CORPORATE REAL ESTATE ALIGNMENT STRATEGIES IN DUTCH HIGHER EDUCATION

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Abstract

Purpose – This paper aims to explore the management approaches concerned with the process of aligning Corporate Real Estate (CRE) with organizational goals on a strategic level and regarding day-to-day operating activities in higher education institutes.

Methodology/approach – The paper first outlines theoretical issues of CRE alignment processes in general. It then presents the findings from 13 interviews with CRE managers who are responsible for the accommodation of Dutch Universities of Applied Sciences.

Findings – The review of CRE theory shows three key CRE alignment process activities and six management approaches. The empirical study shows how these approaches can be used to distinct two opposite strategies for CRE alignment processes: a control-oriented strategy and an involvement-oriented strategy.

Originality/value – The managerial decision-making regarding space issues and its effects on students and staff in higher education is an underexposed topic in CRE research. There is still limited understanding of how to optimally align school buildings to education. The current study combines insights from other disciplines such as IT-alignment with insights from CREM theory. Furthermore it sheds light on several management approaches and on the use of these approaches for CRE alignment strategies in the field of higher education. The findings might be applicable in other sectors as well.

Keywords - Corporate Real Estate Management, Alignment, Strategies, Higher Education.

Paper type Research paper

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1. Introduction

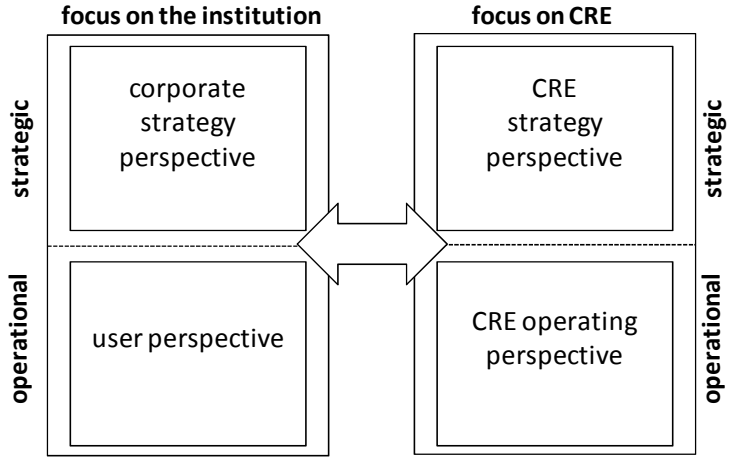
In the field of Corporate Real Estate Management (CREM), there is an ongoing interest in how organizations align their Corporate Real Estate (CRE) with the goals of the organization and its core business (Nourse and Roulac, 1993; Osgood, 2004; Scheffer *et al*., 2006; Lindholm *et al*., 2006; Appel-Meulenbroek and Feijts, 2007; Haynes, 2012). Usually CRE alignment studies focus on addressing CRE strategies that match with the corporate strategy, and on indicating CRE operating decisions to create a building or a built environment that fits best with the corporate goals (Appel-Meulenbroek *et al.*, 2010; Heywood, 2011). Because of the diversity of corporate strategies, the alignment of CRE with the organization is strongly related to the organizational context (Osgood, 2004). Organizations have their own challenges when it comes to aligning CRE with the trends and developments in their specific business.

