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Exploring the Relationship Between Alignment and Strategy

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ABSTRACT

Aligning business and IT strategy is a prominent area of concern. Organizations that successfully align their business strategy and their IT strategy, outperform their non-aligned peers (Chan et al., 1997). This paper explores the relationship between business strategy, IT strategy and alignment capability. We found that each business strategy can be supported by all IT strategies, but that certain combinations provide a better fit than others.

Regarding business strategy and alignment capability we found no conclusive relationship. Regarding the relationship between IT strategy and alignment capability, however, a clear relationship appeared. We explored this relationship further in a dual case study of two organizations having distinctly different IT strategies. One organization sees IT as an enabler for the business processes with mainly an internal impact, whereas the other organization IT sees as a driver for business innovation that can create competitive advantage in the market place. Based upon an assessment of their alignment capabilities we found that the company with the 'innovative' IT strategy scored a distinctly higher alignment capability than the company with the 'essential' IT strategy. Although this conclusion may not be surprising, it provides further evidence for the statement that a more 'progressive' IT strategy pairs with a better alignment of business and IT.

Keywords

Business and IT Alignment, IT strategy, Business strategy.

INTRODUCTION

The necessity and desirability of aligning business needs and ICT capabilities has been examined in numerous articles (Pyburn, 1983; Reich and Benbasat, 1996; Chan et al., 1997; Luftman and Brier, 1999; Maes et al., 2000; Sabherwal and Chan, 2001) and its importance is well recognized (Cumps et al. 2006). In a review of over 150 studies into business and IT alignment (BIA), however, Chan and Reich (2007) show that many different perspectives on and aspects of BIA exist.

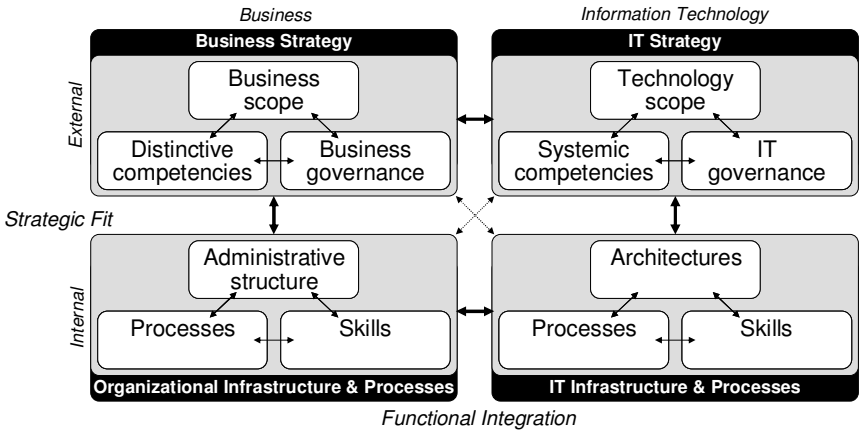

Figure 1. The 'Strategic Alignment Model' (Henderson and Venkatraman, 1993).

Although Henderson and Venkatraman are often credited for launching 'alignment' as a new concept for the 'fit' between business and IT in their Strategic Alignment Model (Henderson and Venkatraman, 1993), the challenge of 'fitting' IT solutions to business requirements is not new. Together with the rise of information systems in organizations, the need for alignment of its use with business processes and strategy grew. As a response to this challenge, methodologies of IT planning and system development were developed. Amongst others: Business Systems Planning (IBM Corporation, 1981), Information Systems Study and Information Engineering (Martin, 1982). These methodologies can be regarded as early manifestations of BIA (Chan and Reich, 2007).

These early methods focused heavily on the analysis and structure of the organization's business processes and data (Silvius, 2005), but in the 1980s and 1990s also a more strategic perspective on BIA arose (Pols, 2003). In the Strategic Alignment Model (Figure 1) this is visualized by the top layer of factors. Strategic BIA refers to the alignment of business strategy, plans and priorities and IT strategy, plans and priorities (Chan and Reich, 2007). Several authors confirm that organizations that successfully align their business strategy and their IT strategy, outperform their non-aligned peers (e.g. Chan et al., 1997; Irani, 2002; Kearns and Lederer, 2003). The relationship between business strategy and IT strategy is therefore a relevant area of concern.

