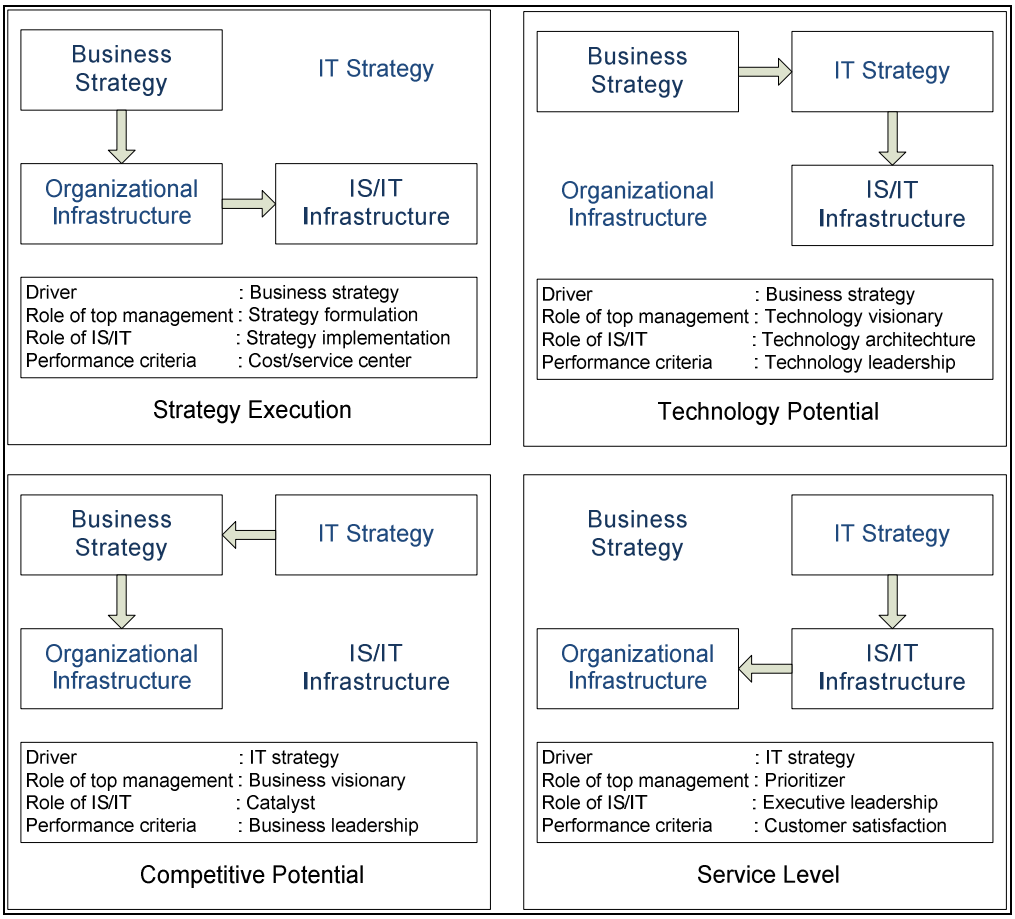

Figure 3: Business-IT Strategic Alignment Perspectives (adapted from Shamekh, 2008)

3.1.2 Business processes as the bridge between IT and strategy

As mentioned earlier, the perspectives in SAM provide guidance for management practice in business and IT alignment. In addition, The SAM model emphasizes a clear message in business and IT alignment: "IT should support the business and this will be more successful if the IT resources are developed and organized with the business strategy and processes in mind" (Gilbert, 2007). Thus Business Processes comes to be the bridge between Strategy and IT, especially in the strategy execution perspective.

Furthermore, studies have posited that nowadays business strategy is based on first-class business processes that provide high degree of customer service (Kettinger & Teng, 1998). Importance aside, what is not clear is how to maintain harmony between business process and business strategy to achieve the best outcome. Earlier, firms have sustained this harmony between business strategy and IT (Shamekh, 2008).

Finally, Papp (2004) has analysed the strategic alignment perspectives in his study "*Strategic alignment: analysis of perspectives*". His study suggests that industries favour some alignment perspectives. And the strategy execution perspective is the most common in industries with 20%. This result reveals the undeniable role of

business processes in selecting IT/IS solutions that will support the implementation of business strategy. Business Process as a centre of aligning would be an enabler to better address the need for doing the right things, and doing things right.

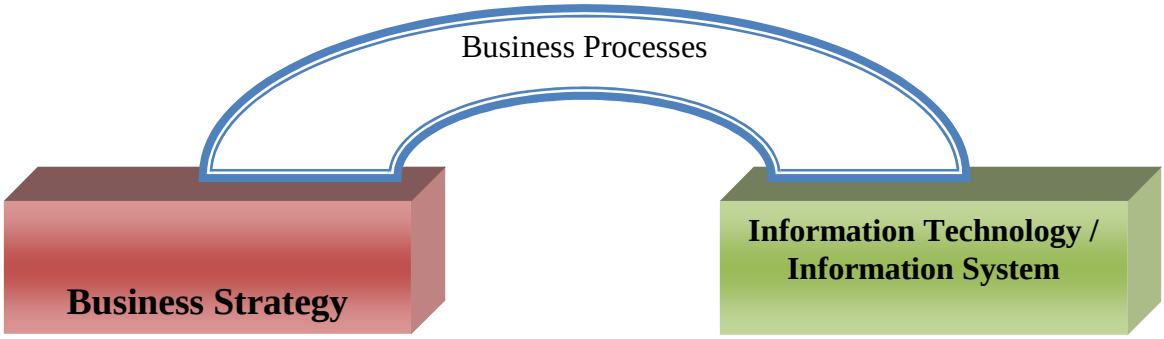

Figure 4: Business process as the bridge between business strategy and IT/IS

3.1.3 Summary of section

The main focus in this chapter has been to position the alignment of strategy with business processes within the domain of alignment business and IT. The four perspectives in SAM – strategy execution, technology potential, competitive potential, and service level - aim to guide management practice in the area of IT and strategy alignment. The perspective that will be interesting in this project is the strategy execution perspective that aligns IT on the base of strategy and business processes. Furthermore, since business processes are the bridge for effective alignment of IT with strategy, it becomes opportune to investigate the following issue in Business Process and Strategy alignment:

- *Why should organizations align business processes and strategy?*

In the next section we will argue the need for organizations to align business processes with strategy.

3.2 The need for organisations to align business processes with strategy

Porter (1985) stresses that strategy is thoroughly linked with how companies organize their activities or processes into value chains, which are, in turn, the basis for competitive advantage. However, little attention has been given to the strategic alignment of business processes, in comparison to the attention given to business and IT alignment. And recent literatures about business process – whether Business Process Management (BPM), Business Process Improvement (BPI), Business Process Reengineering (BPR), and Business Process Redesign - advocate the linkage of business processes with strategy as crucial for company success.

Most reviews of business process management projects pressure that as many as 60 to 80% of those initiatives have resulted into breakdown (Kettinger & Teng, 1998; Abdolvand, Albadvi, & Ferdowi, 2008; Karim et al., 2007; Macintosh & Maclean, 1999). But when analysing success factors of business process initiatives, it appears that keys factors for a successful process change program are the effort range in depth and more importantly, the strategic impact. In fact Trkman (2010) argues that the lack of connectivity between business strategy and business processes endeavours is the main reason for failure. Since awareness of the strategic impact of business process change is a critical success factor, business processes need to be aligned with strategy. Evidence also comes from Lee & Dale (1998) when they argue that "BPM will be most successful if it is linked to policy deployment and when management determines the processes on the basis of critical objectives and company goals".

Alignment of business processes with strategy is double-edge sword on, one hand business strategy can be the anchor for aligning business processes (the strategy execution perspective of SAM), and on the other business processes can serve as base for a new strategy.

On the first hand, the organization cannot focus on everything; otherwise it will be stuck in the middle (Porter, 1980). Thus, it is important for the organization to align the day-to-day activities it performs (business processes) with its strategy in order to stay in the competition. Hence depending on its strategy, the firm should select the core process that enhance organization's performance and improve them. Furthermore, Fisher (2004) posits that alignment of process, people, and technology with strategy is crucial for an organization so that it can result on efficient processes that provide positive and desirable outcomes. In this light processes that are not aligned with strategy do not simply serve the organization and are thus useless. But Fisher goes further and strongly states that those three "common" levers, namely process, people, and technology, should be viewed in the context of enterprise wide controls and governance; otherwise the harmony required to achieve the results will never be reached.

On the second hand, "by significantly improving a firm's operating capabilities, Business Process Regeneration allows the implementation of new strategies and, even more importantly, leads to envisioning of entire new strategy options" (Kettinger & Teng, 1998). The evidence to this assertion is given by Progressive case, an insurance company in USA. Progressive has used BPR to enter the market of high-risk drivers

in USA avoided by others insurers; and has been able to shift its strategy in response to the threat of its competitors. In fact thanks to a good managing of its business process, the company has been able to poach on new territory, the standard and low risky drivers. BPR has enabled Progressive to identify unexploited strategic opportunities and anticipate customer needs (Kettinger & Teng, 1998).

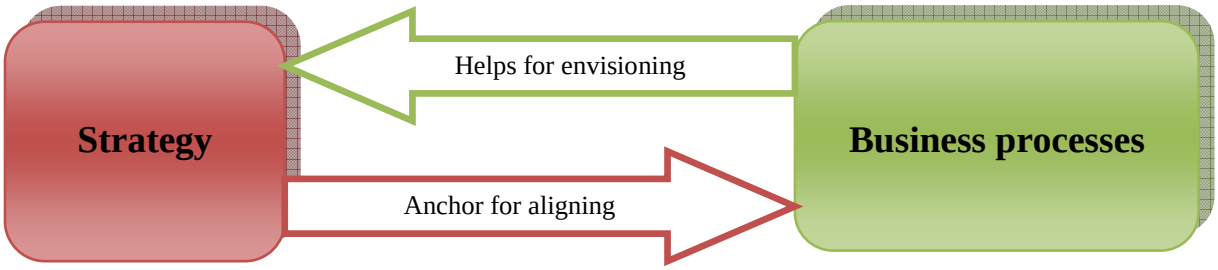

Figure 5: double effect between strategy and processes

3.2.1 Strategic alignment of business processes as a competitive advantage

The alignment of business processes with strategy is worth; indeed initiatives that are taken for strategically improving or better managing business process have led companies to success. For instance companies like Ford Motor Co., CIGNA, and Wal-Mart have been successful in implementing BPR (Al-Mashari & Zairi, 1999); Xerox, USAA, Pepsi are others BPR success stories (Garvin, 1995). Indeed competitive advantage rests upon putting glue among business activities into value chain, and Business process works on that purpose. Business process management provides to the company four specific advantages:

- **A shorter time-to-market**
  In several papers it is argued that the focus on business process allow the company to shorten the time-to-market (Cleveland, 2006). With well defined business process and optimized linkages among business activities, the firm will bring products to market sooner. And as it has already mentioned, the time-to-market is crucial to survive in today competitive environment.

- **Lower cost advantage**
  Well defined and managed business process increase company efficiency (Cleveland, 2006). Indeed a process view of the organization ensures such good coordination that wastes are avoided. Hence costs are lowered; and lower costs provide the company a competitive advantage.

- **High quality product**
  It is also argue that more efficient business processes generally lead to higher quality products (Cleveland, 2006). As product quality is nowadays an imperative for many companies, business process management will provide an advantage.

- **Improved customer satisfaction**
  Since an improved business process lead to high quality product, lower costs - thus lower price for the customer – BPM increase customer satisfaction (Kettinger & Teng, 1998). Furthermore a process orientation allows the firm to be more customer-focused and more efficient; that is the magic of process (Garvin, 1995).

To sum up, business process management provides company a competitive advantage in costs by decrease them. BPM can also support a differentiation competitive strategy by ensuring the quality of product and shortening the time to market. BPM is therefore a key weapon to compete in today business, since it improves business performance and organisational effectiveness.

But critics against the focus on process argue that such competitive advantage is not sustainable since competitors can imitate it. However evidences have shown that a company that really bases its competitive advantage on business process has a length beforehand with regard to its competitors. If the latter try to imitate its business processes, the company can easily shift to another competitive edge on the basis of its business processes (Kettinger & Teng, 1998).

For instance Dell's strategy has been successful because on their focus on adding flexibility into their entire value chain. Dell has been able to sell at lower margins and gain an advantage towards its competitors by leveraging an efficient business process. Thus Dell is one of the best success stories BPM has ever achieved. Dell has integrated its value system (suppliers, company, and customer) so that it encompasses the entire organization – including the sales, assemblers and sub-assemblers - streamlined efficiently. Dell could then produce on order – build-to-order policy. In addition, Dell has significantly reduced sales costs by implementing a direct-selling model. This approach has given the company a competitive edge since customers can buy to the lower price ever. This dual strategy has positioned Dell at the top of the competition for two decades despite being a late entrant. The competitive edge of Dell rests upon a powerful design of its business processes and strategic use of information technology.

3.2.2 Summary of section

So far, we have argued the need for organisations to align business processes with strategy. Business process management provides four strategic advantages for organisation, namely a shorter time-to-market, lower cost advantage, high quality product, and improved customer satisfaction. Besides, strategy is usually the anchor for alignment, but well defined business processes help envisioning a new strategy and making strategic use of information technology. Since the attention to business processes is worth, the two following sections will emphasize the concepts of strategy and business process. First we will discuss strategy as an anchor for alignment; we will mainly discussed two developments in strategic management research that aim to keep the fit between strategy and its execution, namely value chain and balanced scorecard.

3.3 Business Strategy as basis for alignment

3.3.1 Definition of strategy

Contributions to conceptually frame business strategy derive from groups such as industrials economists, organizational theorists and consultants (Håkansson & Snehota, 2006). Those contributions are heterogeneous in terms of perspectives and approaches; there is then no consensus on how to define the strategy concept. Indeed the concept has been borrowed from the military context as reference to "*the art of so moving and disposing troops as to impose upon the enemy the place and time and conditions for the fighting preferred by oneself*" (Oxford English Dictionary).

In the management era, Hofer and Schendel's (1978) conceptualization of strategy was the first that received large consensus among researchers in business strategy. As such, "Strategy provides directional cues to the organization that permit it to achieve its objectives, while responding to the opportunities and threats in its environment" (Hofer & Schendel's, 1978). Strategy is then about defining direction; it determines ways of pursuing or attaining organizational goals. It is an elaborated and systematic long-term plan of actions necessary for carrying out objectives by making use of internal resources and capabilities (Chandler, 1962). Strategy also states clear objectives or goals that precise the mission and the aim of the organization or what organization wants to achieve. And the environment represents the arena in which the organization is competing, and provides both opportunities and threats. But that environment is changing; human nature, contradictions in imagination, conflicting purposes can modify the external forces interacting (Braybrooke & Lindblom, 1963). Hence, the essence of strategy – whether military, diplomatic, business, sports, (or) political – is to build a posture that is so strong (and potentially flexible) in selective ways that the organization can achieve its goals despite the unforeseeable ways external forces may actually interact when the time comes (Mintzberg, 1988). The following figure (figure 6) highlights our understanding of the concept of strategy.