The present study examines CRE alignment in higher education. Higher education is facing substantial changes (Collis and Van der Wende, 2002; Robinson, 2010; Johnson *et al.*, 2011). In the last decades there has been a shift from a supply-driven approach of traditional teaching and learning to new, more customized and demand-oriented ways of teaching and learning (Simons *et al.,* 2000). The role of school has been changed from a place of instruction to a place to produce learning (Barr and Tagg, 1995). Barr and Tagg deliberately use the term *produce*, to emphasize that learning for students has become a co-production with the school, instead of consuming instructions in a class room. These changes in education have been affecting the accommodation of learning and teaching (Johnson *et al.*, 2011; Beckers *et al.*, in press). Yet, literature shows that many buildings of Dutch higher education institutes are not sufficiently prepared for future needs and demands (De Vries *et al*., 2008). De Vries *et al*. attribute this to limited understanding of the alignment of educational buildings with changes in education, e.g. developments in learning and teaching. Based on an extensive literature study, Temple (2007, p. 8) concludes that "the literature throws almost no light on managerial decision-making about space issues affecting students or staff: this is a topic where further work would be useful." This is endorsed by Boddington and Boys (2011) who indicate that there is a need for more appropriate methods and tools for the management and construction of learning spaces in higher education. Yet, CRE managers need a better understanding of how to align educational buildings to the developments in learning and teaching in higher education. In order to contribute to this understanding, this current research investigates the CRE alignment process in higher education institutes. The question this research tries to answer is 'which management approaches are used in practice to align CRE with developments in higher education, and how is daily practice related to alignment theories from literature?' The paper first outlines the theory of CRE alignment as a CREM process. Next, it presents the results of a series of interviews with CRE managers from Dutch Universities of Applied Sciences. The paper ends with theoretical and practical implications and concluding remarks.

2. Theoretical background

According to Heywood (2011) alignment can be defined as bringing into harmony things that differ or could differ. Yet, alignment in the context of CRE is concerned with making CRE consistent or in agreement with the core business. The term CRE alignment itself is relatively new and was used by Osgood (2004) in his publication about the 'Strategy Alignment Model'. This model shows that CRE alignment requires a continuous process of matching building supply to the strategic objectives of an organization. CREM theory shows four perspectives concerning CRE alignment (Krumm *et al.,* 2000; Den Heijer, 2011) i.e. perspectives that are related to the institution (demand side) and to CRE (supply side), and perspectives that focus on the strategic level versus on the operational level (see figure 1).

Figure 1 Four perspectives of CRE alignment



In figure 1, the arrow between the demand and the supply side represents the alignment process of CRE with the institution. This process aims at analyzing the corporate goals and the day-to-day operating activities in order to determine the right CRE strategy and the CRE operating solutions to match. According to process literature three key activities of processes are: coordination activities, decision making activities and communication activities (ISO, 2008). Concerning the CRE alignment process these activities have been the subject of publications in different disciplines such as CREM, facilities management and literature about briefing. The theoretical framework of this present study refers to several sources which are indicated in table 1 (a = Smith and Jackson, 2000; b = Blyth and Worthington, 2001; c = Kelly et al., 2005; d = Ryd and Fristedt, 2007; e = Yu et al., 2008; f = Ikiz-Koppejan et al., 2010; g = Kok, 2012). These sources mention comparable aspects that are combined into six management approaches. The first column of Table 1 shows the three key CRE alignment process activities. The second column describes management approaches for these process activities and the third column shows the references. All processes take place within the specific context of the type of business and the type of organization with its own culture and ethics.

Table 1 Different types of managing CRE alignment based on literature

Key process activities	Management approaches for the key process activities	References
1. Coordination	– Stakeholder management: coordination of the stakeholder representation and the involvement of the client, the customers and the end users;	a, b, c, e, f, g
	– Change management: matching CRE interventions with changes in the core processes;	a, b, c, d, e, f, g
2. Communication	– Information management: the management of information that is correct and relevant for the CRE alignment process;	a, c, e, f, g
	– Relationship management: the management of interactions between participants from demand and supply side in order to align CRE with stakeholder requirements;	b, c, e, f, g
3. Decision making	– Management of the power distribution: levels of influence of different stakeholders involved in the decision making process;	a, b, c, d, e, f
	– Preconditions management: monitoring the balance between available time, costs and quality;	c, d, e

Context: the type of business and type of organization with its own cultural and ethical aspects (referred to by a, c, d)

In the next sections this paper first explores the key process activities and management approaches in the framework in the context of higher professional education. Then the paper will illustrate how these activities and approaches can be used to distinct strategies for the CRE alignment process.