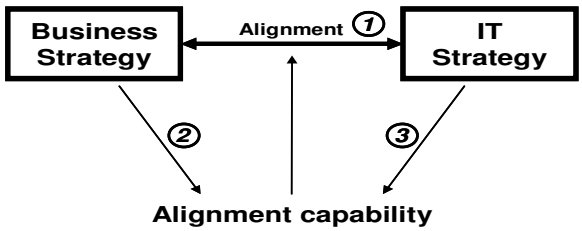

Figure 2. The relationships this paper explores.

Figure 2 illustrates the relationships this paper aims to explore. First the alignment of business and IT strategies will be explored (relationship 1). Hereafter the relationships between business strategy and alignment capability and IT strategy and alignment capability will be explored (relationships 2 and 3). We will elaborate on this last relationship in a dual case study of two financial services companies. The paper concludes with some limitations and suggestions for further research.

ALIGNING BUSINESS AND IT STRATEGIES

The impact of IT on business is rapidly shifting. Starting from a calculation tool to improve efficiency in administrative processes, IT provided decision makers with more detailed information much quicker than before, hereby improving the effectiveness of the organization. The last decennium saw another shift as internet allowed companies to open up new markets, develop new services or provide new means of developing customer loyalty, thereby innovating the business of a company. So, from an enabler of business IT developed into an innovator of business (Silvius, 2008).

Business Strategy

In modern business strategy literature, the most widely used typology of business strategies is that of Treacy and Wiersema (1997). They identify 'winning' strategies as being focused on either Operational Excellence, Product Leadership or Customer Intimacy. In their study they found that, although organizations need to perform adequately in all aspects of business, the most successful companies have distinct excellence in one of the three characteristics mentioned above. In an Operational Excellence strategy the success of an organization is based on realizing high volumes with low costs. This means that all business processes need to be continuously improved and optimized, and that the customer experiences the products or services of the organization as 'good value for money'. In a Product Leadership strategy the Unique Selling Proposition of the company is that of high quality of products and services. This implies continuous investments in (technological) development of products and services, and a brand marketing that focuses at their distinct qualities. Finally, in a Customer Intimacy strategy, the organization excels in fulfilling the specific needs of an individual customer or target group. This requires in-depth knowledge of the position, motives and business of the customer.

IT strategy

IT strategy has been defined as the prioritizing and selection of IT projects, based on their benefits and added value for the organization (Ward and Peppard, 2002). Weill and Ross (2004) recognize a more elaborated set of decisions that should be made, including IT standards and functional requirements. This last aspect relates more to the content of the IT strategy than to the process of decision making. In order to develop a more meaningful typology of IT strategies we build upon the work of Cumps et al. (2006) and Galliers (1993). They view IT strategy as determining IT adoption, ranging from conservative to innovative. We categorize IT strategy on a framework that distinguishes how (senior) management perceive the impact of IT. This impact can be on the external positioning of the organization and/or on the internal business processes (Silvius, 2006). Given a 'high' or 'low' perception of the internal and/or external impact, the different IT strategies can be categorized as follows (Figure 3).

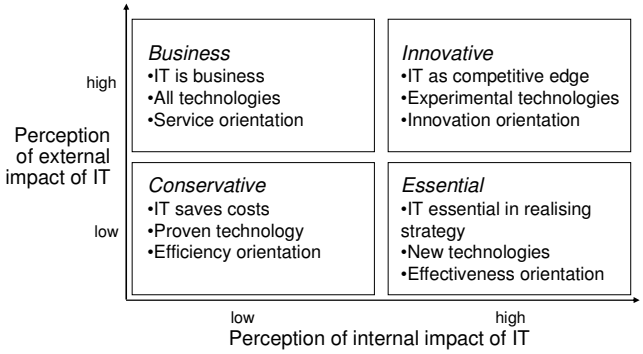

Figure 3. A typology of IT strategies.

The relationship

Cumps and Viaene, together with ProceWaterhouseCoopers (PriceWaterhouseCoopers, 2005), studied the relationship between business strategy and IT strategy in a survey in seven West-European countries with 640 respondents. They categorized the business strategies of the responding organizations in the typology of Treacy and Wiersema described earlier. For the classification of IT strategies of the organizations they used the typology 'Conservative' – 'Essential' – 'Innovative' described above. (Note that the 'Business' type of IT strategy is not recognized in their study. Since this typology is typical for just a specific segment of companies, namely small IT services companies, we will not mention this typology in the remainder of the paper.) The results of the PriceWaterhouseCoopers study are summarized in Table 1.