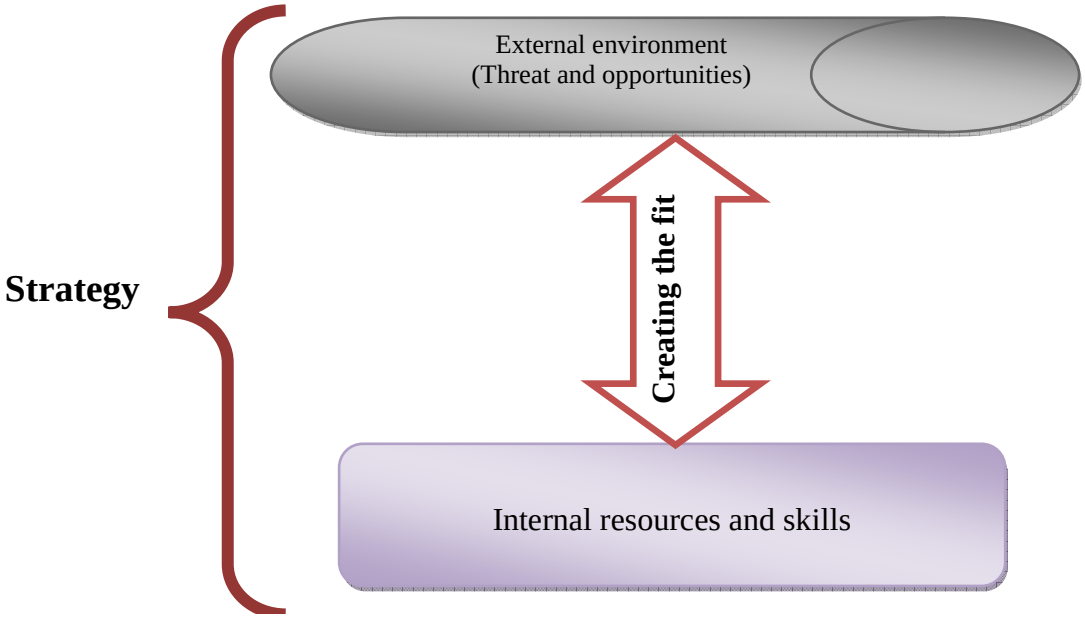

Figure 6: strategy as creating fit

Strategy is very complex and hardly foreseeable since strategy usually works in retrospect (Mintzberg, 1988). Indeed Mintzberg (1988) argues that strategy deals not just with the *unpredictable* but also with the *unknowable*. Successful managers even fail to define how they build their strategy. Hence, in a dynamic environment, tactics are sometimes used to achieve excellence in individual activities. However Porter (1996) argues that operational effectiveness – being excellent in individual functions - is necessary but not sufficient to be taken as strategy. And sustainable strategic position requires trade-offs, where trade-offs occurs when activities are incompatible (Porter, 1988). Porter (1996) then defines strategy as "creating fit among a company's activities. The success of a strategy depends on doing many things well - not just a few- and integrating among them. If there is no fit among activities, there is no distinctive strategy and little sustainability. Management reverts to the simpler task of overseeing independent functions, and operational effectiveness determines an organization's relative performance."

3.3.2 The concept of fit in business strategy

Venkatraman (1989) argue that the concept of fit and its operationalization have been widely discussed in strategic management field by scholars such as Drazin & Van de Ven (1985); Joyce, Slocum, & Von Glinow (1982); Miller (1982); Schoonhoven (1981). Fit here refers to alignment; and the latter is phrased in strategy research with words such as *matched with, contingent upon, consistent with, fit, congruence,* and *coalignment* (Venkatraman, 1989). Venkatraman (1989) classifies fit according to two criteria: the number of variables in the fit equation, and the degree of specificity of the functional form of fit-based relationship. This classification provides precise definitions of fit, useful to test and recognize whether an organization has it or not. Hence the six perspectives that derive are namely: fit as moderation, fit as mediation, fit as matching, fit as gestalts, fit as profile deviation, and fit as covariation.

The notion of fit in business strategy is mainly related to business performance and firm's advantage. But creating fit between a formulated strategy and its execution of still remains challenging. Two main approaches deal with that issue: the value chain and the balanced scorecard. Value chain advocates creating glue among company's activities in order to obtain a competitive advantage. And the balanced scorecard is the most successful approach that ensures congruency between a strategic vision and the actions, through a performance measurement hierarchy.

3.3.3 The fit among company's activities as a competitive advantage: value chain

A competitive strategy for a company is about being different from its rivals (Porter, 1985). It means either doing the same thing better or doing things different from the competitors. Porter (1980) points out three generic approaches for achieving a competitive strategy: (a) *focus, (b) cost leadership* – a firm is able to deliver the same product as its competitors but at a lower cost - and *(c) differentiation* – a firm is delivering the best product-; where "*cost leadership*" and "*differentiation*" are the most discussed in the literature. Porter (1980) also stresses that a firm should not

attempt to follows all those three generic strategies. The risk is that firm may be stuck in the middle and will eventually underperform or simply disappear.

But the question that arises is "*how can a firm achieve a competitive advantage in its day-to-day activities?*". Porter (1985) uses the concept of value chain as a strategic weapon to reach or ensure the sustainability of competitive advantage. He claims in his paper "*How Information Gives You Competitive advantage*" that "*Competitive advantage in either cost or differentiation is a function of a company's value chain*". A company's value chain is a system of interdependent activities, which are connected by linkages in order to improve the overall value for the customer. Linkages exist when the way in which one activity is performed affects the cost or effectiveness of other activities. Linkages often result into creating trade-offs. For example a more costly product design and more expensive raw materials can reduce after-sales service costs. But careful management of trade-offs is a powerful source of competitive advantage because rivals hardly perceive them (Porter & Millar, 1985).

Porter (1985) defines value as the amount buyers are willing to pay for what a firm provides, and conceived value chain with both primary activities and support activities (figure 7). Primary activities are those involved in the creation and delivery of a product or service as well as support and servicing after sales. Primary activities can be grouped into fives main areas: inbound logistics, operations, outbound logistics, marketing and sales, and service. They are supported by activities that provide the inputs and infrastructure that allow the former to take place. Hence support activities help to improve effectiveness and efficiency of primary activities

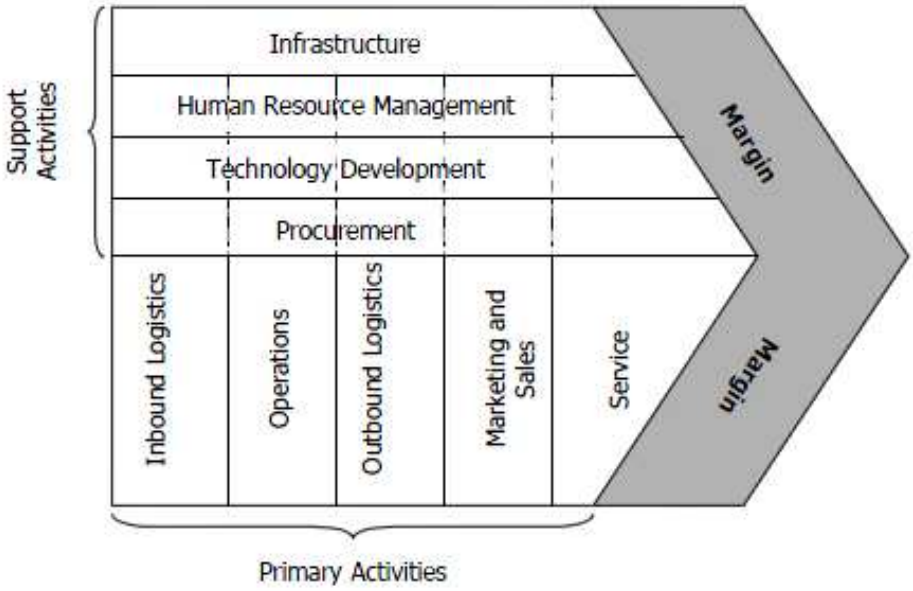

Figure 7: The value chain of an organization (Porter, 1985)

Value chain is the core function of competitive advantage; focus is given to the value that company provides to its customer. The concept of value chain is not only internal; it crosses the boundaries of the organisation. Indeed the value chain of a company is embedded in a larger value system or supply chain (Porter, 1985). Therefore the value

system includes the supplier value chains, the organisation's value chain, and the value chains of the customers.

3.3.4 BSC as a tool for aligning business activities with the organisation vision

One of the interesting developments in strategic research refers to how to align a formulated strategy with business actions. Indeed, strategy is usually expressed as a vision, an intention: "What we want to achieve" or "What we want to be in the future"; an example could be "use high-quality employees to provide services that surpass customer's needs" (Kaplan & Norton, 1996). Such statements are qualified as "*mission statement*" by some researchers (Kaplan & Norton, 1996). Vaguely formulated, mission statements have proven to be difficult to translate into day-to-day actions. For example, Kaplan & Norton (1996) illustrate that a project manager in the field with his customers and employees strongly believed in the mission statement of his organization but he was incapable of acting in accordance with that mission statement. He called his CEO and told him "*I am here with the customer. What am I supposed to do?*". Then the CEO realized that there exists a huge gap between the strategy formulation and the employee's knowledge of how their day-to-day activities could contribute to realizing company's mission.

Kaplan & Norton (2004) argue that vision needs to be translated into objectives and goals that are understandable by employees. And the balanced scorecard is the best approach to match financial budgets with strategic goals (Kaplan & Norton, 1996). The balanced scorecard helps senior management to translate their vision into terms that have meaning to people who will realize the vision (Kaplan & Norton, 1996). Thus strategic objectives are defined in four perspectives, that also served as ground for performance measurement of long-term and short-terms objectives. The measures in the four perspectives are linked in a cause-effect relation; from financial to customer, customer to internal business process, and internal business process to learning and growth. Thus balanced scorecard is a strategic tool that helps to align business activities with company's strategy (Kaplan & Norton, 2004). Kaplan & Norton (2004) argue that people perform the activities in processes; well executed business processes generate satisfied customers, and satisfied customers increase financial outcome. The four perspectives can be characterized as follows:

- **Financial**: To succeed financially, how should we appear to our shareholders?
- **Customer**: To achieve our vision, how should we appear to our customers?
- **Internal business process**: To satisfy our shareholders and customers, what business process must we excel at?
- **Learning and growth**: To achieve our vision, how will we sustain our ability to change and improve?

3.3.5 Summary of section

Strategy is hard to define but for this thesis we argue that strategy is about creating fit between organisation's skills, activities and capabilities and the

environment threats and opportunities. Strategy usually works in retrospect and is hardly foreseeable. The positioning perspective of strategy is the mainly discussed and lies on acquiring a competitive advantage towards its competitors. That competitive advantage is sustained by being unique in creating trade-offs among activities in the value chain. Although this theory is powerful, it remains difficult to ensure that the formulated strategy will be easily understood in the employee's knowledge. Therefore the balanced scorecard (BSC) is actually the best way to translate strategy into actions and measure short-term and long terms business goals (Kaplan & Norton, 2004). BSC rests upon linking in cause-effect relations goals from four perspectives: financial, customer, business process, and learning and growth perspectives.

In the following section, the focus will be given to business processes. We will first define business processes and the typology of business processes in order to help the reader to understand the concept and its use in the organisation. Then we will provide an overview of the challenges and the critical success factors for aligning business with IT, in BPM, BPR, and BPI.

3.4 How Business Process Thinking enables the alignment of business strategy and organization's routines

3.4.1 Business process definition

Basically, there is no service without process. Process has been defined in every area; it's not essential to define process just within firms. People could think of process to achieve something. So, the Process refers to a series of actions, changes, or functions bringing up a result. Thus, Process could accomplish every goal/aim anywhere, among a number of people. As soon as process goes towards organization in order to obtain something, then, it's not just process; it becomes business process. Several researchers defined a business process term in different views. For instance Melão & Pidd (2000) used limitation of Morgan's machine to describe business process within deterministic perspective, while Jacobson (1995) quickly described it as "the set of internal activities performed to serve a customer".

Since many organizations used process techniques for specific projects, Harmon (2003) believed in the majority of business managers who think about their organizations in terms of business process. So then Melão & Pidd (2000) argue that it is impossible or difficult to develop suitable approaches for business process. However, based on aligning business process with business strategy, we also struggle to define the best meaningful definition.

In terms of business process, there are number of people, activities, processes, which all contribute in an organization in order to achieve something. In the literature debate, there are various definitions of business process, but they all agree on its content. Lindsay et al. (2003) struggled to find a suitable definition for this term. And**,** the best one is a set of logically interrelated activities, which use firm's recourses to achieve a defined business outcome for internal and external customers. In this regard, the elements, which make business process up, are stated as activities, people, customer, and organization (Lindsay et al., 2003).

Needless to say, customers take a microscopic view of an organization outcome, and interrelated activities have to contribute to gain profit. Then, organizations should recognize activities as the most fundamental unit of firms, in order to be part of the business process and carry them out to competitive advantage (Harrington, 1991). Thus people expect the best outcome with well-defined and well-managed processes.
But business process, organizations think about their processes orientation. Traditionally, they organized their departments by functions, where each department was responsible to detect its core competency. Keri & Carol (2009) observed the goal of silo perspective to decrease redundancy and optimization expertise. While, nowadays, Organizations are all wholeheartedly to be organized by cross-functionality view in order to achieve sub-optimization and decrease the negative impact and the efficiency of the process (Keri & Carol, 2009) since scholars all agree

on high performances of cross-functional view in firms. As Harrington (1991) argues cross-functional means, they stop thinking about vertical process and shift it to the business process perspective to look at process in the whole organization and then try to boost it. Somehow, process perspective makes all minds clear to reassure, that, this is a complete version of vertical perspective which struggles to help managers to avoid duplicate work, optimize business process, and to improve cross-functional communication (Keri & Carol, 2009).

"Figure 8" illustrates an overview in a hypothetical company which shows how activities take place in the origination with an arrow in the different departments, in other words, how business processes are structured. It illustrates different processes and sub-processes, which are performed by different departments.

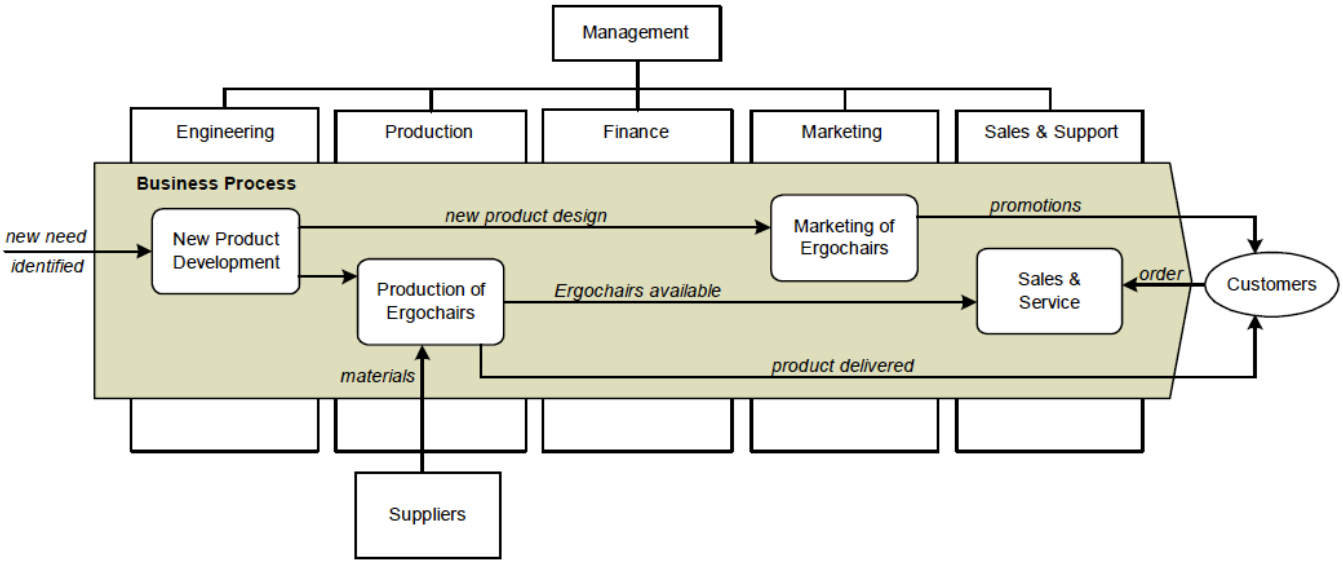

Figure 8: A business process cuts Across Tradition departments to combine departmental activities into a single flow of work. (Keri & Carol, 2009)

3.4.2 Typology of business processes

There are numbers of framework, which are recognized as different process type in order to differentiate design approaches, scope, and risk hitherto. Scholars claim of the existence of one framework developed by Earl (1994), which is overstated of a better understanding of process, model, analysis, redesign even more familiar with value chain if they are relatively structured.

This framework argues for a high and low level structure. In the high structure, there are processes which are more described in detail, easy to understand and easy to define the roles. But processes in the low structure are more complex and risky (Earl, 1994). But in the low structure, there are the processes, which imply more complexity and risk. This divided structure makes scholars closer to primary and secondary

activities of value chain (which we argued in the previous section). The primary processes are emphasizing to have external customer, antipode secondary processes are emphasizing to improve internal efficiency and have indirect effects on business performance.

As mentioned in "Figure 7" primary processes are more concerned with competitive positioning as the best answer of "*how can the firm achieve competitive advantage in its day-to-day activities?*" On the opposite axis, secondary process may have indirect effect on businesses performance. And it is because of their consideration, which is more on capability than competitive advantage

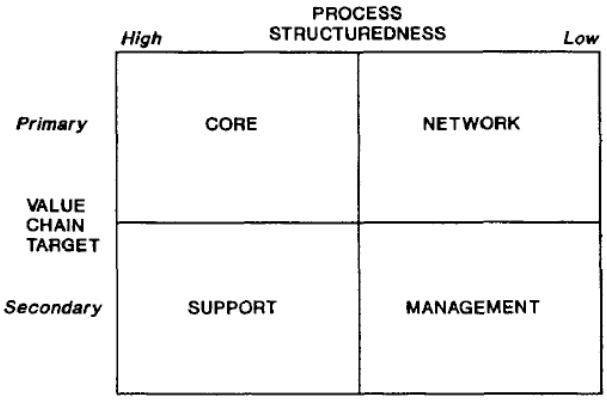

Figure 9: A framework for Typology of Business process (Earl, 1994)

This framework introduces four emergent types of business process:

- **Core processes:** A set of interrelated activities of value chain, which have external customers. McKinsey (1998) argues on core process as an evolution of business system, which is divided in three central processes as developing, delivering and marketing. Central process emphasizes more on customer and supplier relation to create competitive advantage.

