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Why should Organisations Govern Enterprise Search?

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Full Papers

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Abstract

Enterprise search is an area of increasing importance that has not received the attention it deserves. In today's information-rich business environment, the ability to find effectively what you are looking for is vital, and what tools to provide for enterprise search is thus a decision of strategic importance. In this exploratory study, we investigate enterprise search from an IT governance perspective. We ask to what extent management is active in shaping strategies for enterprise search and what effect this has on perceived findability and search satisfaction. Based on results from more than hundred organisations our study concludes that the existence of an explicit strategy for enterprise search is important for organisational performance and that such a strategy is more likely to be in place when there is an active IT governance function involved. We argue that organisations should take enterprise search more seriously by making it an IT governance issue.

Keywords

Enterprise search, search strategy, findability, satisfaction, IT governance

Introduction

Information technology (IT) governance is acknowledged to be a vital organisational function that directly influences what benefits are generated by investments in IT (Weill, 2004). It is therefore not surprising to find the term being widely used both by practitioners and scholars. Yet, it remains somewhat difficult to define exactly what IT governance is. Webb *et al.* conclude that "IT governance is a broad-reaching concept that consists of multiple components [...]" (2006, p.1). They further suggest that the lack of shared understanding stems from the fact that different scholars focus on different aspects of IT governance. The importance of alignment between IT and other business functions is something often highlighted when considering IT governance (*cf.* Luftman, 2000; Henderson & Venkatraman, 1999). Further, Prasad *et al.* (2010) suggest that adequate IT governance can improve the enterprise's processes and overall business performance. Based on a broad literature study, Webb *et al.* (2006) argue that IT governance should be understood as the strategic alignment of IT with business in such a way that business value is maximised through effective control and accountability processes.

In this paper we study one IT component that not only has received much attention in recent years but also seen a shift in the focus of the interest; the web search engine. According to Wu and Brynjolfsson (2013), search engine technology has become a standard component in people's everyday online lives and whenever we use these devices to search the Web, we reveal information about our intentions and preferences. By aggregating such online footprints, business analysts can significantly improve the accuracy, granularity, and timeliness of predictions about future economic activities, allowing

organisations to sharpen their strategies and significantly increase the profit. This new use of search technology, Wu and Brynjolfsson explain, is not just an incremental upgrade from yesterday's practice, but "a fundamental transformation of how much is known about the present and what can be known about the future" (ibid., p. 3). Search technology has become a major strategic component and thus something that should be governed and not just managed.

But it is not only the public Web that can be used for data analysis – organisational intranets are also continuing to grow. Beath *et al.* (2012) studied 26 varied sized organisations and according to them, the increase in data volume amounts to between 30% and 50% on a yearly basis. Clear business strategies regarding information-seeking can generate profits, but most organisations are still not leveraging the increased amounts of data they possess internally (ibid.). Whilst public Web search has been studied intensively for many years, enterprise search has largely been overlooked. This is unfortunate, since enterprise search differs in many ways from public web search, and knowledge from the public Web domain cannot be transferred to enterprise search (Fagin *et al.*, 2003, Hawking, 2004; Mukherjee & Mao, 2004; Stenmark & Jadaan, 2006). Further, the bulk of literature on public Web search has had an individual perspective in focus, typically dealing with behavioural or cognitive characteristics of the seeker. Not much work, if any, has looked at searching from the point of view of the organisation, or applied a strategic perspective on search.

In this exploratory work, we address enterprise search governance as an area of relevance as employees' ability to find information depend on what types of search tools they have at their disposal, which in turn is a consequence of how enterprise search is governed. Chun and Mooney (2009) state that it is the responsibility of the Chief Information Officer (CIO) to see that the organisation's IT-systems are leveraged to add value by supporting the business strategy. According to Drnevich and Croson (2013), "strategy" is defined as a number of management decisions concerning how to balance an organisation's considerations between being efficient (reducing costs) and being effective (creating and capture value) to achieve the business goals. IT governance deals with decision-making rights (who is responsible for IT investments?), input rights (who provides input into IT investment activities?), and accountability measures (how do we ensure that IT investments have positive effects?) (Brown & Grant, 2005). We study this by investigating how enterprise search is being governed with the following questions in mind: How involved are today's CIO's in enterprise search? To what extent are management active in shaping their enterprise´s search strategies? The research literature has to our knowledge no answers to these questions, which indicates a need for more research on enterprise search governance.