		Business Strategy			
		Operational Excellence	Product Leadership	Customer Intimacy	
IT Strategy	Conservative	14%	5%	21%	40%
	Essential	11%	10%	25%	45%
	Innovative	2%	4%	8%	15%
		27%	19%	54%	100%

Table 1. Combinations of Business and IT strategies (Developed from PriceWaterhouseCoopers, 2005)

From these results it can be concluded that all IT strategies can be relevant to all business strategies. However, some combinations seem to be more obvious than others. In an Operational Excellence strategy, the Conservative and Essential IT strategies seem to be dominant, with the Innovative strategy underrepresented. In a Customer Intimacy strategy, the dominant IT strategies are also Conservative and Essential, but in opposite order. Also the Innovative strategy is relatively more present

in this business strategy. In the Product Leadership strategy the dominant IT strategy is Essential, with the Conservative strategy clearly underrepresented.

The debate on whether IT can create a competitive advantage to organizations seems to have been settled on the conclusion that this type of competitive advantage, if any, will be short-lived, and thus not sustainable, if it solely results from the deployment of superior technology (Cumps et al., 2006; Clemons, and Row, 1991; Weill and Broadbent, 1998). This is because of the well developed market for IT solutions, that makes any solution, once deployed as a strategic advantage, easily available for competitors in the market place. It has therefore been suggested that the competitive value of IT results not from the technology itself, but from the management and alignment of it (Earl, 1989; Kean, 1993; Henderson and Venkatraman, 1993; Broadbent and Weill, 1993). The alignment capability therefore is a relevant factor in the success of the combination of business and IT strategy.

ALIGNMENT CAPABILITY

In their research into BIA in European organizations, PriceWaterhouseCoopers (2005) also studied the relationship between business strategy, IT strategy and alignment capability. Alignment capability is measured by using Luftman's alignment maturity assessments (Luftman, 2000). In these assessments six criteria are used to determine the maturity of the alignment of IT and business . These six criteria are described in Table 2.

BIA maturity variable	Description
Communication	How well does the technical and business staff understand each other? Do they connect easily and frequently? Does the company communicate effectively with consultants, vendors and partners? Does it disseminate organizational learning internally?
Value measurement	How well does the company measure its own performance and the value of its projects? After projects are completed, do they evaluate what went right and what went wrong? Do they improve the internal processes so that the next project will be better?
Governance	Do the projects that are undertaken flow from an understanding of the business strategy? Do they support that strategy? Does the organization have transparency and accountability for outcomes of IT projects.
Partnership	To what extent have business and IT departments forged true partnerships based on mutual trust and sharing risks and rewards?
Scope and Architecture	To what extent has technology evolved to become more than just business support? How has it helped the business to grow, compete and profit?
Skills	Does the staff have the skills needed to be effective? How well does the technical staff understand business drivers and speak the language of the business? How well does the business staff understand relevant technology concepts?

Table 2. Alignment maturity variables (Derived from Luftman, 2000).

In the concept of BIA maturity, the level of maturity indicates an organization's capability to align IT to business needs. As in many maturity models, Luftman's BIA maturity assessments involves five levels of maturity:

1. Initial / Ad Hoc Process
2. Committed Process
3. Established Focused Process
4. Improved / Managed Process
5. Optimized Process

In the PriceWaterhouseCoopers (2005) study, alignment capability is expressed as a single score, showing the average maturity on all six variables where a level 5 score is measured as 100%. Their results are shown in Table 3.

		Business Strategy			
		Operational Excellence	Product Leadership	Customer Intimacy	
IT Strategy	Conservative	18%	30%	33%	27%
	Essential	59%	61%	60%	60%
	Innovative	55%	65%	66%	62%
		44%	52%	53%	

Table 3. Alignment capability scores for combinations of Business and IT strategies (Developed from PriceWaterhouseCoopers, 2005)

From these results it can be concluded that business strategy does not seem to have a decisive effect on the alignment capability. The capability scores range on average from 44% to 53% for the different business strategies. The differences are relatively small. The relationship between IT strategy and alignment capability shows a larger spread in scores. In the study a Conservative IT strategy paired consistently with a low alignment capability whereas an Eessential or Iinnovative IT strategy paired with a relatively high alignment capability. From these results it can be expected that the typology of IT strategies, Conservative - Essential – Innovative, corresponds with a growing alignment capability. Figure 4 illustrates this expected relationship. Of course, this is not a mathematical relationship, but a certain correlation, however, seems apparent.