- **Network Processes:** The main role in the network process is to to emphasize on people and their role in the firms. Thereby, the attempt is on social and technical part of organization and to improve communication between and among stakeholders, people, and managers.

- **Support processes:** these processes are essentially related to managing the business resources in the secondary activities and they have internal customers. Support processes usually help core process to enhance high performance. Support processes usually keep up with the core processes in order to enhance high performance. And, this process should be generally outsourced in order to tend organization in horizontal view. In this process managers need internal services including Information Technology, Human Resource, and facilities management. Information Technology, Human Resource, facilities management are the disciplines, which provide internally

services for the managers. But they are different in skill and language (Lurie, 2005).

- **Management Processes:** Lurie (2005) argues about management process, which leads the team and ensures business success. This process is emphasized on managing the core and the support process in order to achieve competitive advantage. Garvin (1995) describes them as activities related to how the CEO runs the company, how management interacts with employees, how decisions get made, and how communication takes place. Thus planning and control are the two disciplines in the management process (Lurie, 2005).

3.4.3 Success factors for effective business process and strategy alignment

In this section we will highlight the challenges and issues in business process endeavours in other to motivate the approach for aligning business processes with strategy.

The sources that we will use here are related to the critical success factors in BPI, BPM, BPR, and business and IT alignment. Since critical success factors are activities or aspects required for ensuring the success of a business, they are grounded somehow in issues and challenges in business processes initiatives. The challenges could also being viewed, as the reasons that lead to failure in business processes initiatives, barriers to success.

Achieving alignment of business processes with strategy is mainly discussed in the Business Processes Management (BPM) literature. But the first challenge when conducting a research in BPM is that various terms are used, such as Business Process Re-engineering, Business Process Redesign, and Business Process Improvement, Business Process Change. The second big challenge is that scholars in BPM do not only disagree about the scale of change and the scope of the processes being redesigned, they also have different definitions of the same term (Larsen & Myers, 1999). However, Hammer & Champy (1993) defines business process re-engineering as “The fundamental rethinking and radical design of business processes to achieve dramatic improvement in critical, contemporary measures of performance such as cost, quality, service and speed”.

Due to numerous failures in BPR initiatives, many scholars have undertaken the task of identifying the barriers and consequently the success and failures factors of Business process projects. Al-Mashari & Zairi (1999) have deeply reviewed literature about business process reengineering to come up with five dominant dimensions related to success and failures of BPR implementation, namely, *change management system and culture, management support, organisational structure, BPR project management (performance measurement and goals), and IT infrastructure*. They also emphasized the alignment of BPR strategy with corporate strategy. Many specific critical factors were also identified in each of the above dimensions.

Based on Al-Mashari & Zairi's study, Cheng & Chiu (2008) have sought to identify critical success factors for successful BPR implementation. The novelty in their study is that they attempted to develop a reliable, empirically tested, and rigorously validated instrument for BPR. The main critical success factors identified are then *management commitment, customer focus, use of IT, and communication of change*. Furthermore, the most crucial factors are *building an effective IT infrastructure* and *aligning it to BPR strategy*.

Trkman (2010) revisited a majority of previous studies and argued that they lack generalisation since they are based on case studies. He then advocates that critical success factors are grounded on three theories, namely:

- The **contingency theory** that characterizes the fit between the business environment and business processes
- The **dynamic capabilities theory**, for motivating proper organization and continuous improvement efforts in order to assure sustained benefits from BPM
- The **task-technology fit** theory that supports the fit between tasks in the business processes and information technology/systems.

Trkman (2010) conducted a case study in a banking company and he concludes that the critical success factors to create fit between business environment and business processes are strategic alignment, level of IT investment performance measurement, and level of employee's specialization. He also acknowledges factors which create the fit between the tasks in business processes and the information technology/system.

Managing business processes is a very complex endeavour, indeed BPM challenges span from organizational, managerial, information systems and social problems (Trkman, 2010). Armistead et al. (1999) developed a number of key themes of strategic business process management based on the experience of more mature Business Process Management organisations. These are strategic choice and direction, organisational design, business process management culture, organisational learning and knowledge management, organisational coordination, performance management, market value chain.

Finally, in "*Aligning BPR to Strategy: a Framework for Analysis*", Kettinger & Teng (1998) have defined five alignment factors for strategy driven business process redesign:

- **Strategy**: the extent to which the process support the strategy
- **Management**: management systems, styles, values, and measurements are supporting the improvement of process efficiency and effectiveness
- **People**: behaviour, jobs, skills, culture of people are ensuring the improvement of process efficiency and effectiveness
- **Structure**: teams, co-ordination mechanisms, formal and informal structure are supporting the improvement of process efficiency and effectiveness

- **Information technology**: how to use IT to enable process efficiency and effectiveness

Kettinger & Grover (1995) have developed a similar model for strategy-driven business process change. He strongly emphasizes that a balance needs to be created among the five dimension of process change for greater outcome (Kettinger & Grover, 1995). This model is based on relationship between buyers and suppliers, industry competitive and economic and geopolitical conditions and is more strategy-driven. The base of this descriptive model contains transformational subsystems including, Information technology (data, Information, IT, production technology), people (values, skills, culture, behaviour), management (systems, style), business process (cross-functional, intrafunctional, interoorganizational) and organization on structure (jobs, teams), which are the main factors for alignment approach. In the business process change, scholars also try to emphasise the output, which focuses more on improvement of cost, quality and customer satisfaction.

As a result, the outcome from each kind of BPR project would have a great change in order to have good performance and also should be more different with comparing of pervious project the companies already implemented. The figure (figure 10) below shows the components of the model and the relations among them.

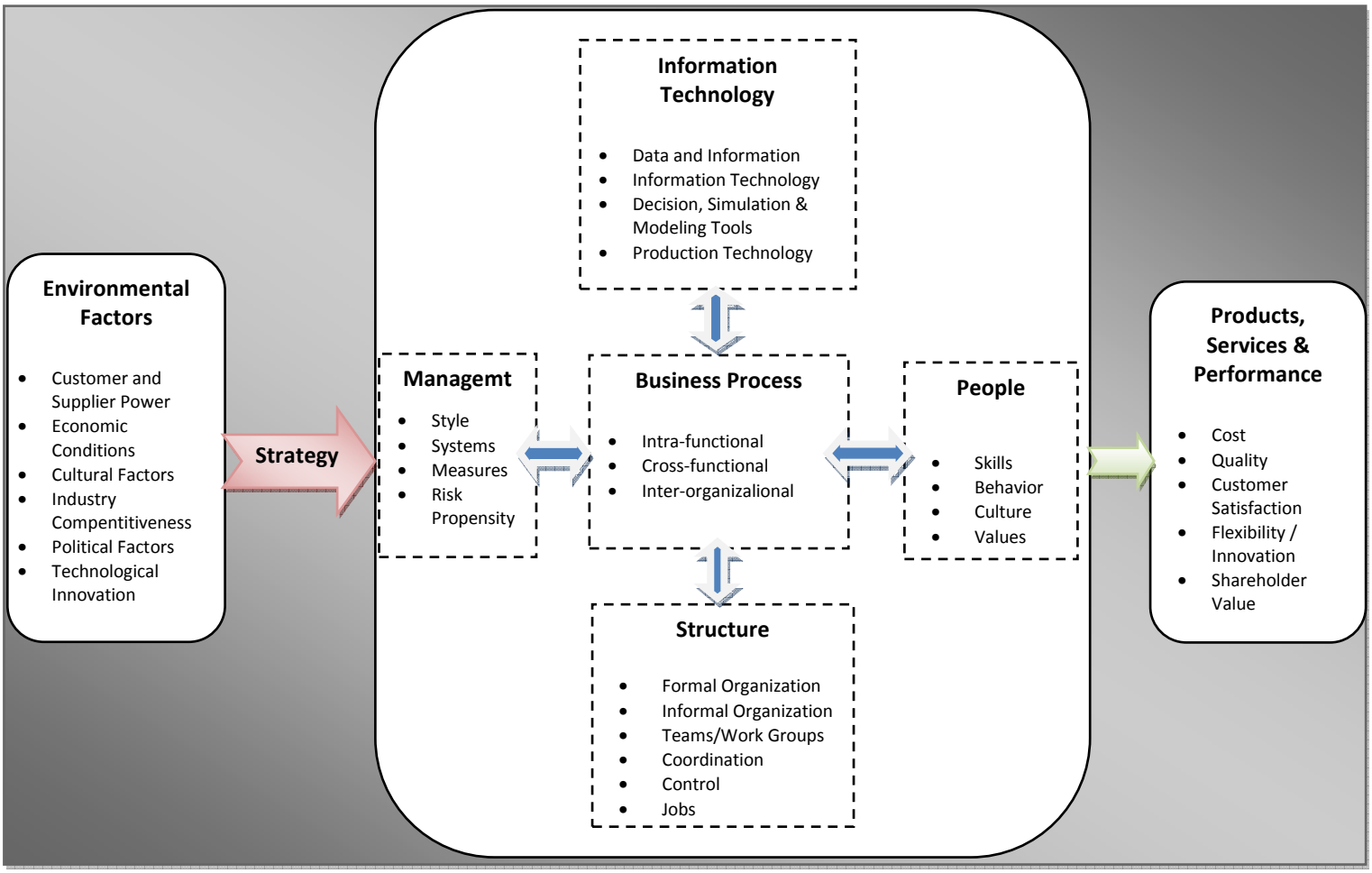

Figure 10: business process change model, adapted from Kettinger & Grover (1995)

3.5 The need for an approach for strategic alignment of business processes

We have earlier argued the critical importance of putting consistency between strategy and business processes and the competitive advantage deriving from that linkage. Unless researchers agree on the alignment requirement, there are not enough approaches aiming at clarifying how to achieve it in the organization.

Approaches for process improvement, for example the capability Maturity Model (CMM), usually lack business orientation. Indeed Trienekens et al. (2004) argues that "although CMM prescribes different types of processes and the application of metrics in process improvement, it lacks well-defined improvement goals at a business level". CMM approach only resides on operational level; it does not derive processes from the strategic level towards to the operational process levels.

On the other hand, efforts for goal-oriented process improvement approaches have been investigated by Trienekens et al. (2004). And it appears that the approach designed by Neiger & Churilov (2003) is powerful in identifying and decomposing different types of organization objectives; respectively fundamental objectives, process objectives and functional objectives. Nevertheless, "a direct link of business goals with business processes is not elaborated" (Trienekens et al., 2004). The same author has identified two well-known approaches for business improvement; namely Six-Sigma and the balanced scorecard (BSC) from Kaplan and Norton. Six-sigma is a powerful tool mainly used in manufacturing industries that focus on customer satisfaction. And BSC defines four business goals domains, namely: financial, customers, internal business process, and learning and growth. The other characteristic of BSC is the measurement system included in the approach. That measurement system "prescribes the usage of pre-defined quantitative metrics for the four goals domains". Thus business improvement approaches provide a path for organizational enhancement "starting from business strategy, predefined types of business goals and predefined types of metrics. However, the link with operational process is missing" (Trienekens et al., 2004).

Based on those evidences, we can conclude that a strategic oriented approach that explicitly link business strategy with business process is still a gap in the research area. The problem has been studied by Trienekens et al. (2004) in the case study at "Thales Naval the Netherland" (TNNL); but alternative approaches need to be investigated and defined.

3.6 Closing remarks

Business processes represent the bridge which links strategy and IT/IS, in the context of business and IT alignment. Thus organisations need to align their business processes with their strategy. Besides, the strategic process orientation helps to stay competitive in a turbulent environment. With well-defined and aligned business processes the company will gain the following advantages: (1) a shorter time-to-market, (2) lower cost advantage, (3) high quality product, and (4) improved customer satisfaction.

Strategy is about creating fit among company's activities. The success of a strategy depends on doing many things well - not just a few- and integrating among them (Porter, 1996). A competitive strategy for a company is about being different from its rivals. It means either doing the same thing better or doing things different from the competitors (Porter, 1985). In other to keep the fit two strategic developments will be used in this work: value chain and BSC. Value chain is a system of interdependent activities, which are connected by linkages in order to improve the overall value for the customer (Porter, 1985). BSC is a performance management system which ensures that there is a consistency among financial, customer, process, and internal & growth perspectives.

Business process refers to the set of internal activities performed to serve a customer (Jacobson, 1995). A business process cuts across Tradition departments to combine departmental activities into a single flow of work (Keri & Carol, 2009). Despite several efforts, there is no approved method or approach to link business processes to strategy. However BPM and business and IT alignment literature identify several factors for successful alignment. Those are (1) Strategy, (2) Business process, (3) Management, (4) People or human factors, (5) Organisational culture, (6) Organisational structure, (7) Information technology, and (8) Performance measurement. The following section will deeply explain our approach based on those alignment factors as well value chain and BSC.

4 The approach for aligning strategy with business processes

The approach that has been developed in this thesis is based on the challenges in BPM, BPR, BPI and business and IT alignment. In this section, we will explain each aspect that need to be addressed for aligning strategy and business processes, namely strategy, processes, people, management, IT, organisational culture, organisational structure, and performance measurement. We will consider the criticality and the role of each factor in alignment. We will also explain the relationships among these aspects since alignment consists of creating a balance.

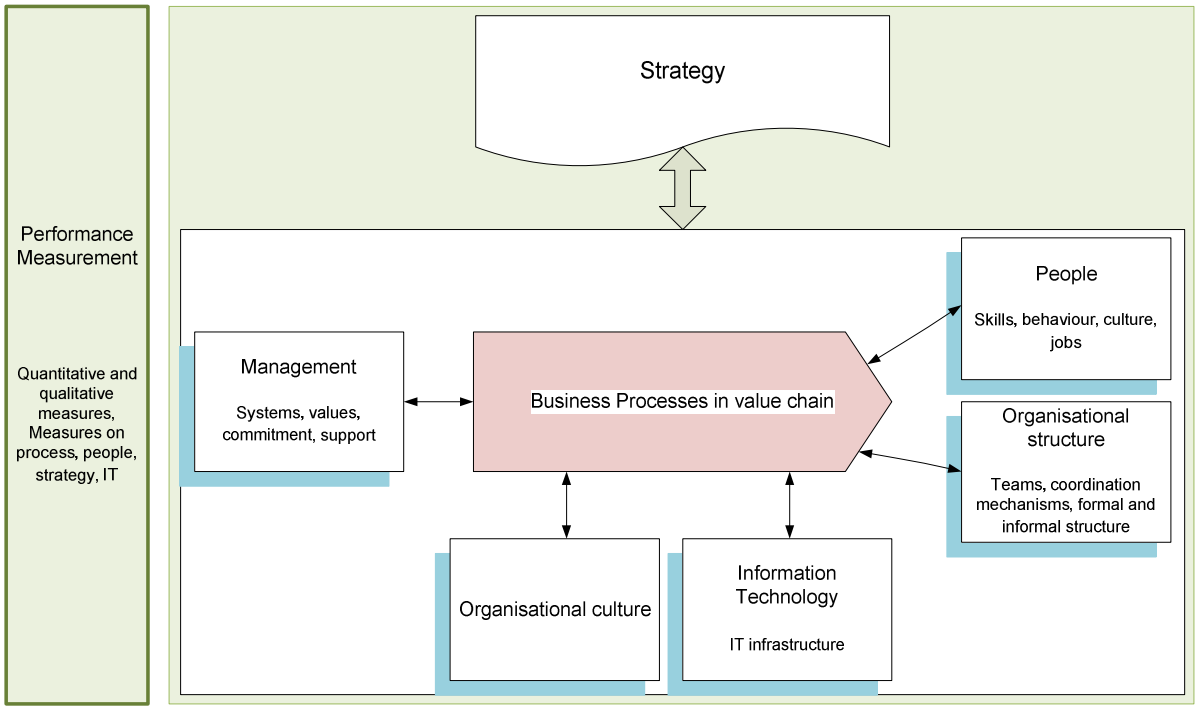

Figure 11: Strategy and Business Process alignment model

Basically, the framework (figure 11) is organised as follows:

- **Strategy** is the basis for business process alignment. All alignment aspects shall be viewed under the scope of strategy. Strategy provides with goals and needs that help in process selection; most importantly strategy harmonizes trade-offs among activities in the value chain and drives performance measurement.
- **Business processes** are the crystal which links together people, management, IT, organisational culture, and organisational structure. They provides requirement for an effective and efficient IT/IS.
- **Management** Support and commitment is critical for BPM success. Changes in business processes may require revision on management systems, styles and values.