The paper is organised as follows: Next comes a theoretical part generating seven hypotheses. Chapter 3 describes the research method and chapter 4 presents the results from our survey. In chapter 5, we discuss and interpret our findings and we thereafter present our conclusions in chapter 6.

Governance of enterprise search

Xue *et al.* (2008) emphasize the importance of adequate IT governance and its role in overseeing every step of the decision process regarding IT investments. According to Khallaf (2012), the reason organisations make investments in the area of IT is to strengthen their strategic position and reach sustainable competitive advantage. IT investments have led to enhancements in businesses and Khallaf specifically talks about product quality, customer relations and innovation. Some of the literature that exists within this area talks about the intangible benefits of IT investments (Bocij *et al.*, 2008). Bharadwaj (2000) discusses how easily IT-investments can be duplicated by competitors and therefore, an investment in itself cannot contribute to a sustainable competitive advantage. Furthermore, he argues that it rather depends on how an enterprise uses their investments in order to create overall effectiveness (Bharadwaj, 2000). Devaraj and Kohli (2003) also point out the importance of the correct use of an IT investment. They mean that there is evidence suggesting that investments in IT have monetary gains when usage of the technology is considered (ibid.).

IT governance influences the overall corporate governance in different ways depending on the size of the organisation (Sambarmuthy & Zmud, 1999). Smaller organisations are more likely to make centralised efforts in order to manage and coordinate activities that are being carried out in each sub-unit. Further, Bharadwaj (2000) discusses the relationship between IT capability and enterprise achievement, which refers to how organisations use their IT-resources. His results show that enterprises with high IT capability tend to exceed a random sample of organisations in terms of profit and cost-based

performance. His starting point is that an organisation's operating performance varies by sector and size. He states that literature in accounting has acknowledged that size, for instance, is a strong predictor in regards to the choice of how to calculate costs (ibid.). Given that size tends to be such a vital factor in other major business areas, and adding earlier conclusion about the immense growth of information volume in organisations, one can expect differences in findability-level regarding search and retrieval of information between various-sized companies.

Consequently, we suggest the following hypotheses:

- H1: An organisation's size affects the extent to which information can be found.

- H2: An organisation's size affects the extent to which the employees are satisfied with their search applications.

Bocij *et al.* (2008) mean that despite a large investment in IT, it is not totally clear to which extent those investments benefit the organisation. This illustrates the importance of a distinct strategy to make the IT investment support the organisation's business goals. Furthermore, they argue that it is relatively easy to identify the cost concerning IT investments but harder to detect and quantify the benefits with the reason being that the benefits often are intangible and therefore harder to ascribe a financial value (Bocij *et al.*, 2008).

According to Melville *et al.*, (2004) the different types of benefits can be formulated as efficiency and effectiveness, where efficiency addresses cost-reduction and increased productivity in a certain business process. Effectiveness refers to the intangible achievements such as improved relation to the organisation's environment (Melville *et al.*, 2004). Bocij *et al.* (2008) argue that the benefits from IT investments appear when organisations manage to do things that they could not do or did not do very well before (Bocij *et al.*, 2008). One way to make this happen would be for IT systems to be searchable and respond to user's questions with adequate information (Kuhlthau, 1991).

Mithas *et al.* (2012) found empirical evidence indicating that IT investments per employee have a positive and statistically significant association with revenue. Their research shows that increased IT expenditure per employee by $1 is associated with over a $12 increase in sales per employee. Even in the sense of IT investment versus advertising they found statistically significant differences that showed that IT investments on profitability are even greater than other major investment areas within an organisation, such as advertising (Mithas *et al.*, 2012). In addition to this, Miller and Monge (1986) emphasise that there are more to it than the financial benefits from the increased productivity that comes with IT investments. They argue that the increased productivity leads to a higher degree of participation among the employees which leads to a higher level of satisfaction (Miller & Monge, 1986). Their arguments are supported by Ostroff (1992) who states that organisations that have more satisfied employees are more productive. Having a governing strategy therefore plays a significant and substantial role when it comes to gaining benefits from IT investments.