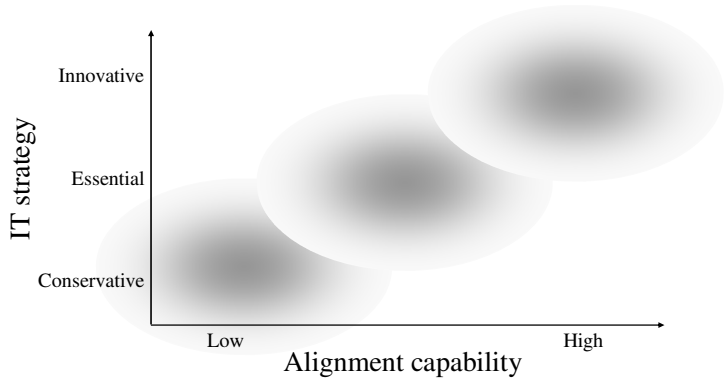

Figure 4. The expected relationship between IT strategy and alignment capability.

Although this relationship can be expected, it cannot be concluded from this study. Regarding the 'essential' and 'innovative' strategies, the results are not conclusive on the effect on, or from, alignment capability.

In our study we contribute to the research into this relationship in on a dual case study. We selected two medium sized organizations, working in the same industry (financial services). One of which can be classified as having an Essential IT strategy, the other one as having an Innovative IT strategy. The organizations were the Dutch based NIBC Merchant Bank and ALEX Investment Bank. The choice for case studies as research design was made because of the nature of the data required. Assessing the IT strategy and BIA capability maturity requires multiple interviews in each organization and is therefore impossible to obtain through surveys or external data analysis.

For both cases, respondents from both 'business management' and 'IT staff' were selected. Another selection criterion was the insight into the alignment processes that the respondents had. All respondents had sufficient insight and received specific explanation about this study and the maturity assessments.

CASE 1 NIBC MERCHANT BANK

The organization

NIBC is an independent merchant bank focusing on business-to-business financing of corporations, transactions and real estate. As a medium-sized merchant bank, NIBC has a value proposition based on superior sector knowledge and customer intimacy. It focuses on the mid-cap market. NIBC believes that its conservative strategy and diversified business model will guide it through the continuing challenging market conditions.

NIBC is organized in business units that reflect their main activities: Corporate Finance, Real Estate Markets, Financial Markets, Principal Investments and Investment Management. NIBC has 624 employees (full time equivalents) and has offices in 5 countries.

IT organization

In NIBC the IT department is centrally organized as part of the 'Corporate Center' support unit. The IT manager reports to the Director of the Corporate Center. The business units have no IT staff of their own and also no specific business-IT liaison positions. The IT organization does have liaison positions, so called information managers, that manage the relationship with the business units. The IT processes are partly outsourced to an external service provider.

IT strategy

The annual reports 2006 and 2007 of NIBC do not include any information about their IT strategy or the role of IT in NIBC's business. In interviews with NIBC staff members it is stated that within NIBC IT is following the business. The importance of IT as a supporter of the business is acknowledged, but IT does not play a role in the business strategy of NIBC. Between senior business and IT staff it was agreed that NIBC's IT strategy could be identified as 'essential'.

Alignment capability

In the assessment of NIBC's alignment capability we used Luftman's alignment maturity assessment described earlier. The maturity was assessed by seven respondents. Three of them were classified as 'business management', the other four as 'IT'. They assessed NIBC's BIA maturity as shown in figure 5.