- **People** or **human factors** are very important since they make the processes work. People have assets like knowledge, skills, jobs, behaviour, and culture that are needed to improve process efficiency. Process change may infer people re-skilling and competence development.
- **Organisational culture** is the trickiest aspect because it is implicit and has to be formed over time through continual reinforcement. Culture of experimentation is the most successful one in the context of process improvement.
- **Organisational structure** refers to the organization, functional or horizontal. In the context of process improvement, teams, co-ordination mechanisms, formal and informal structure may need revision.
- **Information technology** is process enabler. In fact IT shall support the execution of business processes. IT may also help rethinking the intersection between activities. The critical aspects here are*: Effective IT infrastructure, Adequate IT investment and sourcing decision, Higher IT function competency, Proper IS integration*.
- **Performance measurement** is important to evaluate the fit between all alignment factors. Performance measures should be tied to strategy: the balanced scorecard – measures on strategy, processes and people. Processes must be measured for factors such as time, costs, productivity, quality, and capital

4.1 Strategy direction, choice and linkage

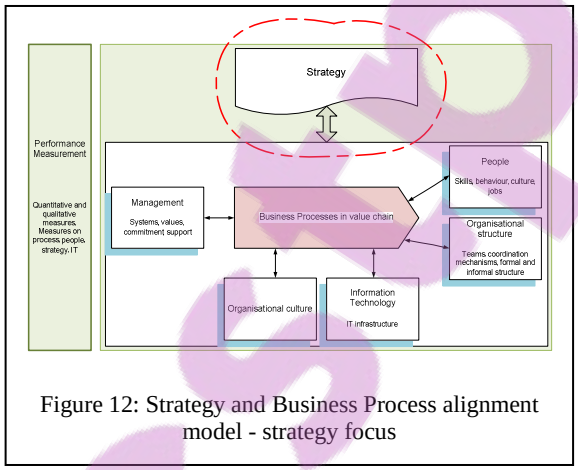

Figure 12: Strategy and Business Process alignment model - strategy focus

We have argued in the previous chapter that Strategy is the anchor for alignment. Strategy provides direction, is the base for choice in the processes and determines how activities are linked to create value to the customer.

Strategy formulation is the first step towards strategic alignment of business processes. Many scholars argue that strategy should be used to select the processes the organisation will improve (Kettinger & Teng, 1998; Garvin, 1995). Thus strategy is the basis for process improvement. Garvin (1995) argues that "You can't redesign processes unless you know what you are trying to do". You should "review strategic direction by looking at the competition, then figure out how to organize to achieve the new goals".

Strategy does not only ground process selection, strategy also aims to select the activities in the value chain that the organisation will concentrate on, either core processes, support processes, management processes or networked processes. Porter

(1985) refers to strategy as creating linkages between business activities. As we earlier discussed, a company's value chain is a system of interdependent activities, which are connected by linkages in order to improve the overall value for the customer. The activities in the company's value chain should be tailored for the organisational strategy so that the company will obtain a competitive advantage (Porter, 1985). Strategy should also support the definition of relation with the subcontractors as the value system includes the supplier value chains, the organisation's value chain, and the value chains of the customers (Porter, 1985).

Cheng & Chiu (2008) advocate that process selection should have a significant impact on customer satisfaction, delight and financial performance. The process goals should be tied to business process objectives. Garvin (1995) strongly stresses that strategy should drive performance measurement. In this light the balanced scorecard developed by Kaplan & Norton (1996) provides a top-down approach for aligning performance measures. The approach starts with strategy (financial and customer goals), links that to processes and then people (learning and growth). The links between goals and measures in the different perspective ensure that strategy is successfully implemented.

Strategy supports selecting which parts of the business processes need to be automated, in which activities IT could have the most important value, and how the organisation structure should evolve, to what extent management system, values, should be improved to fit business processes.

4.2 Business Process

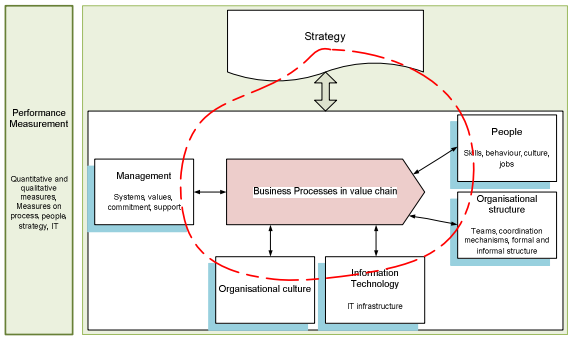

Figure 13 : Strategy and Business Process alignment model - business process focus

Business processes must reflect firm's strategy, in order to be effective. In our approach Processes are the crystal; they link together the others aspects of alignment, namely people, management, organisational culture, organisational structure, and Information Technology. Business Processes ensure that people are working together to meet company's goals (Garvin, 1995). The magic of processes, as we have already mentioned, is that they are reliable, repeatable, and in control (Garvin, 1995). They also provide requirement for an effective and efficient IT/IS.

In order to keep alignment with strategy, business processes should integrate many features. Many scholars advocate that well-defined processes should be customer-focused (Porter, 1985; Cheng & Chiu, 2008). Therefore process redesign must have a direct impact on customer value and cost (Cheng & Chiu, 2008). Process measurement is also an important aspect. Basically processes should have "measurement and feedback controls close the points at which the activities are performed" (Cheng & Chiu, 2008).

4.3 People

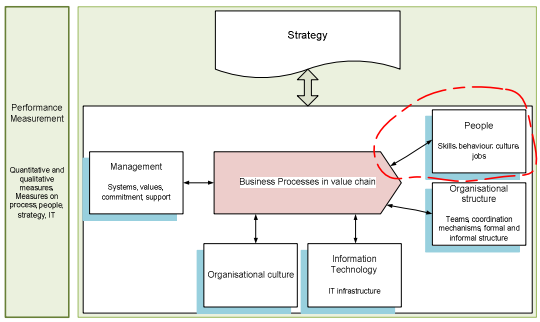

Figure 14: Strategy and Business Process alignment model - People focus

People or human factors are important in business processes, since they perform the activities in the processes. People have various assets that are needs in order to improve process efficiency and effectiveness. Those are knowledge, skills, jobs, behaviour, and culture. Moreover a successful process-oriented manager argues that people possess loyalty, commitment to customers and understanding of firm's culture. And those aspects are fundamental and valuable when an organisation shifts to new processes (Garvin, 1995). One successful manager argues "We want to keep our employees when we shift to new processes. They come with assets like loyalty, commitment to customers, and understanding of our culture and our mission" (Garvin, 1995).

The shift to new processes may infer job redefinition. Thus people may need re-skilling, training, etc (Garvin, 1995). In short people development is important for alignment. But people could be resistant to changes in the way they were used to work.

The focus on people leads to the notion of organisational learning and knowledge management (Armistead et al., 1999) since people are the primary agents in creation of knowledge. They have detailed knowledge and best experience of strengths and weaknesses of the current processes. People are the knowledge holders and knowledge management supports service strategy

4.4 Management commitment and support

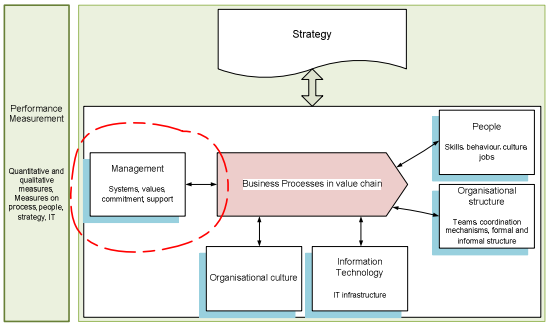

Figure 15: Strategy and Business Process alignment model – Management focus

Management support and commitment is the degree to which management at all organisational levels sponsor the business process project (Stelzer & Mellis, 1999). In fact the shift to a process orientation requires changes in the way the organisation is managed (Harrington, 1991). Kettinger & Teng (1998) argue that management systems, styles, values and measurements should support the improvement of process efficiency (minimizing the resource needed) and effectiveness (producing the desire results).

Effective business process implementation requires top management's support and commitment (Harrington, 1991). The management should strongly get involved in the business process project. Diaz & Sligo (1997) stress "senior management sponsorship proved critical to the success of the process improvement efforts. This means not only taking an active interest to the success of the process improvement initiatives, but also providing funding and time to do work, and rewarding those who contributed". They should lead and inspire the teams to leverage the resources available in the company. Top management should have strong leadership that will enable to diagnose and influence organisational culture (Kettinger & Grover, 1995), in order to break resistance and status quo.

Many scholars strongly advocate the need to create a balance between functional and cross-functional teams. Indeed, well-managed business processes have a process owner - someone who is held accountable for how well the processes perform (Harrington, 1991; Garvin, 1995). Process management requires more soft skills and communication skills (Garvin, 1995) than bureaucratic management.

4.5 Organisational Culture

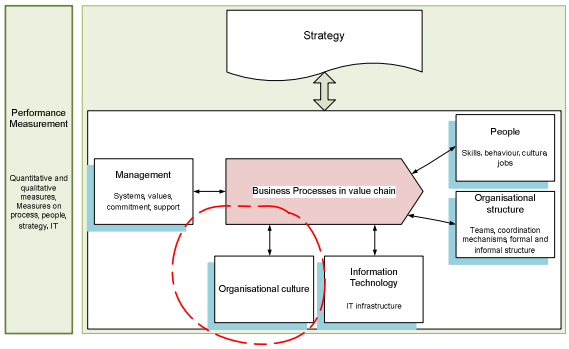

Figure 16: Strategy and Business Process alignment model - organisational culture focus

Shifting from a functional orientation to a process orientation is a difficult cultural change (Harrington, 1991). Culture includes both organisational culture and individual culture. Each company has a culture; a set of rules, values, that people share. Culture is a soft skill, difficult to change, implicit, in the head of people; it is sometimes not written in a company's manual. And since people are an important aspect for BPM success, the attention towards culture becomes critical. Armistead et al. (1999) provide some examples of organisational cultures: the "H-P Way" from Hewlett Packard or the "Plan Do" from British Telecom.

Garvin (1995) in a Roundtable with some managers, strongly states that "changes in the process implicitly change company's culture and behaviour patterns". For instance, by adopting a process-oriented organisation, Pepsi had to shift from an 'action-oriented' organisation with "take-the-hill, get-it-done, can-do" mentality, to another way of working. Of course, this alignment of processes with culture is tricky. Successful process oriented companies' managers argue that "changes in culture are what make the shift to processes so difficult. They can't be mandated; instead, they have to be formed over time through continual reinforcement" (Garvin, 1995).

To be successful in a long-term period, approach to BPM should fit the culture of organization. Both management and people performing the core business operations shall contribute to this aspect of alignment.

Culture brings barriers that can be broken by the use of networks of individuals which break rigidity of attitudes and behaviours (Armistead et al., 1999). Finally, the culture of experimentation is an essential part of a successful process-oriented organisation. Thus all participants should be prepared to cope with mistakes and errors during the process (Armistead et al., 1999).

4.6 IT/IS support

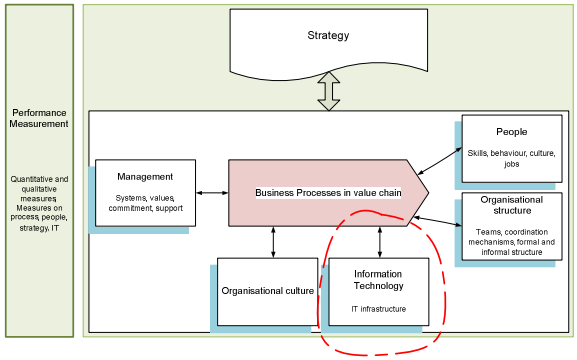

Figure 17: Strategy and Business Process alignment model - IT/IS focus

The information technology is pervading business processes, thus enabling process efficiency and effectiveness. The innovation in IT is that the new technology holds information, fastens communication, provides new ways on making business (Porter, 1985) and helps rethinking how and where processes intersect (Garvin, 1995). As such IT has a support function for business processes. IT is a crucial aspect in alignment between business processes and strategy because IT supports the execution of business operations. IT also provides alternatives in redesigning processes. Some of the most successful companies in implementing business process projects argue that "Technology also forced us to think about how and where our processes intersect. Alignment across businesses is critical for us because our goal is to exploit the efficiencies of centralized information management while we decentralize service delivery" (Garvin, 1995). The adoption of IT requires significant modifications to current business practices (Ices & Learmonth, 1984).

The role of IT in the alignment of strategy with business processes is discussed by Al-Mashari & Zairi (1999).

- **Alignment of IT infrastructure and BPR strategies**
  IT infrastructure strategy should be aligned business process strategy. To achieve that alignment, top management should act as a strategy formulator who provides commitment for the whole process redesign, while the IS manage should be responsible for designing and implementing the IS strategy (Henderson & Venkatraman, 1993). The strategy describes the role of IT in leveraging changes to the underlying business processes and infrastructures (Al-Mashari & Zairi, 1999).

- **Building effective IT infrastructure**
  A successful process implementation requires effective IT infrastructure. IT infrastructure is made of physical and intellectual assets, shared services and the linkages between the components (Al-Mashari & Zairi, 1999). "The IT infrastructure and business processes are interdependent in the way that

deciding the information requirements for the new business processes determines the IT infrastructure constituents, and a recognition of IT capabilities provides alternatives for business processes" (Al-Mashari & Zairi, 1999).

- **Adequate IT investment and sourcing decisions**
  Although IT supports processes, not all IT investments will provide a competitive advantage to the company. Thus IT investments must be selective and customer-oriented. In this light, McLaughlin et al. advocate that IT investments must be judged not simply by cost but also potential for "adding value" to the customers.
  A sourcing decision is about making the balance between internal and external sourcing -"*Make-or-Buy*" paradigm. The most effective sourcing strategy consists of insourcing the most-critical IT components while outsourcing common assets (Al-Mashari & Zairi, 1999).

- **Increasing IT function competency**
  Getting an effective IT function in the organisation has proven to be critical for business process initiatives. The IT function needs to be designed in a structure that focuses on quality, value creation and delivery. Most importantly, the organisation should develop an effective IT management architecture for BPM (Al-Mashari & Zairi, 1999).

- **Proper information system integration**
  Processes cross the organisational units. Thus data and information from information systems in different business units need to be integrated, and this is vital for BPM implementation (Al-Mashari & Zairi, 1999). IS integration for business processes can be defined as the "extent to which various information systems are formally linked for the purpose of sharing complete, consistent, accurate, and timely information among business processes".

4.7 Organisational structure

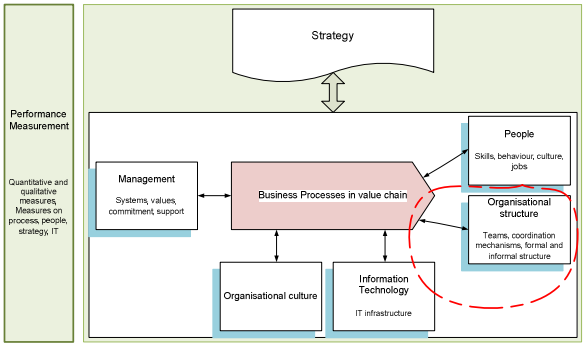

Figure 18: Strategy and Business Process alignment model - organisational structure focus

An organisational structure that provides mechanisms for accountability and ownership of strategy formulation is critical for successful alignment (Broadbent & Weil, 1993; Henderson & Venkatraman, 1993; Luftman, Papp & Brier, 1999). In addition, an adequate organisational structure stresses the need to revise teams, co-ordination mechanisms,

formal and informal structure that will support the improvement of processes (Kettinger & Teng, 1998). Indeed, Business Processes initiatives create new processes which define jobs and responsibilities across the existing organizational functions (Davenport & Short, 1990). Hence an organizational structure, which determines "how BPR teams are going to look, how human resources are integrated, and how the new jobs and responsibilities are going to be formalized" (Al-Mashari & Zairi, 1999) is needed to sustain the fit between strategy and process architecture.