3. Empirical study: methods and findings

The empirical part of this research was conducted in 13 large Dutch Universities of Applied Sciences (UAS). As part of the PhD-research from the first author, in all 13 UAS an interview was conducted with the manager (CREM/FM) who is responsible for the alignment of the educational buildings of these Dutch UAS with the developments in learning and teaching. The Netherlands have 39 UAS with a total number of 423,776 students and 41,429 employees (reference date 2011/2012) (www.vereniginghogescholen.nl/). The 13 UAS involved in the study represent a total market share of 75% of all students in Dutch UAS. At the time of the research, the 13 UAS together used 145 buildings for education and staff, with

a total number of approximately 1.5 million square meters gross floor area.

All the interviews were tape recorded and transcribed for subsequent analysis. For the present study the interviews were analyzed, using the analytical framework of table 1. The linkage of text fragments from the interviews to the characteristics in the framework of table 1 was based on open coding (Corbin and Strauss, 2008).

The interviews indicated approximately 500 text fragments that refer to CRE alignment process activities and the underlying management approaches. The management approaches and the number of times that in a case has been referred to an approach, are summarized in table 2. Next, the management approaches are discussed in more detail.

Table 2 Overview of text fragments per management approach and frequencies

		Cases in Dutch Universities of Applied Sciences													
		A	**B**	**C**	**D**	**E**	**F**	**G**	**H**	**I**	**J**	**K**	**L**	**M**	**TOTAL**
1a	coordination - stakeholder management	0	1	1	2	6	0	10	0	3	2	6	4	0	**35**
1b	coordination - change management	5	2	4	1	8	0	6	4	0	2	6	5	8	**51**
2a	communication - information management	7	6	5	6	7	0	4	5	9	2	5	0	6	**62**
2b	communication - relationship management	8	3	7	12	7	1	9	4	7	4	7	6	8	**83**
3a	decision making - power distribution	19	13	17	23	12	6	5	3	6	7	14	8	4	**137**
3b	decision making - preconditions management	5	9	14	14	9	6	4	10	4	8	15	6	16	**120**
		44	**34**	**48**	**58**	**49**	**13**	**38**	**26**	**29**	**25**	**53**	**29**	**42**	**488**

1a Coordination – stakeholder management

The interview data especially focused on the internal stakeholders related to learning and teaching. CRE managers distinguish four categories of internal stakeholders:

- executive board: top management;
- middle management: academy directors, institute directors, program directors;
- teachers and non teaching staff;
- students.

The first three categories represent approximately 8.5% of the total number of internal stakeholders in the UAS involved in the study (measured over the period 2006-2011, www.verenigingh ogescholen.nl). The rest (91.5%) are students. Furthermore, CRE managers make a distinction between clients, customers and end-users. The executive board and other managers that participate in the formal decision-making process of the organization and that have access to financial resources, are defined as the clients and the customers respectively. The teachers, non teaching staff (staff) and students are considered as the end-users. Because of their alliance with the institutions, the needs and requirements of teachers and staff are fairly clear for CRE managers. However, the student population is perceived as increasingly diverse. For this reason CRE managers make a distinction between various student groups regarding the type of study (e.g. FM versus retail and leisure, economics, law etc.), study progress (first-year students have different needs than older students) and student type (part-time, full-time) and students in metropolitan areas are different from students from the country side.

Interviewee [case D]: "At our university first-year students follow lessons in a classroom according to a fixed schedule and have less autonomy in their learning process than senior students. Which means that they have other requirements for learning facilities."