According to Drnevich and Croson (2013), IT take on different roles, each with considerable performance implications in an enterprise's strategy at the business level. They argue that at the level of business strategy, IT's role might be to encourage improved organisational performance by lifting current non-digital capabilities and allow fresh digital capabilities to produce and capture value. They underline that such elements of value generating and seizing are fundamental aspects of business-level strategy (Drnevich & Croson, 2013). An assumption will be made that investments in search is a part of an organisation's IT investments and associated strategies and we want to investigate if this has anything to do with the level of satisfaction within the organisation. In addition, we suggest that the findability of the information assist the workers in being more efficient and productive when searching, hence more satisfied.

This leads us to formulate the following hypotheses:

- H3: Having an explicit strategy for search affects the extent to which the employees are satisfied with their search applications.

- H4: There is a positive correlation between an organisation's perceived ability to find information within the organisation and their perceived satisfaction with their search applications

In addition, if organisational size affects the ability to find information and the employees' level of satisfaction, and if having an explicit strategy for enterprise search to remedy such problems, it seems plausible that larger organisations are more likely to implement such strategies. In order to test this, we propose the following hypothesis:

- H5: Organisational size should affect an organisation's likelihood of having an explicit search strategy.

Who is responsible for enterprise search technology and strategy? According to Banker *et al.* (2011), the Chief Information Officer (CIO) is a role within an organisation that has become increasingly influential throughout the last decades. A study conducted by Raghunathan & Raghunathan (1989) showed that the CIOs ability to influence decreased significantly when he/she operates two or more levels below the CEO. Chun and Mooney (2009) showed that this has changed as CIOs now have a more executive role and generally report directly to the CEO. Banker *et al.* (2011) propose that the CIO tends to engage in several different responsibilities such as being in charge of the IT function, manage information resources and vouch for IT as a means for business change (Banker *et al.*, 2011). Therefore, there is reason to believe that the CIO also makes decisions about and is involved in managing matters about search technology. However, there are also other management functions who can take an active role in IT governance so our last set of hypotheses are as follows:

- H6: The involvement of management in an enterprise search programme is positively related to the existence of a strategy for search

- H7: Having an appointed management function as the final decision-maker regarding search investments is positively related to the existence of a strategy for search.

Method

To examine the above hypotheses, the research team designed a questionnaire in collaboration with an independent IT consultancy firm, specialising in information seeking. The consultancy firm was established in 2005 and hence they have almost ten years of experience in the search sector and therefore a vast network of companies engaged in enterprise search. The questionnaire was divided into seven different sections in order to give the respondent a context and understanding for each set of questions. The questionnaire was made available through online channels such as Slideshare, LinkedIn, Twitter and Facebook, but also emailed to handpicked recipients known to the consultancy firm. Therefore, a random sampling method was not used for this study. The survey was addressed to those who were responsible for enterprise search in their organisations. By distributing the questionnaire in consultation with the consultancy firm, and relying on their network of people and organisations, we tried to make sure that 1) the questionnaire reached a broad range of organisations worldwide, 2) the questionnaire reached organisations of various sizes, and 3) people in the right organisational positions were the ones responding. These efforts were made in order to have an as broad sample as possible whilst yet reaching relevant respondents.

A total 140 organisations started to answer the questionnaire and out of these, 112 actually finished by answering every single question. Responses were collected by the same company as mentioned before using a web application tool. When collecting the data, the questionnaire had been available for fourteen days and no reminders were sent out during this period. This was the third consecutive year that the company sent out the survey and the number of responses received was in parity with the two previous years.

The survey was not anonymous since we needed to verify that the respondent, who spoke on behalf of their organisations, were indeed involved in their organisations' search efforts. Entries that could be questioned were removed from the dataset. The identity of the responding persons, as well as the names of the participating organisations, were anonymised by the consultancy firm before the data was passed on to us. The data was subsequently analysed using statistical methods including z-test, ANOVA, Pearson's r and Chi-2.

Results

Here we present the results obtained when we tested the hypotheses we introduced in section 2, and first out is hypothesis 1 (H1): An organisation's size affects the extent to which information can be found.