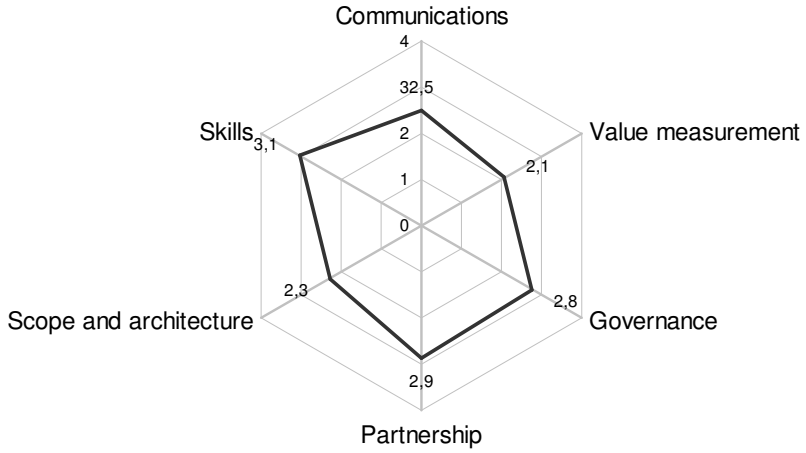

Figure 5. BIA maturity score for NIBC.

The maturity on the different BIA variables are assessed on levels between level 2 Committed Process and level 3 Established Process. Although it is difficult to assess this result in itself, a first benchmark is provided by Luftman's study into the BIA capability of 160 organizations (Luftman, 2007). In this research, the financial sector showed an average maturity of 2.9 which provides some indication that the NIBC score is relatively low regarding 'Value measurement' , 'Communications' and 'Scope and Architecture' . Especially the score on 'Value measurement' is particularly low (2.1), indicating that IT only weakly demonstrates its value to the business.

A more elaborated analysis of the maturity assessment is shown in Figure 6. This graph shows the assessment scores, split by respondent group business management and IT staff, on the level of the sub-variables. From this Figure it becomes apparent that on average the business management respondents rate the alignment maturity higher than the IT respondents. On average the difference is in fact 0.55, which corresponds to more than half a level of maturity. Remarkable differences in perception occur for 'Role of IT in Strategic Business PLanning', 'Change readiness' and 'Locus of power'. These differences may indicate that the alignment between Business and IT in NIBC is not undisputed. The information received in interviews with the IT staff acknowledges this difference in view.

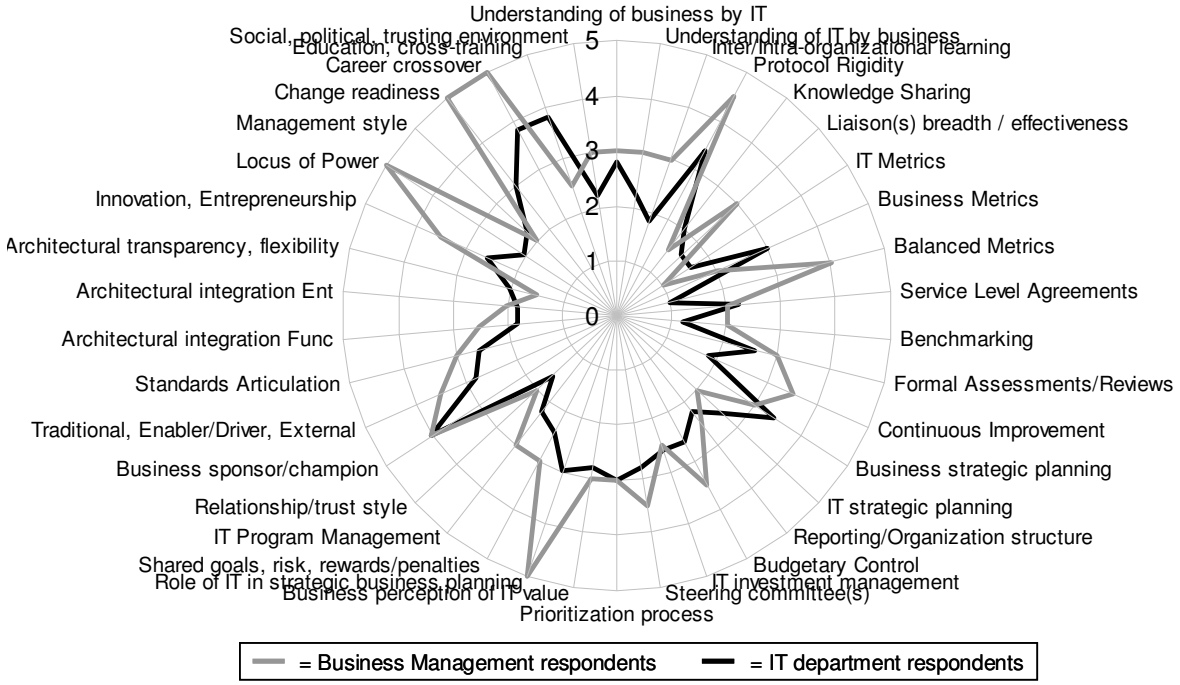

Figure 6. Detailed BIA maturity score for NIBC.