A process-based organisation crosses the boundaries of functions or departments. Hence, job and labour integration (case worker) is the most appropriate approach of human resources design that supports the process-based organisational structure rather than a function-based one (Davenport & Nohria, 1994; Hammer, 1990). Furthermore, a formal and clear definition of jobs and responsibilities is required (Talwar, 1993) because BPM results in a major structural change in the way people work in the organization.

Cross-functional teams are critical component of successful alignment of Business Processes with strategy. They are critical for implementing Business Process Management project (Al-Mashari & Zairi, 1999) because linkages need to be kept among activities in several functions.

4.8 Continuous improvement through performance measurement

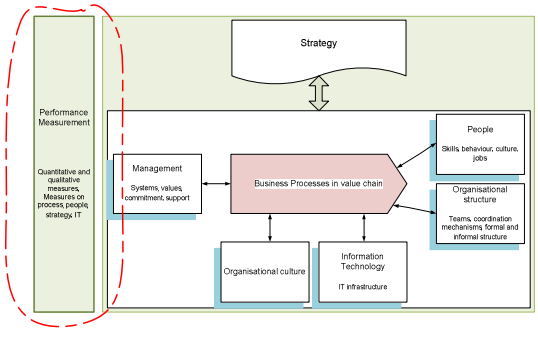

Figure 19: Strategy and Business Process alignment model - performance measurement focus

Henderson & Venkatraman (1993) argue that strategic alignment is dynamic and "not an event but a process of continuous adaptation and change". Indeed, internal and environmental factors can alter both strategy and processes. In this light alignment of business processes with strategy need to be maintained over time. And this is achieved and evaluated through continuous improvement. The best way to evaluate the success of alignment between strategy and business processes is by measuring performance at different levels of the organization, and for all alignment factors, namely strategy, processes, people, Information technology, management, etc.

Armistead et al. (1999) distinguish corporate measures level from operational or process measures level. They advocate that Strategy should drive performance measurement and management; corporate level target and measures should act to drive the subset of processes. The measures need to be linked to customer satisfaction and value with productivity, return on assets and stakeholder value. Besides, Kettinger & Teng (1998) divide performance measurement into qualitative and quantitative measures. They believe that both individual and team satisfaction measures should be

analysed as well as the communications flows between jobs, activities and sub-processes.

Several factors need to be considered in performance measurement. Indeed, new Business Processes must be measured for factors such as time, costs, productivity, quality and capital, then compared to the processes they replaced (Guha & Kettinger, 1993; Armistead et al., 1999). Furthermore, IT and information are important assets which ensure the creation of a competitive value to an organisation (Al-Mashari & Zairi, 1999). Thus, IT infrastructure effectiveness on business processes needs to be adequately measured. Most importantly performance measures should be tied to strategy. And the Balanced Scorecard is the best approach that aligns measures on process level to strategic goals (Norton & Kaplan, 1996). In that approach, strategic vision drives strategic goals on four dimensions, thus performance measures. In the BSC, strategic objectives are defined in four perspectives, which also serve as ground for performance measurement of long-term and short-terms objectives. Measures are linked in a cause-effect relation. The four perspectives are financial, customer, internal business processes and learning and growth. Thus the balanced scorecard measures performance for all alignment factors, namely strategy, processes, people, Information technology and management.

Finally, the measurement of processes efficiency may require improvement in the processes. Thus performance measurement is the ground for continuous improvement and quality improvement (Guha & Kettinger, 1993).

4.9 Closing remarks

This chapter has highlighted the importance and the links between business processes and strategy alignment factors. For aligning strategy and business processes, ones needs to address aspects in the areas of strategy, processes, people, management, IT, organisational culture, organisational structure, and performance measurement.

This framework is so far theoretically grounded. The next chapter will provide more insight of the alignment factors in practice. Our focus will be on small and Medium Enterprises located in Jönköping. The case studies conducted here are based upon the defined alignment aspects. We can assume that our big hypothesis is that all those aspects need to be addressed. And the empirical validation will aim at estimating what are the most important, are they all always addressed, and why are some of them more important than others.

5 Empirical findings

This chapter presents four case studies which provide the reader with a practical view of business processes and strategy alignment in SMEs. The units of analysis are from different industry, namely banking, service and other products. This chapter portrays for each case a general background which aims to present the company, its market and customers. Then the efforts in process improvement are described. The importance of business processes and business strategy is briefly discussed. And finally, the importance of alignment factors is argued.

5.1 ARKITEKTKOPIA AB

Interviewee: One of the owners of the business unit

5.1.1 Background

ARKITEKTKOPIA AB is a franchise of the group ARKITEKTKOPIA. The group was founded in 1951 and has its head office in Stockholm. 35 franchises exist in different Swedish counties, including Jönköping.

ARKITEKTKOPIA AB was created in 1989 by the two owners. The main customers were architects. The company was printing building drawings for its customer. The market has changed and is now richer. The customers span from public and private organisations to private persons. Those customers are Jönköping commune, Big companies like Elmia, Huksvana, Fares, Advertising companies, Schools, private persons, etc. Building drawings now represent 30% of the products, while coloured drawings represent 70%.

With the emergence of information technology, ARKITEKTKOPIA AB has widely introduced digital technology in its business processes around 10 to 15 years ago. Nowadays data is pervading the business in a way that it becomes impossible not to cope with it. The owner estimates data as participating in 98% of business activities. The digital technology is pervading the value chain from the suppliers to the customers. In this light, ARKITEKTKOPIA AB receives commands by emails; customers can also order from the company website. A Customer Relationship Management System helps to share information about the customers among the 35 franchises in Sweden. ARKITEKTKOPIA AB is intensively using phone application, SMS, emails marketing to reach new customer and advertise its services. As result of the use of the digital technology, ARKITEKTKOPIA AB has reduced its workforce, from 12 to 5 employees.

5.1.2 Business Process management Project in ARKITEKTKOPIA AB

Although it is not completely clear when a project aiming to manage business operations in a better way has been launched, we can notice that ARKITEKTKOPIA AB has been continuously using information technology to transform the way the activities are performed in the organisation. Managing business activities in a better

way is more an ongoing process than a static endeavour. Information technology is now very important to ARKITEKTKOPIA AB; there is almost no use of paper, manual routines are now obsolete. Meeting the customer needs is a credo for ARKITEKTKOPIA AB; the owner argues "We follow what the customer wants; we listen to our customers". The first central information system was launched in 1985, following the new behaviour of customers. It is very important to ARKITEKTKOPIA AB to keep the fit between strategy and business processes. By doing so they improved customer satisfaction, "customers can go one step further". It has been possible to exploit the market of coloured drawing because business processes work in a way that makes it easy to follow customer needs.

Alignment between strategy and business processes is reducing costs in ARKITEKTKOPIA AB. However the return on IT investment is not good. In fact the IT industry is innovating every day, technology is evolving too fast (facebook, iphone apps, etc.). The introduction of new IT solution breaks the life-cycle of previous technologies. Thus a solution becomes obsolete, although the return on the investment is not good enough. Profits have then not increased, because of recurrent investments. Besides, the turnover is higher but total costs are also growing.

The alignment of business process with strategy reduces the delivery time to customer. An order can be processed the day the customer sends the request, when before it could be done the day after. However, it makes customers hard to please. Young people for example order online and just call after to know if they can get the product the day after.

The quality is higher than before. Quality includes both quality of service and product quality. The printing quality has been improved with the use of good machinery. By speeding up the delivery time and continuously matching customer needs to business processes, it has resulted to a higher service level. Finally IT effectively supports business operations from order creation, through production and delivery to the customers.

5.1.3 Business process and Business Strategy

ARKITEKTKOPIA AB has well defined and documented business processes. It is important to note that for each order, a person is responsible for handling the whole process up to the delivery to the customer. By listening to the customer, ARKITEKTKOPIA AB finally adopted the process view. Since the organisation is very small, it is hard to completely talk of process orientation.

ARKITEKTKOPIA AB has a local strategy. The company defines a 5 year strategy that can be changed each year depending of the environment. For example, because of the 2008 financial crisis, some changes have been done on the strategy and the goals of the year. Strategy defines goals on customer and financial perspectives. Strategy serves as "guideline" and help ARKITEKTKOPIA AB in selecting and aligning business processes.

5.1.4 Alignment factors

In ARKITEKTKOPIA AB, the most important alignment factors are people, information technology and management. People are very important because people face the customer every day. They need to have good competence, and to know according to the organisational rules and practices. ARKITEKTKOPIA AB is successful in addressing human factors, mostly because the company is small. It is easy to share the information within a group of 5 people.

As we have already said IT is really important to the organisation. ARKITEKTKOPIA AB has an effective IT infrastructure that supports business operations. But at the scope of the local unit, addressing IT investment and sourcing decisions remains challenging. IT is then viewed as a source of costs, despite its undeniable importance in business processes.

In other to get efficiency and effectiveness in business processes, it is very important to share information among staff. Management mostly consists of explaining "why" and "how" things need to be done. Measuring performance in the customer perspective is crucial for ARKITEKTKOPIA AB. The quality of product is the most important criterion which is measured. One of the owners argues "quality is more important than quantity". Some customers are really demanding of the best quality while others do not make any differences between "dark grey" and "black" for example.

ARKITEKTKOPIA AB culture consists of "try and see what the customer say". The company really has a culture of experimentation. They are not afraid to try new things. They learn from internet about innovation in technology. For instance they have been to buy a new colour machine in Sweden. The culture is also in delivering the right product with the right quality and the right time.

5.2 Intersport Jönköping-AREA

Interviewee: Human Resource Manager

5.2.1 Background

Intersport Jönköping-AREA is an entrepreneurial company created in 1988, part of the group Intersport. Intersport has divided its business into three different parts which are private customers, clubs and companies. The business unit has seven stores with 80 employees, 2 in Jönköping, 2 in Linköping, 1 in Motala, 1 in Vimmerby, and 1 in Eksjö. The seven stores represent a turnover of 300 million SEK. The store in A6 centre, Jönköping, is the subject of our empirical investigation. We will call it Intersport Jönköping-A6.

Intersport Jönköping-A6 has 50 employees; it is the biggest store of the business unit. It was created in 1999. The owner is located in Jönköping. Intersport Jönköping-A6 has a local vision or strategy adapted to its market. However the Headquarter in Gothenburg provides the local store with marketing support. The information system

is not modern and the Headquarter has planned to launch a new one in October 2010. The human resource manager is part of the leading group and completely involved in strategy formulation.

5.2.2 Business Process management Project in Intersport Jönköping-AREA

Although the information system is quite old and not integrated to all business activities, IT is very important to the organisation. By integrating a completely new system, the attention is to higher efficiency and effectiveness in business operations.

Intersport Jönköping-AREA had one store at its creation. The organisation was mostly focused on warehouse functions and the sales were not highlighted. While growing the need to create a balance in the organisational structure and highlight the role of sales personnel appeared. Thus, around 2004, a flat organisation structure was adopted. The rationale was to get an organisation in which the support roles serve the sales roles and then the customer. The customer should be more than satisfied; they should experience a "Waouh feeling" when they leave to the store. The ambition is for the customer to have a positive experience, with both counselling and sales. The challenge is now to keep a horizontal structure wile coping with flexibility, speed, closeness to customers. Intersport Jönköping-AREA is a local owned company, thus the knowledge of the market, the capability to ensure flexibility and the closeness to the customer are aspects that provide a competitive advantage. The shift to a horizontal structure, has also affected the management system. From 2009, two groups, namely the leading group and the operating group, have been created to discuss and evaluate both strategy and business performance.

It is very important to Intersport Jönköping-AREA to sustain a fit between strategy and business processes because it ensures a first class service quality to the customer. The customer orientation is a key concept and Intersport Jönköping-AREA usually gets feedback about what customers think of the service. Some professionals also evaluate the quality of service via "mystery shopping".

The alignment between business process and strategy is a goal that has not been completely achieved by the unit. With a customer focus, Intersport Jönköping-AREA has improved customer orientation, increased profits, reduced the delivery time of products and improved the quality of service. However a reduction in total costs has not been achieved. IT investment and support are not improved. In fact investing in a modern enterprise system is quite expensive for the business unit. In addition, the group is working on a project to acquire an integrated information system. Finally the big hint in alignment is the lack of good information system to support all business activities.

5.2.3 Business process and Business Strategy

Intersport Jönköping-AREA lacks formalised strategic process, especially in the leading group. Documentation about the link and support among roles in organisation

is defined, but processes are not kept up to date. No theoretical approach is used to analyse the processes; analysis is performed using "common sense".

Intersport Jönköping-AREA has a formulated business strategy that is customer focused. Strategy has the basis for changes in business operations and the organisational structure. Strategy is also customer-focused. The vision is "to be the markets best store, both for customers and employees".

One of the recurrent problems in family owned business is the strategic focus. Long term strategy is hardly formulated and sometimes "decisions fall between chairs". The organisation is successful at the operational level but there is a need for rigour and direction at the strategic level.

5.2.4 Alignment factors

Regarding the factors that are important to create alignment between processes and strategy, the human resource manager thinks the most important are people, management, information technology and organisational culture. Performance measurement and organisational structure are less important.

Human factor are very important because they get the job done; involvement and communication between employees is crucial. People, here sales personnel, are the one facing the customers, they then need to have knowledge of the organisation itself. They may deliver the best service and most importantly keep trust. That is what provides a competitive advantage. It is difficult to be completely successful in addressing human factors because "people are not programmable". Therefore it is a continuous work to satisfy people and customers.

Information technology is important because it helps to get better quality in customer service. IT is accurate, thus provides accurate statistics and ease administrative operations. IT may also help to direct costs in a better way. In fact, as the actual information system is not modern, accounting and sales administration are performed manually. There is a huge amount of time lost. Intersport Jönköping-AREA is not successful in addressing IT aspects mainly because it requires headquarters' decision and approval.

Performance measurement is almost not a reality. Intersport Jönköping-AREA lacks IT support and channels to measure performance on people and processes. There are no structured measures although they are important. There are team measures, a sales personnel is not evaluated upon his sales rate. What is most important is the team performance.

Intersport Jönköping-AREA is a small structure. Communication between management and operational levels is then easy. Management commitment motivates and encourages people in their day-to-day activities. This comes to be a critical success factor of the efficiency and effectiveness in business processes. Management struggles to keep values in the reality through meeting and interpersonal communication.

Organisational structure facilitates the improvement in business processes. In the pursuit of their goal to be more customer-driven, Intersport Jönköping-AREA has created a new job "Visual Marchandiser" whose role is to be the interface between the Human Resources support and the sales personnel.

5.3 Handelsbanken Jönköping

Interviewee: Private business Manager

5.3.1 Background

Handelsbanken is an international group founded in 1871, and its first branch office in the Swedish industry was established in 1874 especially in the finance field. The primary goal of the group is to "have better yield on its own capital". Besides, Handelsbanken works to achieve higher profitability than the average of its competitors. And therefore, the group focus on continuously improving customers' satisfaction and lowering costs. Handelsbanken has had higher profitability than its competitors over the past 38 years.

Handelsbanken has a decentralised organisation. There is a head office at the top; each region has a regional bank; and finally there around 600 offices all over Sweden. The head office and regional banks do not have any direct relation with the customers. The bank office strongly focuses on corporate policy, culture and an effective financial system. Each bank office is responsible for its own capital, profits and customers. And it means the individual products are never in the pin of Handelsbanken. Handelsbanken Jönköping is the office that is the subject of our work.

5.3.2 Business Process management Project in Handelsbanken Jönköping

The banking industry is an information dependent system. Information flow is vital for bank survival. Therefore Information technology is very important to Handelsbanken Jönköping. In fact IT provides the bank with easier means to serve the customer, enables statistics, etc. Since Handelsbanken Jönköping has a low costs strategy, the efficiency and effectiveness in business processes are very important. Thus they have lower loan loss ratio than their competitors. The overall strategy of the organization, especially in the finance industry, is to always be one step further than its rivals.

In the pursuit of their low costs strategy and in order to gain efficiency in the business operations, Handelsbanken has launched a dematerialization project 3 years ago. Basically the idea is avoid the use of paper in financing operations. The analysis performed by the bank shows that the use of electronic files to send and share information will make the system less complex. The manager we have interview is part of the project that is launched on a national scale.

Aligning business processes with strategy is very important to Handelsbanken Jönköping and is also a state that the bank struggle to reach through continuous improvement of both business processes and the supporting IT infrastructure. This alignment process has provides Handelsbanken Jönköping with all BPM advantages. Handelsbanken Jönköping has improved customers' satisfaction, reduced costs. IT investment and support roles are highlighted. IT accuracy and speed in information processing enhances service quality and profits.