In this test, we used the question "How difficult is it for the users to find the information they are looking for?" across organisational size and compared the different means. The data presented in table 1 suggest that smaller organisations perceive it to be easier to find information. An ANOVA test (F=2.77, df=(5, 119), p=0.021) shows that the differences are statistically significant on the 5% level. Noticing a significant pivot point at 1000 employees, we grouped the organisations into Smaller and Larger companies, respectively. Testing the differences between these, we again found the differences to be significant (z=3.606, p<0.001 two-tailed), whereas the internal differences amongst the small companies (F=0.695, df= (1, 39), p=0.41) and amongst the large companies (F=0.254, df=(3, 80), p=0.86) were both insignificant.

	Size (no. of employees)	No. of orgs.	Mean	Mean
Small companies	1-250	31	3.23	3.29
	251-1000	10	3.50	
Large companies	1001-5000	31	2.74	2.68
	5001-10000	13	2.54	
	10001-50000	26	2.62	
	50001 or more	14	2.79	
		N=125		

Table 1. ANOVA test of perceived difficulty of finding information (1=Very difficult, 5=Very easy) within the organisation, reported per different size segments

Our second hypothesis (H2) reads: An organisation's size affects the extent to which the employees are satisfied with their search applications.

For testing H2 a similar approach was used conducting an ANOVA test, but in this case we are testing the question "How satisfied are the users with the existing search application(s) within your organisation?" across organisational sizes. An ANOVA test (F=3.82, df=(5,116), p=0.0031) shows that the differences are statistical significant at the 1% level. The data is presented in Table 2.

	Size (no. of employees)	No. of orgs.	Mean	Mean
Small companies	1-250	29	3.34	3.26
	251-1000	10	3.00	
Large companies	1001-5000	31	2.61	2.53
	5001-10000	12	2.33	
	10001-50000	26	2.54	
	50001 or more	14	2.50	
		N=122		

Table 2. ANOVA test of perceived satisfaction with the search applications (1=Very dissatisfied, 5=Very satisfied) within the organisation, reported per different size segments

The results also suggest that size has an impact on the extent to which the users are satisfied with their search application(s). Again we can distinguish a tendency that when an organisation exceeds 1000 employees, the level of perceived satisfaction decreases drastically.

Performing a z-test for the mean differences between small and large companies, we again found the differences to be significant (z=4.508, p<0.0001 two-tailed), whereas the internal differences amongst the

small and the large companies, respectively, were not significant, (F=1.45, df=(1, 37), p=0.24) and (F=0.253, df=(3, 79), p=0.86).

Next, we turn to employee satisfaction as the dependent variable and hypothesis 3 (H3) which suggests: Having an explicit strategy for search affects the extent to which the employees are satisfied with their search applications. Figure 1 illustrates the different mean level of perceived satisfaction between organisations with a search strategy and those without. As seen in figure 1, the level of satisfaction is higher when a strategy for search exists.

Figure 1. Relationship between the existence of a search strategy and the perceived satisfaction

To investigate these differences, a z-test was conducted, and we found the differences to be statistically significant at the 1% level (z=2.95, p<0.01). We therefore say that H3 was strongly supported by our data (see also table 3).

	Without strategy	**With strategy**
Mean	2.5645	3.1087
Variance	0.7745	0.9879
Observations	62	46
|z|	2.9526	
P(Z<=z) two-tailed	0.003151	
z-critical 1%	2.807	

Table 3. Results of a z-test for differences in perceived satisfaction between organisations that had and had not a search strategy in place

Regarding perceived satisfaction we also suggested that it should be linked to the perceived level of findability in hypothesis 4 (H4): There is a positive correlation between an organisation's perceived ability to find information within the organisation and their perceived satisfaction with their search applications.