CASE 2 ALEX INVESTMENT BANK

The organization

ALEX is a relatively young (founded in 1996) bank that focuses on investment and funds management in the consumer market. Its market proposition is built on product leadership and superior customer service, allowing the customers to manage their portfolios in real time. ALEX was the first bank to offer this service at the end of the nineties. Later innovations included fully automated analysis of stocks, assets and portfolios, thereby automating the advise process. ALEX employs 156 full time equivalents and has one office located in Amsterdam.

IT organization

The IT organization of ALEX is organized as a supporting business unit. The IT manager reports to the CEO. Regularly IT staff members fulfill customer service tasks and participate in relation management events to understand the issues and

experiences of ALEX's customers. ALEX has a strict in-sourcing policy for system development projects resulting from the philosophy that competitive advantage from the application of IT can never result from standard systems that are available to all market parties.

IT strategy

In interviews and presentations ALEX positions IT as a 'business driver' (Lanen, 2008). The CEO even went as far as calling ALEX first of all an IT company and secondly a bank. Of course the business activities of ALEX are that of a banker, but IT clearly plays an important role in their proposition to customers. It is IT that has enabled ALEX to launch new and innovative services as "ALEX assist", a fully automated advice service on investment portfolios, into their market. With these new services ALEX had been able to exploit new market segments and to become market leader in their segment within a matter of years. ALEX no doubt is a textbook example of an 'innovative' IT strategy.

Alignment capability

In the assessment of ALEX's alignment capability, nine respondents were found. Five of them were classified as 'business management', the other four as 'IT'. They assessed ALEX's BIA maturity as shown in figure 7.

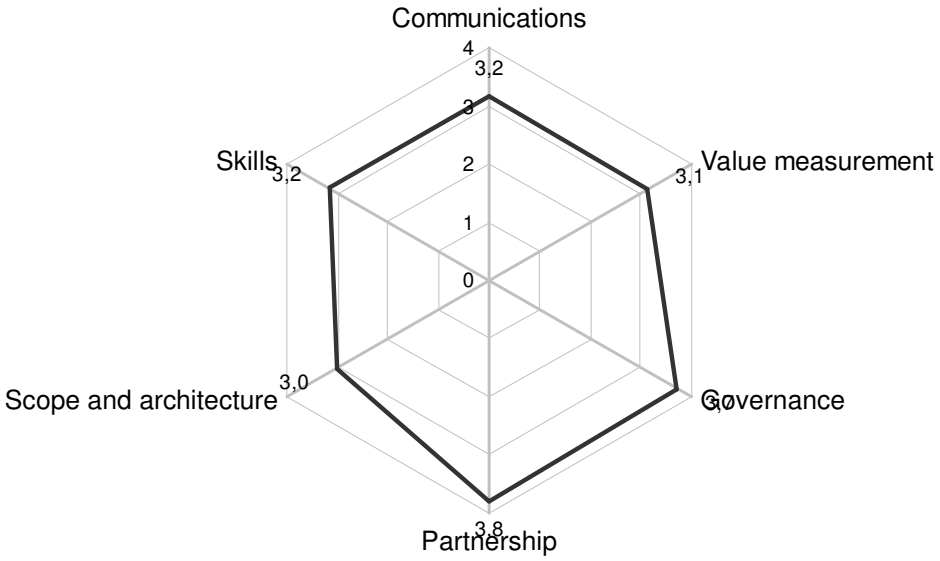

Figure 7. BIA maturity score for ALEX.

The maturity on the different BIA variables are assessed on levels between level 3 Established Process and level 4 Improved/Managed Process. When compared with Luftman's benchmark for the financial sector this indicates that ALEX scores relatively high. All scores are above the average found by Luftman. Especially the scores on 'Partnership' and on 'Governance' are particularly high, indicating a good co-operation between business and IT.

Again a more elaborated analysis of the maturity assessment is shown in Figure 8. In ALEX the two respondent groups, Business Management and IT Staff, were quite close together in their assessment. On average the difference is a mere 0.09. This indicates that business management and IT staff share their views on the strong and weak points of BIA within ALEX.