5.3.3 Business process and Business Strategy

It is crucial for a bank to structure and formalise working procedures. Thus Handelsbanken Jönköping follows rules established by the head office, which are both internal and external. Structures and financing schemes for examples are built at the national level (head office). At the local scale, no theoretical approach is used to analyse business processes.

Handelsbanken Jönköping has a well formulated strategy, as discussed earlier. The office has not voted a budget for 40 years now. Nevertheless a business plan is created every year in the scope of the office. And based on the local business plan, every employee builds its individual business plan with profits and income goals.

5.3.4 Alignment factors

Based on our interview and the aspects, which are needed to address the alignment, Handelsbanken Jönköping founds the role of people, IT, performance measurement and organizational culture as most important factors. Organizational structure and management factors are neutral.

In the context of process improvement, people are very important to Handelsbanken Jönköping, especially aspects like communication and involvement. But it takes time to communicate and get people involvement. Thus Handelsbanken Jönköping is successful because of the values that are shared among employees. In fact Handelsbanken Jönköping has developed a group vision. What matters most is not the performance of one individual, rather the group performance. To illustrate that characteristic, no individual reward system is used in the organisation. The other culture feature is the willing to have a close and trustful relation with the customer. The private manager says: "we do not try to sell the highest costly product to the customer; we sell a product that is more suitable for them". With that trust Handelsbanken Jönköping secures the loyalty of its customers.

Handelsbanken Jönköping is a very small business unit with 50 employees. Thus Managers are supportive to the employees and communicate informally. The high management commitment in day-to-day activities is seen as a success factor for process effectiveness.

The use of information technology facilitates the execution of business operations. But to be successful in addressing IT factors, Handelsbanken Jönköping always seeks to get employees involved in both requirements analysis and implementation of new

IT solutions. Handelsbanken makes use of a "software as a service" strategy for IT investments. The head office invests in a new IT system for all the offices. The head office then charges each office according to the numbers of employees using the distributed system.

The changes in business processes and information system usually require people training and education. Handelsbanken Jönköping invests in developing employees' competences. Handelsbanken Jönköping has a management team of 4 managers, each one responsible of one market segment. Teams are also cross functional.

5.4 FLINTAB AB

Interviewee: CEO

5.4.1 Background

Flintab AB is a company established in 1981 after management from Lindells & Stathmos had quit. The company is now owned by the employees, who become associates after a qualification process. Flintab AB is specialized in weighing systems for industrial applications. The applications are for food, logistic, luggage handling, checking, traffic enforcement, chemical product, etc.

One important feature in Flintab AB is they have internal core competences in Information Engineering. This means they are able to develop and maintain business applications. It becomes less costly to Flintab AB to improve their IT/IS but the employees tend to forget the costs, profits and internal revenues.

5.4.2 Business Process management Project in Flintab AB

It is almost impossible to dissociate the history of business process projects and the evolution of the use of IT in the company. Thanks to its strong niche competences in engineering, Flintab AB has been a precursor in the use of information technology. IT is a support asset that enables business processes; for instance an engineer can receive an order on his handheld computer and handle it quickly. The order is automatically sent from the ERP to the engineer's PDA with all information required to handle (duration, resources, problem description, etc.). IT is very mature and integrated, workforce, product development, financial are all integrated in the same system.

For a long time product development has been customer-driven (company as an organisation), but now it is becoming user-driven (individual user of the product) because the users have more knowledge about the requirements of the product. Achieving efficiency and effectiveness in business processes is an ongoing project in Flintab AB. The company is continuously working to improve business performance. But the market is quite immature; this could be restrictive in the future.

Flintab AB has launched several projects to maintain its position of leader of the market. The goal has mostly been to achieve higher performance in the business operations, to reduce costs, to leverage the user of technology in support of the

transportation system, the reporting system, the development and the sales systems. One of the current projects is to launch a web-based reporting system for aftermarket services. Flintab AB ensure guarantee for its products if they are damaged. The idea is to gather data and be able to characterize the most recurrent damages for example. This will be possible with the participation of the customers. Guarantee costs may be reduced for Flintab and its customers since they will not pay a break warrantee if the product is almost not likely to be broken. Flintab AB has launched a project to optimize transport in the transportation industry. They will be able to keep owner profile, to evaluate easily and to improve their knowledge in the domain.

An Enterprise system has been acquired by the company in 2001, to support and manage in a better the business operations. The system efficiently supports production and planning. But it lacks customer relation management aspect. Thus the idea is to add that functionality in the system by buying the service since only 10 persons in the company will be using the system.

It is very important to Flintab AB to maintain an alignment between business processes and strategy. This mostly achieved by the integration of all business applications into the same system. For example, the quality system is integrated into the ERP system. The guarantee costs management system will be integrated as well. There is a strong focus in converging all the business applications and the CRM system. Sales and development processes are integrated and the processes are quite cross-functional.

The alignment of business processes with strategy and is an ongoing process in Flintab, especially process performance improvement. Thus some benefits of alignment are not yet achieved. By from our interview Flintab has improved customer satisfaction, increased profits by 113% in Helpdesk for example. The quality of service has been enhanced with a better response time (PDA), introduction of scan, the FIFO system in warehouse management. The alignment has proven to increase the return on IT investment. However this result is not most accountable to the decision making process in the organisation. Because employees own the company, any IT investment must be support by the ROI expected. Thus an investment which addresses an effective problem is approved by the employees. Finally the alignment has improved the use of IT in support of business processes. Thus further development will be to introduce a CRM system and provide a SAAS capability to the customers. On the other hand the reduction of total costs is not yet achieved and is planned as a future target. Besides, the reduction of time to market, here the best aftermarket service, will be achieved later on with the use of CRM.

5.4.3 Business process and Business Strategy

Basically Flintab AB trees major activities, production, after sales or maintenance, and scales verification. The production process includes all activities from requirement specification to sales. Flintab AB has well defined and documented business processes. Flintab is providing high technological solutions to its customers and is accredited by the government for periodical verification of scales. Thus each activity performed in the process needs to be documented in terms of report, but the

way of performing the activity as well. That documentation is integrated in the Enterprise system.

So far no approach is used for analysing business processes. But the CEO intends to apply BSC later on as a tool for strategic management. The rationale is BSC is simple and can be modify with a high frequency. The tool is also flexible and may be used to align different activities in the organisation. The organisation has never been silo oriented. Thanks to its small size and the high staff competence, team work has also been across development, sales or service.

Business strategy is well formulated in Flintab. Each year a business plan is created to guide the organisational activities and specify business goals. With regard to the business plan, improvements on business processes are done (example in the BPM project section). Strategy provides Flintab with the goals and requirements for process improvement.

5.4.4 Alignment factors

People or "human factors" is the most important and tricky alignment aspect in Flintab. As already mentioned employees own the company; any decision need to be approved by them. People are sometimes unwilling to change because the culture has always been "*if you do a good job, no one says you anything*". People were used to stick to what they think is the best way of doing. Thus they become resistant to change; the actual turnaround (around 38% in years) will be an opportunity to introduce some changes with new people.

Information technology is not an aspect to address in the future for sustaining alignment between business processes and strategy, because Flintab "*already have what they need*" to perform business activities in an efficient way. Thus that aspect is neutral. However BPM projects histories have proven that IT has been an enabler in the company. Flintab is successful in addressing IT factors. Sourcing decisions are strategy-driven; the use of SAAS model for CRM. IT competency has been increased with the introduction of ERP system, for example.

Performance measurement is important in order to detect the parts of the processes that need to be speed up for example. They should be connected to management and help to improve customer service, strategy (the guarantee strategy), and profits. The most important performance measure is the financial measure.

Management is important to Flintab, especially sponsorship. To get things done, it is important to communicate with people. Management sponsorship is a warrantee of success in changes.

Organisational structure is not important because the company is small. In fact the organisation has always had a cross-functional structure. Besides, everyone can do anything in the company. The inconvenient is that it requires more efforts on sponsorship and commitment from the management. There is a need to make a balance between employees' expectations and their competences. Some strategic

choices need to be made sometimes, “a person with less experience in a domain could be assigned to a task when a more competent person is available”.

It is important to pay attention to organisational culture, as described in the people factor. To deal with the cultural aspect, it is important to show to people that they can do better. For instance with several measures in transportation, stock management (FIFO), purchasing (avoidance of bargain), procurement (assessment of real value), Flintab has made around 1 million SEK economy. That is a victory that encourages people to accept experimenting new things.

5.5 Closing remarks

This chapter has described business process management projects in four companies, namely ARKITEKTKOPIA AB, Intersport Jönköping-AREA, Handelsbanken Jönköping and Flintab AB. A brief overview of the status of business processes as well as strategy has been presented. Finally the most important alignment factors have been discussed.

Based on the four case studies and the theoretical approach developed in chapter 4, the next chapter analyses and discusses key points in business processes and strategy alignment in SMEs.

6 Discussion and analysis

In this chapter, we discuss and analyze the factors in the approach developed in chapter 4. We first discuss how SMEs manage to keep fit between business process and strategy over time. Then we present the most important as well as the less important alignment factors.

6.1 The nature of business process and strategy alignment in SMEs

The alignment of business processes with strategy refers to the extent to which business processes are supporting the organisation strategy. Venkatraman (1993) argues that "alignment of business and IT is a process and not an event". Similarly, in the four case studies previously presented, it appears that process and strategy alignment is not a one-time endeavour; it is rather a process of continuous and incremental match of the execution of day-to-day activities to strategy. For instance, Flintab AB is continuously improving its transportation system, the sales system with the introduction of a CRM tool and the procurement process with a real assessment of storage value. Handelsbanken Jönköping, despite its integrated system and an execution of business processes that serve business strategy, has launched a project to speed up the financial operations and achieve higher performance. Intersport Jönköping-AREA is introducing new features in the management process to provide the best service to the customers.

There is rarely a process improvement project targeting all activities in the value chain. Most of BPM initiatives focus on one part of the business processes, there is no radical change as advocated tough. As described in the "business process management project" of each case, SMEs undertake small project and they continuously improved their way of working. The efficiency in sales is, for example, the focus of the ongoing project in Flintab. Handelsbanken Jönköping improves the efficiency in the financing function only.

The alignment of business processes with strategy is sometimes technology-driven. IT opportunities enforce managers to rethink the way they operate and their relations to their customers. For example ARKITEKTKOPIA continuously introduces new technologic channels, like iphone applications and facebook applications, to market their products. The introduction of those new channels alters some parts of business processes since there is a need for technology integration and organisational integration through reorganisation of business processes. Handelsbanken Jönköping, by digitalising financing operations, is as well improving its business processes. Thus the technology potential perspective in SAM is in practice guiding processes and strategy alignment.

Figure 20 : IT in strategy and business processes alignment

6.2 The importance of aligning business processes with business strategy in SMEs

So far companies believe in the fit between their process and strategy. They believe that to have better profits they should care about linkage between processes and strategy. It is very important to SMEs to align business processes with strategy because "the whole value chain should work in the same way" (ARKITEKTKOPIA AB). Besides, aligning business processes with strategy helps Flintab AB to integrate activities and most importantly integrate the whole information system. Business processes support guarantee cost strategy in Flintab AB. Furthermore, SMEs think aligning business processes with strategy improves customer satisfaction, higher product quality with a better response time in Flintab and delivery time in ARKITEKTKOPIA AB. It also increases profits in overall.

However, alignment benefits are not always the same in each company, but the main alignment enabler is an effective information system. Most companies claim having a change in their processes is essential to integrate their old information system to modern one thorough enterprise systems as SAP, SOP, ERP and CRM. It is interesting to know that companies detect their main shortage on the implementing of CRM, since it is costly and time consuming.

6.2.1 Business Process in SMEs

SMEs care about their processes, but as they state (ARKITEPKOPIA, Intersport Jönköping-Erea) their activities and their plans are always in their mind. They don't have tough challenges in writing or documenting since they well know how they should organize, measure, and perform their processes.

SMEs usually have a process-oriented structure (ARKITEPKOPIA, Intersport Jönköping-Erea, Flintab AB). Functions are not clustered and the execution of business operations is performed with a strong focus on team work. Business processes are well-defined and up-to-date. But sometimes they lack formalization because coordination is simple in SMEs.

As earlier mentioned process improvement is performed on small scale processes within a function rather than large processes (from supplier to customers). However SMEs do not use theoretical approaches like Capability Maturity Model (CMM), balanced scorecard or six sigma for analysing and improving their business processes. Generally they prefer using heuristics based on their experience.

6.2.2 Business Strategy in alignment

SMEs agree upon having well defined business strategy, but "decisions sometimes fall between chairs". Strategy is the support for performance measurement, unless those measures are mostly on financial and customer (customer satisfaction) perspectives. In SMEs, strategy helps in selecting and aligning business processes. It is as well the basis for process improvement as described in the cases. For example,

Flintab AB has improved his purchasing process because of an operational cost reduction strategy.

Moreover the companies believe in, selecting the best vision and process is going to improve their quality and it has direct relation with customer satisfaction in Flintab AB.

6.3 The most important alignment factors in SMEs

From the four case studies, it has been shown that the most important alignment factors are People, IT, Culture and Management. This section analyses each of these factors against the theoretical framework.

6.3.1 Human Factor

We have argued in our theoretical approach that people are important for process effectiveness because they perform business activities. They come with assets such as jobs, skills, knowledge, behaviour, and culture which are needed to improve process efficiency. Moreover, Garvin (1995) argues that people have assets like loyalty, commitment to customers, and understanding of organisational culture and mission.

In all SMEs investigated, people are very important as well. They come to be the most important alignment factor. For instance, in the Flintab company, human factor are the most important because Flintab's employee own the company and all the decision should approved by them. In the Handelsbanken Jönköping, people are also highlighted as most important because they usually have the best knowledge about how things are done in the local office. People in the Intersport are responsible to deliver the best service to the customer. Intersport needs to train its employees in order for them to get better knowledge of the organization. Actually, with the shift to a new process-oriented organization, there was a need to re-skill and train staff. In ARKITEKTKOPIA people also are in the first level of importance, because they are facing the customer every day.

SMEs have a small workforce (McGregor, 2004). Thus there is no strong hierarchical view; managers and operational employees communicate informally and easily. In ARKITEKTKOPIA AB as well as Handelsbanken, with the changes in business processes, people need to be educated so that they know what and how to do things (ARKITEKTKOPIA AB). Communication about company's goals, "why" and "how" things need to be done in another way, is crucial in all SMEs investigated in order to get people involvement.

Despite good communication, it is still tricky to deal with people's job and behaviour. In fact the Human Resources Manager in Intersport Jönköping-EREA argues that "*People are not programmable*". Thus brainstorming process improvement alternatives helps to get global agreement and then avoid resistance. In Flintab AB, introducing new people help changes to become a reality. The CEO advocates mixing between new people integrating the organization and old people. However, this is a

circumstance rather than a choice since there will be a substantial turnaround of 38% in 3 years.

6.3.2 Information technology

We have argued in the theoretical approach that IT pervades business processes, thus enables process efficiency and effectiveness. Technology provides means to redesign business processes (Garvin, 1995). Al-Mashari & Zairi (1999) have depicted some aspects to address in order to leverage IT for proper strategy and process alignment. Those are aligning IT infrastructure and BPR strategy, building an effective IT infrastructure, defining IT investment and sourcing decisions, increasing IT competency, and getting proper information system integration.

In our study, IT is a process enabler. IT supports the execution of business operations; thus it is located at the highest level of importance in the organization in order to align process with strategy. Moreover different companies have different role of IT/IS in their organization. For instance in Handelsbanken office, the role of IT is to facilitate the execution of business operations. In Intersport, IT is important as well but the role of IT is to improve the quality service. In ARKITEKTKOPIA AB, IT supports business operations, with the use of new machines (copy machine, printing machine), the use of digital technology (emails) to communicate with customers.

SMEs seek for proper system integration. Flintab AB has customized its enterprise system (ERP) by integrating its quality system. The company also intends to integrate the customer relationship management system into the whole enterprise systems. The CEO strongly believes that IS integration is a key for operational effectiveness and service level (quality of service and product quality) improvement.

Sourcing decisions are strategy-driven in Flintab AB; a SAAS model will be used for CRM because few people are concerned with the new feature. Handelsbanken makes use of a “software as a service” strategy for IT investments as well. The head office invests in a new IT system for all the offices. The head office then charges each office according to the numbers of employees using the distributed system.

Addressing IT competency is rare in SMEs because of their low budget; Intersport Jönköping-AREA for example illustrates this. In fact SMEs usually have an operational structure and no internal IT department. However, Flintab AB has that internal competency and IT competency has been increased with the introduction of ERP system.