1b Coordination – change management

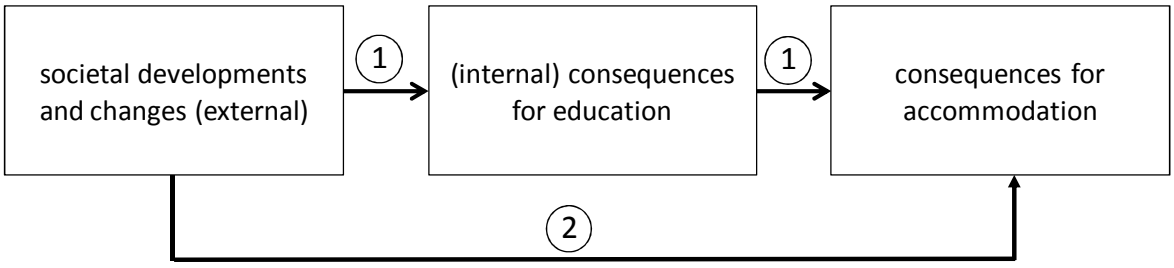
CRE alignment processes are often related to situations where changes in core processes appear. In the interviews the CRE managers mentioned several developments and changes which they think to be important for the CRE alignment process, such as:

- Fast IT developments in society (e.g. social media) and in education (e.g. e-learning, or the concept of the flipped class room, where student watch web-lectures at home and come to school to work together on assignments in class).
- Educational developments and changes like the shift from the proven concept of teaching in classrooms with one teacher talking and thirty students listening, to students that progressively work together in small groups. These developments become apparent in 'a shift from a cognitive focus on education to a social focus', 'an increasing need to meet', 'increasing flexibility in educational processes' and in no more 'one size fits all'.
- The social debate in the Netherlands about the quality of higher education, which leads to an increasing number of procedures and supervision in education.
- The growing impact of the 'experience factor': school must be fun and education must be attractive.
- Demographical developments lead to the expectation that the number of students will decrease after 2020.

CRE managers perceive the consequences of these developments for their educational accommodation in two ways, indicated with number 1 and 2 in figure 2.

1. From the left to the right in figure 2, societal developments and changes have direct consequences for education at a UAS, and thus indirectly also have consequences for the accommodation. Demographical trends for instance lead to an increase of the numbers of students and thus to the need for less square meters. And IT developments may lead to other didactical forms as the flipped class room concept and blended learning (a mixture of e-learning and face-to-face meetings at school)..
   Interviewee [case L]: "New ways of learning, as we call it. The influence of IT in education, resulting in a reduction of traditional learning space such as large lecture rooms."
2. There are external changes and developments that directly influence the educational accommodation, without interference of education. The societal demand for more sustainability results in stricter guidelines regarding energy efficiency. In this case initiatives to adaptations do not necessarily come from educational needs.
   Another example is that the changing expectations of students in the context of the experience economy lead to 'Starbucks concepts' in school.
   Interviewee [case A]: "The experience economy in our society. That's why we refurbished the entrance and created this well designed meeting area."

Figure 2 Coordination - change management



2a Communication – information management

When it comes to the definition of the needs and requirements of education in relation to the accommodation, CRE managers mention three key aspects:

- Needs and requirements often arise from dissatisfaction with the current situation. Representatives of education are quite conscious about what they don't want but do not really know what they do want or need and how to formulate their real needs.
  Interviewee [case J]: "If I ask teachers how they see future education, then it falls painstakingly silent."
- Needs and requirements are often formulated in operational terms and solutions (e.g. moving walls, doors) and not in desired outcome or aimed performance (e.g. what are our processes, which are our intended goals and results, how can CRE support our needs).
  Interviewee [case A]: "Requirements are mostly formulated in terms of 'we need this separation wall removed', and 'I would like to have a glass door for this classroom'."
- Needs and requirements are often formulated in terms of familiar solutions and what is known from the past ('we want more of what we already have, but then refreshed and new'). Also the needs and requirements are mostly ad-hoc (short term) and not focused on the long term. Strategic plans of Dutch UAS have a time scope of only four years ahead. Most clients, customers and end users find it difficult to think 'out of the box'.
  Interviewee [case D]: "Academies think about the here and now and not about what they want to do in the future and that what they need to achieve that."