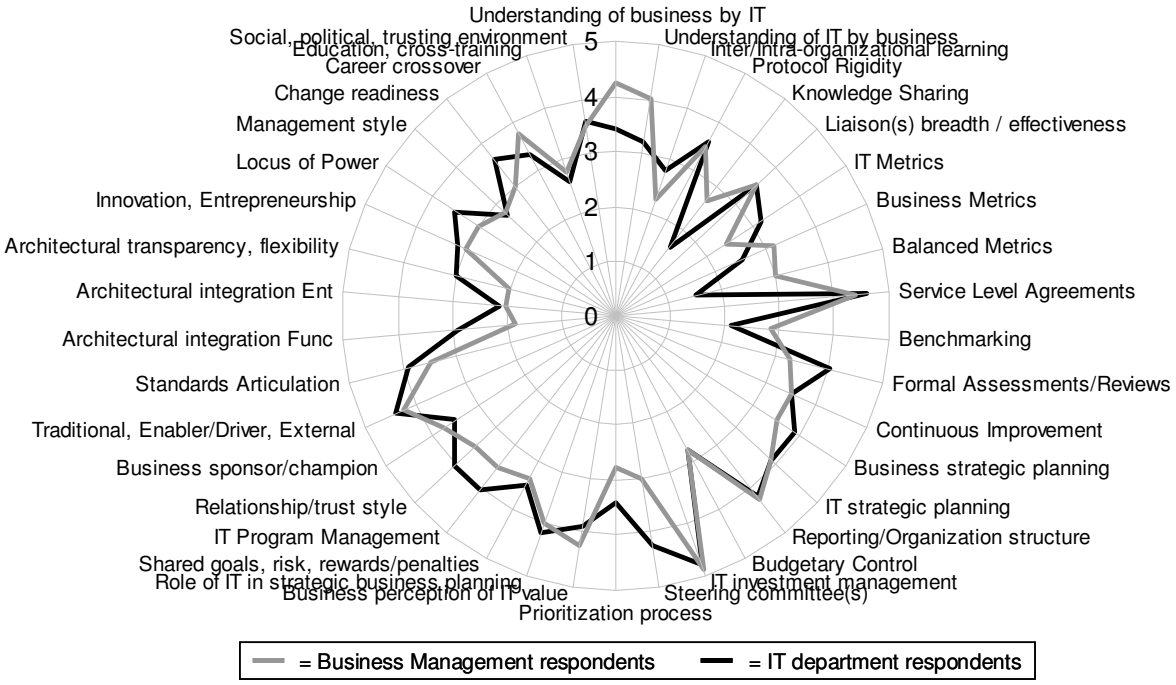

Figure 8. Detailed BIA maturity score for ALEX.

COMPARISON OF THE TWO CASES

Table 4 summarizes the IT strategies and the mean alignment maturity scores of the two cases.

		NIBC	ALEX
IT Strategy		Essential	Innovative
BIA Maturity score	Mean of all respondents	2.61	3.34
	Av. Difference between Business Management respondents ant IT staff respondents	0.55	0.09

Table 4. Summary of the results of the two cases.

IT strategy

The IT strategies of NIBC and ALEX show the typical difference between an 'essential' strategy and an 'innovative' one. Since the two cases were selected on their different IT strategies, this is not surprising.

Alignment capability

As is apparent from Table 4 and Figures 5 and 7, ALEX scores consistently higher on the BIA maturity variables than NIBC. Figure 9 shows the maturity scores of the two companies on a more detailed level. Also on this more detailed view, ALEX scores almost consistently higher than NIBC. This strengthens the impression that also the 'essential' and 'innovative' IT strategies pair with distinct different levels of alignment capability.