All SMEs are not successful in addressing IT factors. For instance, Intersport Jönköping-AREA is not successful in addressing IT aspects mainly because it requires headquarters’ decision and approval. Addressing IT investment and sourcing decisions is challenging to ARKITEKTKOPIA AB because technology is evolving so fast. Some technologies become obsolete so quickly that it increases IT costs. IT is then viewed as a source of costs despite its undeniable importance in business processes. Finally, to be successful in addressing IT factors, SMEs seeks to get employees involved in both requirements analysis and implementation of new IT solutions (Handelsbanken Jönköping).

6.3.3 Organizational Culture

The current literature posits than changes in processes implicitly alter company's culture and behavioural patterns (Garvin, 1995). But the implicit and tacit nature of culture makes it difficult to cope with. Therefore culture may hinder efforts for aligning business processes with strategy. To overcome cultural barriers scholars argue that approaches to BPM should fit as much as possible the organisational culture.

SMEs understand the importance of culture in different ways but with the same meaning. Although values are hardly written down, they exist in the head of people. In ARKITEKTKOPIA the credo is "try and see what the customer says". This way of doing things could be assimilated to a culture of experimentation. Thus it makes it easy to adopt changes in processes and technology. In the Handelsbanken office, culture has an undeniable role. They always seek to improve their relation with customers and make them close to the organization.

In Flintab AB, the culture has always been "if you do a good job, no one bothers you". Therefore, in order to make people accept changes, the CEO thinks it is powerful to achieve small successful results. This is an excellent way to deal with cultural barriers.

Culture is also a facilitator in process and strategy alignment. Intersport Jönköping-AREA has developed a clear organisational culture with keys words like *teamwork, passion and respect*. Employees have voted the values they think are the most important to share and support the new process-orientation. This emphasis on "*team orientation*" enables collaboration. However the challenge remains to stay offensive and creative since each improvement is in the pin of the group.

Finally, culture is not only important when companies shift from functional orientation to a process orientation, but it is a weapon to keep process working in a good way. Team orientation facilitates the execution of business activities in SMEs (Handelsbanken Jönköping, Intersport Jönköping-AREA).

6.3.4 Management

Scholars advocate that management support and commitment is important for successful alignment of business processes to strategy (Harrington, 1991). Process management also requires soft skills and communication skills (Garvin, 1995).

Our cases show that management is as also important for successful alignment. SMEs highly value soft skills, thus we can claim that they are "soft companies". They tend not to be bureaucratic, since management and operational employees communicate informally. For example the ARKITEKTKOPIA Company believes in a management that consists of describing why and how internal people should do their tasks. In the Intersport, managers motivate people in their activities so that they can work better. Also managers communicate with operational staff during meetings and through interpersonal communication. In the Handelsbanken also, management commitment is

a success factor for process effectiveness. In some organizations like Flintab AB sponsorship is the most important management aspect to get things done.

6.4 The factors with less importance in SMEs

6.4.1 Organizational structure

Scholars advocate that structure is critical for successful alignment because of accountability and ownership of strategy (Henderson, 1993). By the literature review, we determine structure is answering, "How BPR teams are going to look, how human resources are integrated and how the new jobs and responsibilities are going to be formalized" (Al-Mashari, 1999).

But based on our study, Structure is not as much important as literature focuses on. Of course this is one factor that is essential to aligning process with strategy. But given the size of organization and their processes it is different from companies to companies. For example, in the Flintab AB, Intersport Jönköping-AREA and ARKITEKTKOPIA AB, the structure is not important at all. The rationale is that company size is too small. In Handelsbanken the importance of structure is kind of neutral because they are also in the area of SMEs. Therefore in the SMEs, there is not need to formally integrate the job and labour to supports the process-based organizational structure.

6.4.2 Performance measurement

Performance measurement is the way to measure financial, people, customers and processes objectives. And all size of companies should always think about their finance since they should measure the amount of low and high profit they have earned. Scholars posit that the best way to evaluate the success of alignment between strategy and business process is done by performance measurement at different level of organizations. They claim that business process must be measured for different factors like cost, quality, time, productivity and capital.

The empirical assessment shows that performance measurement is not used for process improvement as mentioned in the literature. To tie and align measures with strategy, the Balance Scorecard is the best approach, but in the empirical study companies do not state much on the Balance Scorecard method as scholars advocate. Only Flintab AB values the use of BSC because it is simple to update and it can be modified with high frequency. It also helps to align different activities in the organization.

Other companies like Handelsbanken, ARKITEKTKOPIA find the importance of performance measurement in the high level. For example, ARKITEKTKOPIA sees the importance of performance measurement in the quality side of product. Still there is a company which claims that performance measurement is not as important as scholars claimed; Intersport Jönköping-AREA states that measures on processes is almost not a reality. Finally, based on empirical study the performance measurement is not a lever for process improvement.

7 Conclusion and recommendations

This chapter portrays a summary of the results found during this thesis work. Then generalizability and limitations of the results are discussed. Finally some recommendations for further research are given.

7.1 Summary of the results

Strategic alignment is mainly discussed between business and Information technology. However current research has increasingly argued the importance of business processes in alignment. The idea is business processes are the bridge to adequately create a fit between IT and strategy. This has motivated us to investigate the alignment of business processes with strategy. In addition, there is no agreement on how to address strategy and process alignment. Thus many business processes management projects have resulted into failure. Finally some studies have investigated the success factors of process and strategy alignment in large companies, but there is little research about the alignment factors in SMEs.

The aim of this study was to come up with the factors practitioners and researchers in the field of Business Process Management (BPM) should pay attention to while aligning business processes with business strategy in SMEs. In order to achieve that aim, the first objective of this study has been first to build an approach based on the current literature on business and IT alignment, as well as business processes management. In addition further objective was to investigate in SMEs the validity and importance of the alignment factors. Thus the following research questions have been formulated:

1. Why should organisations align business processes and strategy?
2. What are the critical success factors and challenges in BPM, BPI, BPR, Business and IT alignment?
3. What aspects should (or need to) be addressed to create alignment between business process and business strategy?

These research questions have shaped the study from literature review to empirical study and analysis. In this light the following results have been achieved.

7.1.1 The approach for aligning strategy with business process

Business processes management initiatives must be strategy-driven. They also lead to a rethinking of the way companies operate both internally and externally. Business processes should be designed in a way that creates values among the entire value chain, from suppliers to customers. Thus our approach suggests that companies need to address the following in order to create alignment between strategy and business processes: Strategy as the basis, Business process as the crystal that connect together all alignment factors, People or human factors, Management support and commitment, Organizational structure, Organizational culture, an effective Information Technology, and Performance measurement.

7.1.2 Business processes and strategy alignment factors in SMEs

One of the difficulties in analyzing case studies is there is no mature method in the literature. Analysis mostly requires thinking and categorizing. Thus during this thesis we have put efforts to link our analysis to the theoretical approach, we have tried to map the alignment factors in the theoretical approach with the findings of the case studies. Our final results can be summarized as follows.

The alignment of business processes with strategy is very important to SMEs because it improves customer satisfaction, enhances product quality with a better response time or delivery time. It also increases profits in overall. Rather than an event, strategic alignment is a continuous process of adapting business strategy with the improvement in business processes. Therefore the idea of radical change is not a reality.

In order to sustain alignment between business processes and strategy, SMEs give importance to factors such as IT, people, culture and management. In fact business processes are effectively supported by a good information system, which facilitates the information flow, enables process automation, increase process efficiency. Thus IT has a vital role in sustaining business processes and strategy alignment.

Besides, people are very important because they make processes work. Culture is a generally a barrier that can be broken through successful improvement. But it can also be a facilitator to make people work as a team. And Management enables processes by a good communication, especially informal communication.

On contrary, because of their small number of employees, SMEs do not give importance to organisational structure. And performance measurement is not an important alignment factor to SMEs as well. However measures are done on financial and customer perspectives.

7.2 Generalization

As earlier mentioned, scholars have analyzed BPM initiatives in large companies. This thesis contributes to the current research in strategic alignment by investigating the success factors in SMEs. Because various industries are subjects of the research, the usability of the research to other SMEs is widened. Nevertheless, this heterogeneity is also a limitation because the criticality of information flow in the banking industry affects process maturity, when a retailing company can survive without well defined processes. Thus the importance of alignment may be different in those industries.

As discussed in the method chapter, the method used (multiple case studies) is powerful to draw generalization, by replication. The results of this research can be then analytically generalized to SMEs located in Jönköping. However, using interview as a strategy for case study evidence collection has limited the analysis. It has been impossible to gather in-depth evidence on “how” and “why” some alignment factors are more important. Thus without an in-depth study more investigation is necessary.

7.3 Limitations

This work has been performed in collaboration with SMEs randomly selected in Jönköping. The interview has been done in retrospect of companies' involvement in project to manage their business activities in a better way. The topic of strategy and business processes alignment is not well known in companies. Thus it has been difficult to translate the theoretical view to a more pragmatic view.

Each interview lasted 1h since managers are generally busy. Because of that time limitation, an in-depth description as well as analysis of the cases has not be possible to achieve. Basically, it has not been possible to gather enough motivations on "How" or "Why" some aspects of the framework are more important.

7.4 Recommendations for further studies

This study has mainly investigated the importance of alignment factors in SMEs. Within the limited time in companies, it was not possible to examine the relations between alignment factors. A further research could be performed on that matter.

This study focuses only SMEs; it will be interesting in further research to investigate the differences on the importance of alignment factors between large companies and SMEs.

This research has validated some business processes and strategy alignment factors and their importance. However the interrelations between success factors and their individual impact to successful alignment of business processes with strategy could be issued in further research.

Case evidence has been collected through focused-based interviews in order to validate alignment factors. It will be interesting in further studies to analyse the alignment factors by means of other data collection strategies: open interview, documents, archive records, direct observation, participant-observation, and physical artifacts.

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9 Appendix

9.1 Appendix 1: Questionnaire design

9.1.1 The method

A first draft of the questionnaire was developed by one of the authors. To achieve it, techniques to develop questionnaire were reviewed from books, research papers, articles and websites. Some questionnaire samples in the domain of business and IT alignment were also used to guide and support the choices in the structure of the questionnaire.

Then a common review of the two authors was performed. That review has led to a second version of the questionnaire. The current version was sent to our supervisor without a clear description of the framework. The interest here was first to get academic feedback on the content, the formulation of the questions and the structure of the questionnaire. It appeared that having the questionnaire without a clear definition of the framework was a kind of “blind test”.

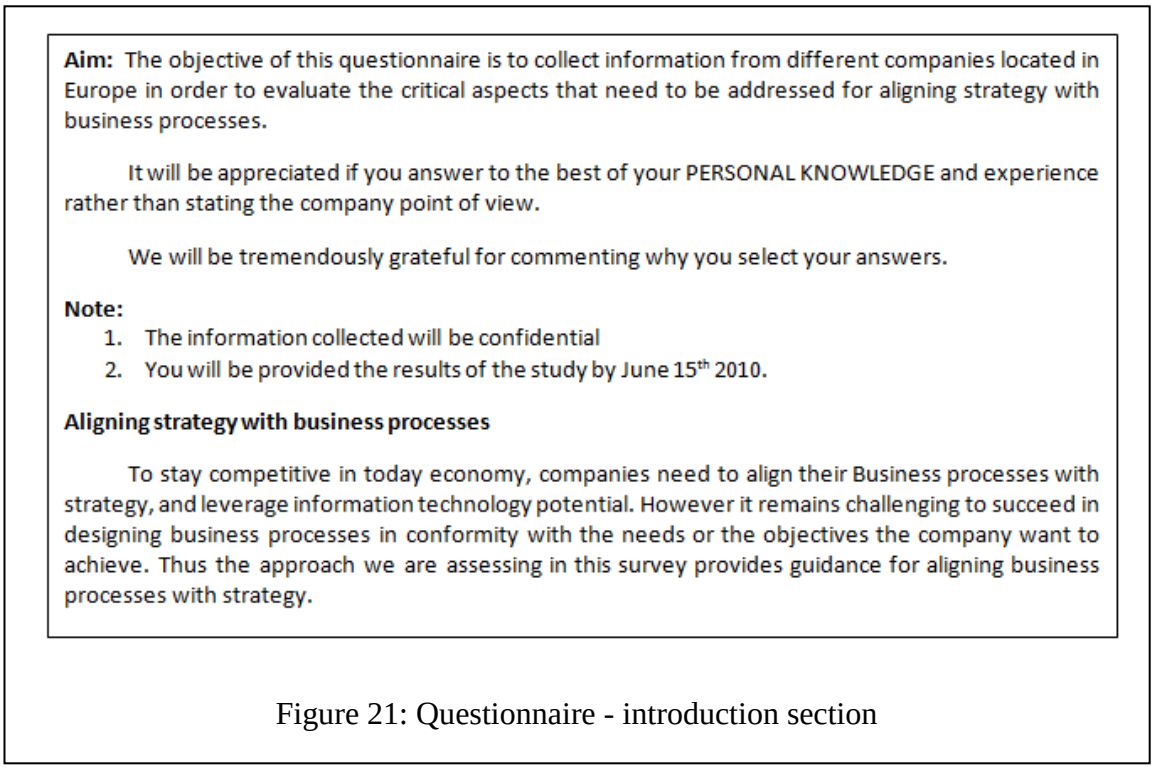
A discussion between the authors and the supervisor helped to identify shortcomings and revise the questionnaire. A description of our framework was added as well as open questions like “why” and “how” which help to get additional explanation.

9.1.2 The questionnaire content

The idea behind alignment is that business process can help organization achieve efficiency and effectiveness (Grover & Otim, 2009). Authors' expectation is to get feedback in order to have a clear understanding of each alignment factor and its importance in the organizations. Therefore, all the collected data was arranged into different sections as follows for the analysis to be more understandable.

1. The introduction section

The introduction section set the scene of our study. The aim is to provide general information about the problem, the purpose of the study, and our expectations from the respondent. The introduction also describes our framework to the respondent. The figure below shows a brief view of the content of that section.



Aim: The objective of this questionnaire is to collect information from different companies located in Europe in order to evaluate the critical aspects that need to be addressed for aligning strategy with business processes.

It will be appreciated if you answer to the best of your PERSONAL KNOWLEDGE and experience rather than stating the company point of view.

We will be tremendously grateful for commenting why you select your answers.

Note:

1. The information collected will be confidential
2. You will be provided the results of the study by June 15th 2010.

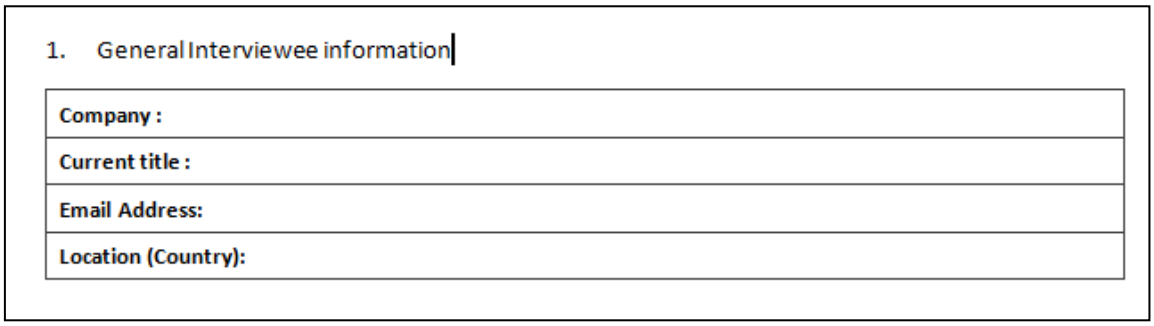
Aligning strategy with business processes

To stay competitive in today economy, companies need to align their Business processes with strategy, and leverage information technology potential. However it remains challenging to succeed in designing business processes in conformity with the needs or the objectives the company want to achieve. Thus the approach we are assessing in this survey provides guidance for aligning business processes with strategy.

Figure 21: Questionnaire - introduction section

2. General Information

The next section is the "general information" section. The questions in that section aim to collect background information that will be used to categorize industries and subsequent data analysis. An example of question is shown below.