As a consequence CRE managers have to cope with the dilemma of having a time horizon with their property that goes far beyond that of education. CREM requires long term thinking, which is not always in line with the dynamics of education. Especially when they are faced with new construction projects, far-reaching building mutations, or long term lease contracts. CRE managers often have to deal with an enormous number of square meters of the current stock as an inheritance of the past, which hinders to cope with for instance the growing need of efficiency, cost reduction, sustainability and flexibility. Several CRE executives feel that they are "always lagging behind the facts".

2b Communication – relationship management

Relationship management is concerned with managing cooperation and communication between participants from demand and supply side in order to align CRE with various stakeholder requirements. CRE managers mention four questions according to that, namely: what?, with whom?, how? and how often?.

- What? Concerns the distinction between three situations: 1) construction project activities with a clear scope , 2) CRE alignment activities regarding going concern accommodation management, and 3) maintenance.
- With whom? That refers to the distinguished internal stakeholders in terms of clients, customers and end-users.
- How? Figuring out the needs and requirements of education (demand analyses) takes place by asking (e.g. account management), by measuring ex post whether people are satisfied with the accommodation solutions (e.g. by a customer satisfaction survey) and by occasional conversations with clients, customers and end-users (e.g. surveying complains).
  Interviewee [case A]: "Facility managers in a building are responsible for their own customer relations: account management, e.g. who is the customer/end-user, what are their requirements, are building adjustments needed, et cetera."
  Interviewee [case D]: "Another way we get informed about user requirements is through the monitoring of complaints via the service desk."
- How often? A distinction is made between frequently and planned versus sometimes and unstructured.

Table 3 shows the different types of relationship management that were mentioned in the interviews.

Table 3 Various types of relationship management as mentioned in the interviews

What?	With whom?	How?	How often?
1. Going concern accommodation management	With the executive board and with middle management	By account management meetings	Occasionally (when there is a need for it)
	With the end-users	By surveying customer satisfaction	Annually
2. Projects (large renovations or construction projects)	With a large representation of internal stakeholders, in particular at a strategic and tactical management level and with a focus on teachers/staff. Student are less involved.	In project teams and focus groups	Structured during the project
3. Maintenance	With the executive board	In budget meetings	Annually

Table 3 shows that relationship management concerning the CRE alignment process is not really structured and mostly depends on coincidence. Besides, it is remarkable that communication in order to achieve an optimal alignment between demand and supply side is mainly based on traditional approaches. Only one of the UAS spontaneously mentioned the use of social media (i.e. Twitter) to stay in contact with end-users.

3a Decision making – managing the power distribution

Decision making is strongly related to the power distribution between various stakeholders involved in the CRE alignment process. The CRE managers mentioned the following aspects in the interviews:

- Decision making is often not clear and transparent.
- The involvement of the various internal stakeholders shows a huge variety. Sometimes the executive board is leading in decision making, but in other UAS, decisions are made by lower management echelons or by involving educational professionals (e.g. teachers and non teaching staff).

The interviewees mentioned several ways how the CRE department operates in decisions regarding CRE alignment. Two opposite approaches were mentioned:

- Reactive or proactive. The reactive CRE department is reacting on concrete demands from the client, customer or end-user at the demand side. The proactive CRE department is anticipating on educational and societal developments, in order to come up with proposals to accommodate those developments.
  Interviewee [case C]: "We are responsible for the availability of facilities and accommodation. Therefore we have to take the lead in the development of these facilities and accommodation. So we can't wait until an academy express their requirements. We should always be a step ahead."
- Advisory or directive. The CRE department may play the role of the consultant, who helps the client with the translation of needs into CRE operating solutions. The client finally decides.
  Interviewee [case I]: "Formerly we were mainly carrying out operational jobs. Now we focus on being an advisor and cooperate with our customers."
  Interviewee [case B]: "What if education wants to change their teaching processes? As a facility professional and partner of the core business, we can help them with the possible consequences for the physical environment."
  In the other role the CRE department is more directive. The customer can request for mutations in the accommodation, but the CRE department is deciding whether that request will be granted (supported by the client of course).
  Interviewee [case J]: "Concerning educational changes, we have to assure ourselves that building adaptations are future-oriented and not just a translation of the current teaching process and the actual building."
  Interviewee [case D]: "We play an important role in the decision whether building adaptations occur or not. […] Requests have to be submitted with the CREM department. We translate these into business cases with an advice for the executive board. Finally they decide, we get the resources and are responsible for the realization."