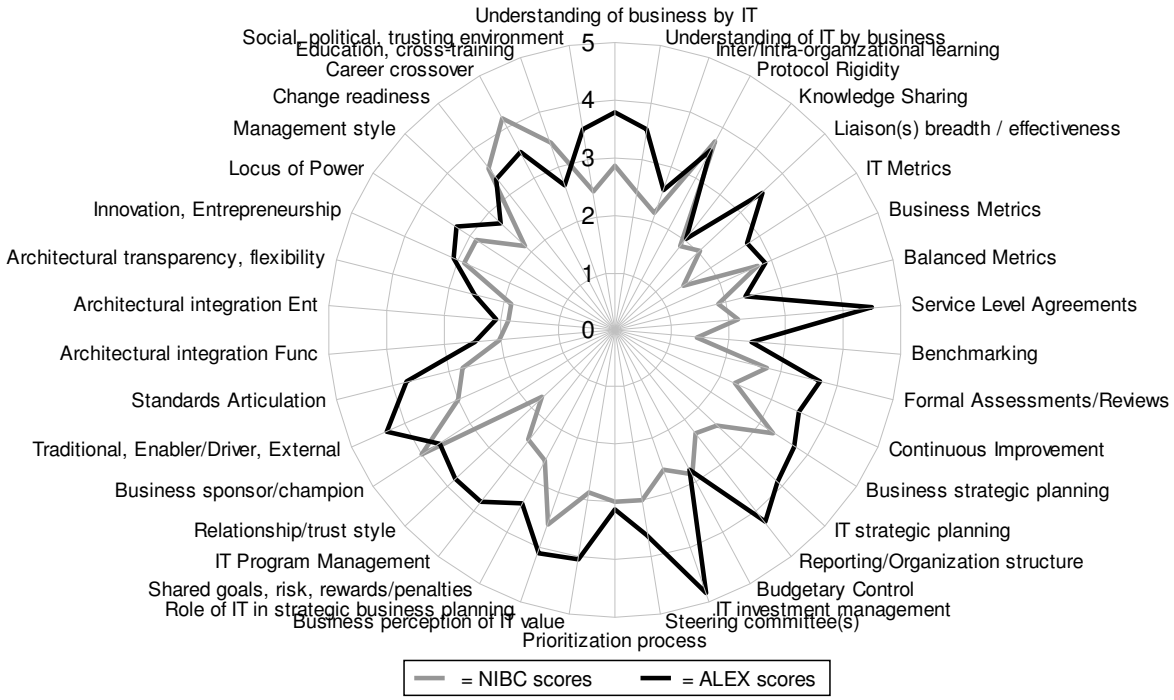

Figure 9. Detailed BIA maturity score for NIBC and ALEX.

Alignment consensus

Another indicator for the alignment between business and IT is the level of consensus between business management and IT staff about the assessment of an organization's alignment capability. Table 4 shows that NIBC shows a substantial lower level of consensus than ALEX. The difference in alignment capability perception is on average 0.55 in case of NIBC and 0.09 in case of ALEX.

CONCLUSIONS

Aligning IT to business needs is still an important challenge for many organizations. This paper explored the relationships between business strategy, IT strategy and alignment capability.

Regarding the relationship between business and IT strategies it was concluded that all possible combinations of business strategy and IT strategy occur in reality. Some combinations, however, appear to be more dominant than others. Logical combinations were formed by:

- Conservative and Essential IT strategies with an Operational Excellence business strategy;
- Essential and Conservative IT strategies with a Customer Intimacy business strategy;

- An Essential IT strategy with a Product Leadership business strategy.

Regarding the relationship between business strategy and alignment capability, it appeared that business strategy does not have a decisive effect on the alignment capability.

Regarding the relationship between IT strategy and alignment capability the case studies described in this paper confirm the expectation that IT strategy is a distinct factor in the alignment capability of organizations. We contribute to earlier studies by showing that also the 'essential' and 'innovative' types of IT strategies pair with distinctly different levels of alignment capability.

DISCUSSION AND LIMITATIONS

An important limitation of the relationship between business and IT strategies that appeared in the study is that it is not linked to the success of the combination. The mere fact that each possible combination occurs in practice is an important, but not decisive indication. Further research is required to establish the rate of success of each combination.

The relationship between IT strategy and alignment capability that appeared in the studies confirm the expected pattern (Figure 5). It is clear that pursuing an innovative IT strategy requires a high alignment capability. A question that remains unsolved, however, is the causality of this relationship. Does a more innovative IT strategy result from a high alignment capability or the other way around. Another suggestion for further research is therefore the causality of the IT strategy – alignment capability relationship. This would require longitudinal research of multiple organizations.

The limitations of case study research in general also applies to our study of NIBC and ALEX. The decision to use case studies in this study was made for practical reasons of in-depth data collection. The relationship found between IT strategy and alignment capability could be strengthened by including more cases in the study.

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