1. General Interviewee information

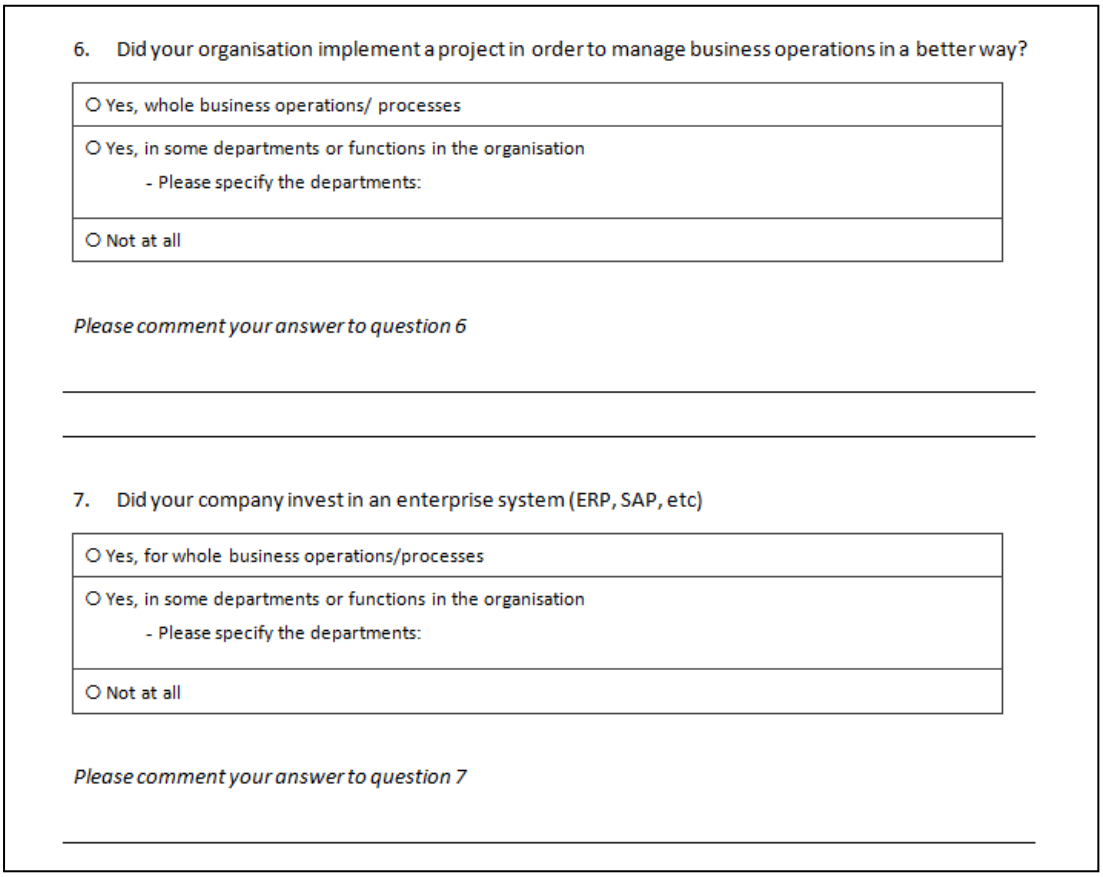
Company :
Current title :
Email Address:
Location (Country):

Figure 22: Questionnaire - exemple of general information question

3. Implementation a business process management projects in the organization

This part addresses general aspects such as strategy, process management projects, IT. The purpose is to evaluate if the organization had undertaken a project for aligning business processes with strategy. The attention is also given to the extent to what the organisation cares about strategy, processes and IT. The involvement of the respondent in BPM projects and strategy formulation is also taken into account.

This section is determinant because the answers to those questions are prerequisites for the remaining parts. In fact, it will not be interesting to get answers from companies that don't have any experience in process management. Examples of questions are shown below:



6. Did your organisation implement a project in order to manage business operations in a better way?

○ Yes, whole business operations/ processes
○ Yes, in some departments or functions in the organisation - Please specify the departments:
○ Not at all

Please comment your answer to question 6

7. Did your company invest in an enterprise system (ERP, SAP, etc)

○ Yes, for whole business operations/processes
○ Yes, in some departments or functions in the organisation - Please specify the departments:
○ Not at all

Please comment your answer to question 7

Figure 23: Questionnaire - example of question in BPM implementation section

4. Business process

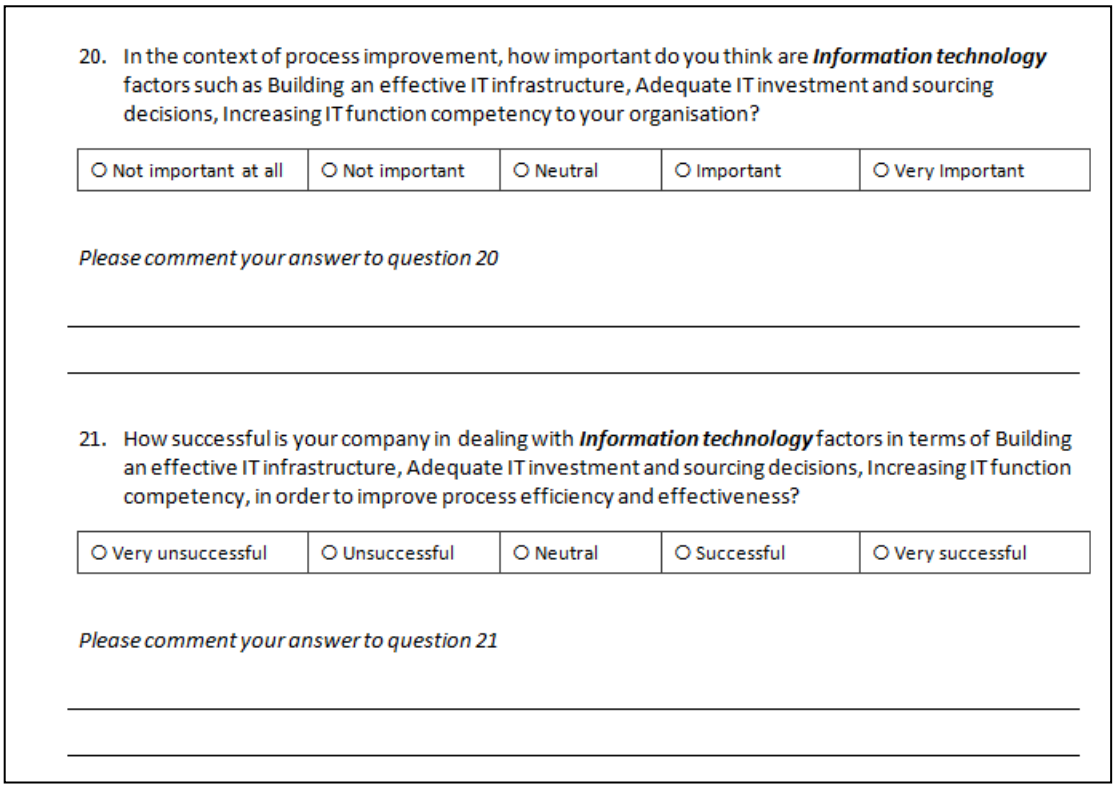
This section addresses the extent to which the organisation cares about business processes. The need here is to capture how the organization keeps business process up-to-date, how you identify their process, and how you use your processes to higher performance.

5. Strategy

Here the attention is given to the extent to which strategy is important in the organisation. The purpose is to capture is the organisation has a well-defined strategy since strategy is usually the basis for process alignment.

6. Factors that promote alignment between strategy and business processes

Several aspects need to be addressed to create alignment between business processes and strategy. Those are people, information technology, management, performance measurement, organisational culture, and organisational structure. The following questions aim to evaluate the importance of each factor for your organisation. The first question in this section is general; specific questions about each aspect will follow. For each aspect the respondent is asked if the aspect is important to his organisation, and the extent to which his organisation succeeds in addressing that factor. A comment section follows each question; the idea is to add details that may extent the limits of the factors.



20. In the context of process improvement, how important do you think are ***Information technology*** factors such as Building an effective IT infrastructure, Adequate IT investment and sourcing decisions, Increasing IT function competency to your organisation?

○ Not important at all	○ Not important	○ Neutral	○ Important	○ Very Important

Please comment your answer to question 20

21. How successful is your company in dealing with ***Information technology*** factors in terms of Building an effective IT infrastructure, Adequate IT investment and sourcing decisions, Increasing IT function competency, in order to improve process efficiency and effectiveness?

○ Very unsuccessful	○ Unsuccessful	○ Neutral	○ Successful	○ Very successful

Please comment your answer to question 21

Figure 24: Questionnaire - example of question on critical factors

9.2 Appendix 2: Questionnaire

TEKNISKA HÖGSKOLAN

HÖGSKOLAN I JÖNKÖPING

Towards an approach for aligning Strategy with Business Processes - Questionnaire

Aim: The objective of this questionnaire is to collect information from different companies located in Europe in order to evaluate the critical aspects that need to be addressed for aligning strategy with business processes.

It will be appreciated if you answer to the best of your PERSONAL KNOWLEDGE and experience rather than stating the company point of view.

We will be tremendously grateful for commenting why you select your answers.

Note:

1. The information collected will be confidential
2. You will be provided the results of the study by June 15th 2010.

Aligning strategy with business processes

To stay competitive in today economy, companies need to align their Business processes with strategy, and leverage information technology potential. However it remains challenging to succeed in designing business processes in conformity with the needs or the objectives the

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SPRING 2010

Brief overview of the framework

Different aspects need to be addressed in order to create alignment between strategy and business processes, in other words to design processes that support organisation's strategy. Based on previous research in process management and IT alignment, the authors have developed a generic framework. The aspects that are important in that framework are:

- Strategy direction, choice
- Business processes, to which all the other factors are connected
- People or human factors, which include people skills, behaviour, knowledge, jobs
- Management support, commitment, values, and system
- Organisational structure, with aspects like teams, co-ordination mechanisms
- Organisational culture
- Performance measurement that should addresses strategy, processes and people

Part 1: Background

The following questions aim to collect background information that will be used to categorize industries and subsequent data analysis.

1. General Interviewee information

Company :
Current title :
Email Address:
Location (Country):

Part 2: Implementing a business process management project in the organisation

The purpose of this section is to evaluate if your organization has undertaken a project for aligning business processes with strategy.

2. How important is Information Technology to your organisation's operations/activities?

○ Not important at all	○ Not important	○ Neutral	○ Important	○ Very important

3. How important is the efficiency and effectiveness in business processes to your organisation?

○ Not important at all	○ Not important	○ Neutral	○ Important	○ Very important

4. To what extent are you involved in business strategy development in your organization?

○ Very uninvolved	○ Uninvolved	○ Neutral	○ Involved	○ Very involved

5. To what extent are you involved in business process strategy development in your organisation?

○ Very uninvolved	○ Uninvolved	○ Neutral	○ Involved	○ Very involved

6. Did your organisation implement a project in order to manage business operations in a better way?

○ Yes, whole business operations/ processes
○ Yes, in some departments or functions in the organisation - Please specify the departments:
○ Not at all

Please comment your answer to question 6

7. Did your company invest in an enterprise system (ERP, SAP, etc)

○ Yes, for whole business operations/processes
○ Yes, in some departments or functions in the organisation - Please specify the departments:
○ Not at all

Please comment your answer to question 7

8. How important do you think is the alignment of business processes with strategy to your organisation?

○ Not important at all	○ Not important	○ Neutral	○ Important	○ Very Important

Please comment your answer to question 8

9. Do you think alignment between strategy and business processes achieves the following in your organisation?

	Strongly disagree	Disagree	Neutral	Agree	Strongly agree	Comment (Why or how)
Improved customer satisfaction						
Reduction in total cost						
Better return on IT investment						
Increased profits						
Reduce the time-to-market						
Higher quality product						
Improved use of IT to support business operations						

Part 3: business process

This section addresses the extent to which your organisation cares about business processes. The need here is to capture how your organization keeps business process up-to-date, how you identify their process, and how you use your processes to higher performance.

10. Your organisation has well- defined, documented and up to date Business processes

○ Strongly disagree	○ Disagree	○ Neutral	○ Agree	○ Strongly agree

Please comment your answer to question 10

11. Your organisation has Business processes that are customer-focused and support organisational strategy

○ Strongly disagree	○ Disagree	○ Neutral	○ Agree	○ Strongly agree

Please comment your answer to question 11

12. What approach or model do you use for analyzing business processes in your organization?

○ Capability Maturity Model (CMM)	○ Balanced Scorecard	○ Six Sigma Process Improvement projects	If other, please specify :

13. What and/or who in the organization was the driver for adopting process orientation?

Part 4: Business strategy

14. Your organisation has well- formulated strategy

○ Strongly disagree	○ Disagree	○ Neutral	○ Agree	○ Strongly agree

15. The organisational strategy helps selecting and linking your business processes/operations

○ Strongly disagree	○ Disagree	○ Neutral	○ Agree	○ Strongly agree

Please comment your answer to question 15

16. Your organisational strategy was the basis for process improvement

○ Strongly disagree	○ Disagree	○ Neutral	○ Agree	○ Strongly agree

Please specify why

Part 5: Factors that promote alignment between strategy and business processes

Several aspects need to be addressed to create alignment between business processes and strategy. Those are people, information technology, management, performance measurement, organisational culture, and organisational structure. The following questions aim to evaluate the importance of each factor for your organisation. Question 15 is a general; specific questions about each aspect will follow.

17. Which of the following factor has the most important impact on alignment in your organization?

	Not important at all	Not important	Neutral	Important	Very important
People					
Information technology					
Performance measurement					
Management					
Organizational Culture					
Organisational structure					

Please comment your answer to question 17

18. In the context of process improvement, how important do you think are ***human*** factors such as communication, behaviour, competence development, resistance to change, involvement, to your organisation?

○ Not important at all	○ Not important	○ Neutral	○ Important	○ Very Important

Please comment your answer to question 18

19. How successful is your company in addressing ***human*** factors in terms of communication, behaviour, competence development, resistance to change, involvement, in order to improve process efficiency and effectiveness?

○ Very unsuccessful	○ Unsuccessful	○ Neutral	○ Successful	○ Very successful

Please comment your answer to question 19

20. In the context of process improvement, how important do you think are ***Information technology*** factors such as Building an effective IT infrastructure, Adequate IT investment and sourcing decisions, Increasing IT function competency to your organisation?

○ Not important at all	○ Not important	○ Neutral	○ Important	○ Very Important

Please comment your answer to question 20

21. How successful is your company in dealing with ***Information technology*** factors in terms of Building an effective IT infrastructure, Adequate IT investment and sourcing decisions, Increasing IT function competency, in order to improve process efficiency and effectiveness?

○ Very unsuccessful	○ Unsuccessful	○ Neutral	○ Successful	○ Very successful

Please comment your answer to question 21

22. In the context of process improvement, how important do you think are ***Performance measurement*** factors such as strategic measures on different perspectives (*customer, financial, process, people),* qualitative and quantitative measures, continuous improvement through measures, to your organisation?

○ Not important at all	○ Not important	○ Neutral	○ Important	○ Very Important

Please comment your answer to question 22

23. How successful is your company in addressing ***Performance measurement*** factors such as strategic measures on different perspectives (*customer, financial, process, people),*

qualitative and quantitative measures, continuous improvement through measures, in order to improve process efficiency and effectiveness?

○ Very unsuccessful	○ Unsuccessful	○ Neutral	○ Successful	○ Very successful

Please comment your answer to question 23

24. In the context of process improvement, how important do you think are ***Management*** factors like commitment, sponsorship, and management system and values development, to your organisation?

○ Not important at all	○ Not important	○ Neutral	○ Important	○ Very Important

Please comment your answer to question 24

25. How successful is your company in addressing ***Management*** factors in terms of commitment, sponsorship, management system and values development, in order to improve process efficiency and effectiveness?

○ Very unsuccessful	○ Unsuccessful	○ Neutral	○ Successful	○ Very successful

Please comment your answer to question 25

26. In the context of process improvement, how important do you think are ***Organizational Culture*** factors like the shift to a culture of experimentation, to your organisation?

○ Not important at all	○ Not important	○ Neutral	○ Important	○ Very Important

Please comment your answer to question 26

27. How successful is your company in addressing ***Organizational Culture*** factors like the shift to a culture of experimentation, in order to improve process efficiency and effectiveness?

○ Very unsuccessful	○ Unsuccessful	○ Neutral	○ Successful	○ Very successful

Please comment your answer to question 27

28. In the context of process improvement, how important do you think are ***Organizational Structure*** factors like definition of jobs and responsibilities, definition of cross functional teams to your organisation?

○ Not important at all	○ Not important	○ Neutral	○ Important	○ Very Important

Please comment your answer to question 28

29. How successful is your company in addressing ***Organizational Structure*** factors in terms of clear definition of jobs and responsibilities, definition of cross functional teams, in order to improve process efficiency and effectiveness?

○ Very unsuccessful	○ Unsuccessful	○ Neutral	○ Successful	○ Very successful

Please comment your answer to question 29

Thank you for spending time and completing this questionnaire.

Please make any comments

Please return the questionnaire by e-mail, or by post to:

Farnaz.ansari@hotmail.com OR mariappoline@yahoo.fr