3b Decision making – preconditions management

Concerning the preconditions the main aspect that was mentioned in the interviews regards finances. Many CRE managers mention that financial resources in higher education are decreasing. Besides, the volume of the resources is often not clear. Two different ways for allocating the financial resources concerning CRE did show up:

- The financial resources are allocated at a strategic level by the executive board or by the CRE executive. Most other internal stakeholders do not have a clear idea of CRE costs and cannot make decisions about which financial resources are available for the accommodation. The CREM department uses standards for space use for a sincere allocation of the financial resources such as 6,4 m2 per enrolled student, € 666 per enrolled student, 6,6% CRE costs as percentage of total costs (Benchmark Dutch Higher professional Education, 2011; OCW, 2011).
  Interviewee [case K]: "Financial incentives only work at a certain organizational level, let's say at a management level […] but teachers care less."
  Interviewee [case D]: "Most end-users are what we call 'cost-unconscious' anyway ."
- The financial resources are delegated by the executive board and allocated at lower organizational levels of the institution (e.g. managers of academies, faculties, course directors). These organizational units pay for the use of their accommodation, often per square meter.
  Interviewee [case B]: "On behalf of the executive board, we are the (delegated) owner of the buildings. Faculties are the tenants of a building. They pay for the square meters space they use."
  Interviewee [case G]: "Academies do not come to us for financial resources, but go for approval directly to the board of managers."
  In some cases these units are even the owners of CRE. This way of allocating financial resources may lead to obvious differences between the way academies, faculties and courses, are accommodated (e.g. different number of square meter per student, different quality of finishing of buildings).

4. Strategies for the CRE alignment process

The above described ways to manage CRE alignment are not equally interpreted in the studied cases. The six types of management show several opposite approaches, which overall lead to two opposite strategies for the CRE department to manage CRE alignment. Table 4 shows the characteristics of these strategies. These two opposite strategies can be linked to the four perspectives of CREM, which is shown in figure 2. Both strategies start at the corporate strategic level at the upper left hand side of the figure, and lead to CRE operating decisions at the lower right hand side.

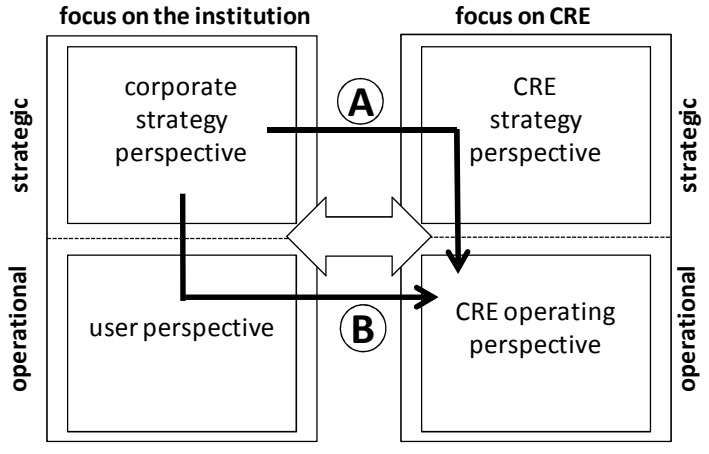
In strategy A the responsibilities, power and often also the financial resources are allocated to the strategic CREM level. The corporate strategies are translated into CRE strategies, which are the starting point for operating solutions. Middle management submits demands and requests from the core processes to the executive board. Communication between demand and supply is mainly organized at a strategic level.

In strategy B the responsibilities, power and often also the financial resources are allocated to lower levels in the organization. CRE operating solutions are directly derived from the operational processes and activities. Thus, the CREM department mainly organizes communication at that level.

Table 4 Two opposite strategies based on the six management approaches for CRE alignment with organizational objectives and business processes (in this case: teaching and learning)

CRE alignment process	Strategy A	Strategy B
1. Coordination:		
1a Stakeholders management	Perception of a homogeneous group of stakeholders	Perception of a heterogeneous group of stakeholders
1b Change management	CREM focus on societal developments and changes and indirectly the educational spin-off for the institution	CREM focus mainly directly on the educational developments within the institution
2. Communication:		
2a Information management	CRE information is strategic	CRE information is operational
	Long term focus on CRE	Short term focus on CRE
2b Relationship management	Focus on client	Focus on customer and end-user
	Structured interaction between CRE and internal stakeholders	Ad-hoc interaction between CRE and internal stakeholders
3. Decision making:		
3a Power distribution	Proactive CREM	Reactive CREM
	Directive role of CREM	Advisory and operating role of CREM
	Top down decision making in CRE	Bottom up decision making in CRE
3b Preconditions management	CRE department has a high influence on financial resources	CRE department has a marginal influence on financial resources
	Cost driven CRE solutions	User driven CRE solutions
	Focus on operational excellence and CRE standardization	Focus on customer intimacy, and custom made CRE solutions

Figure 2 two extreme strategies for the CRE alignment process related to four perspectives of CRE alignment



5. Discussion and conclusion

The two opposite strategies for CRE alignment show a strong similarity with involvement-oriented versus control-oriented management strategies (Meyer, 1991; Lawler, 1992). Strategy A is comparable with control-orientation and a top-down approach resulting in directive standards. Strategy B is more similar to involvement-orientation and a bottom-up approach in which communication with involved stakeholders is key. Similar mechanisms were formulated by Minzberg (1983). He distinguished mutual adjustment and direct supervision with high standardization (Ulft and Axelsson, 2005). Mutual adjustment focuses at the information coming from feedback of stakeholders during the CRE alignment process. Direct supervision focuses at having one person as the linking pin and responsible for CRE alignment process, supported by standards, e.g. procedures, norms and formats.

The visualization of the two strategies in figure 2 shows resemblance to the strategic alignment perspectives in the IT industry in the 1990s, based on the Strategic Alignment Model of Henderson and Venkatraman (1990). Henderson and Venkatraman (1990) describe the linkages between the core business and Information Technology (IT), in a comparable way as the linkage between the core business and CRE in figure 1. Like the strategies in figure 2, they show two opposite ways of how the business strategy may lead to operating IT solutions.

To conclude, three relevant elements of the CRE alignment process are coordination, communication and decision making. These three aspects can be managed by six types of management: stakeholder management, change management, information management, interaction management, managing the power distribution between stakeholders and preconditions management. In practice, overall these approaches result in two opposite strategies to cope with CRE alignment: the involvement-oriented strategy versus the control-oriented strategy.

The results of the empirical study show that there is a shift in Dutch UAS from a control-oriented CRE alignment strategy of CRE departments to an involvement-oriented CRE alignment strategy. In practice that leads to a more advisory role of the CRE department and customer intimacy by an increased eye for the end-user and approaches as co-creation and collaborative design. Yet, A and B each represent an extreme CRE alignment strategy. These are hypothetical. Reality will be in between the two described strategies.

The empirical study also shows the necessity to bring the educational demand side and the CRE professionals closer together. It is essential to invest in the development of a common language between demand and supply side, and to develop new ways to recovering the educational needs and requirements and to translate these needs into future-proof accommodation solutions.

6. Acknowledgements

The authors would like to thank HAN University of Applied Sciences for supporting the research and all participants for their contribution to this study.

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