When performing a Pearson's r test, we obtained an r-coefficient of 0.7792, which indeed indicates a positive relationship. We thereafter performed a t-test and found the correlation to be statistical significant at the 1% level (t =13.6227, p <0.01). We can thus say that there is a correlation between the two variables, so that when the perceived findability level of information increases, so does the perceived level of satisfaction. However, an R^2-value of 0.6073 suggests that only 60% of the variance in perceived satisfaction can be explained by variation in perceived findability. A plot of the two variables is shown in figure 2.
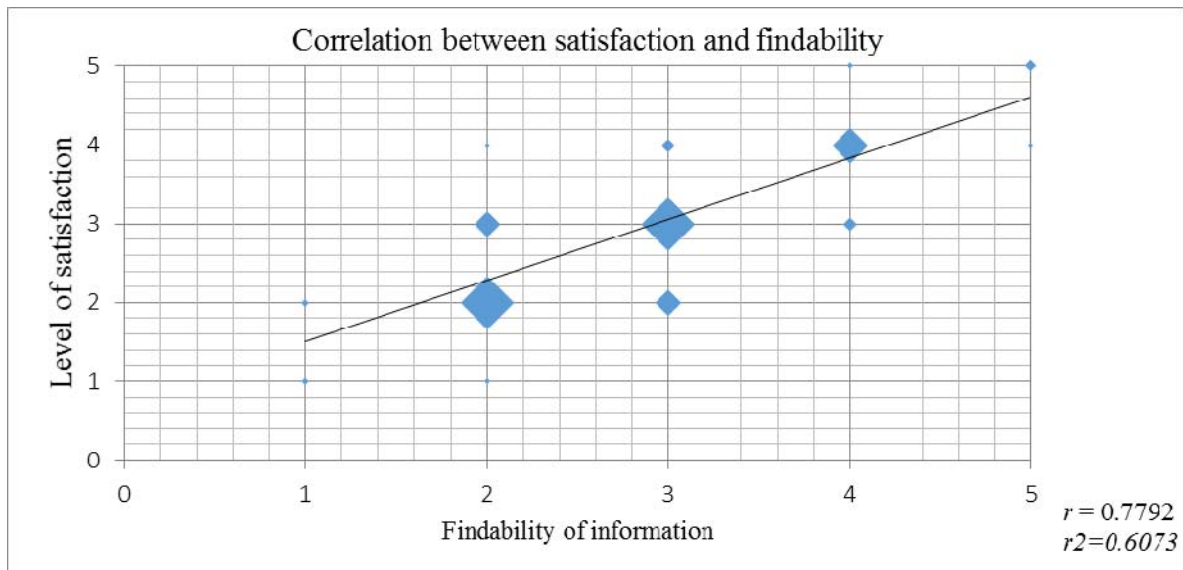
Figure 2. Plot of the relationship between findability and satisfaction (N=122)

We also suggested that larger organisations should be more likely to have an explicit search strategy in place in hypothesis 5 (H5): Organisational size should affect an organisations likelihood of having an explicit search strategy.

Our data shows that size has an effect on the likelihood of having a search strategy and table 4 shows that really small and really big companies are more likely to have a search strategy in place. These differences are statistical significant at the 1% level ($\chi2$= 15.09, df=5, p<0.01).

	1-250	251-1000	1001-5000	5001-10000	10001-50000	>50000	Total
With strategy	17	2	8	*3*	7	10	*47*
Without strategy	12	8	16	*8*	17	3	*64*
Total	*29*	*10*	*24*	*11*	*24*	*13*	*111*
$\chi2$	15.0876						
Critical value 5%	11.070						
Critical value 1%	15.086						
p	0.000999						

Table 4. Results from the Chi-2 test regarding whether organisational size had any effect on the likelihood of having a strategy

Finally, we turn to the role of governance in general and of the CIO in particular in the following two hypotheses that have the existence of a search strategy as the dependent variable.

First, we formulate hypothesis 6 (H6): The involvement of management in an organisation's search programme is positive related to the existence of a strategy for search.

To test H6, we carried out a Chi-2 test. As table 5 shows, companies where the CIO was involved in the governance were more likely to have an explicit strategy for search, and these differences were statistically significant at the 1% level ($\chi2$=14.60, df=2, P<0.001). H6 was thus supported. Prompted by the data in

table 5, we also tested whether it was the engagement of the CIO *per se* that made the difference and we found this to be the case (χ2=7.50, df=1, P=0.0061).

	CIO involved	Other management function involved	No management involved	Total
With strategy	15	28	4	*45*
Without strategy	7	34	23	*58*
Total	*22*	*62*	*27*	*111*
χ2	14.599			
Critical value 1%	9.2103			
p	0.00068			

Table 5. Results from the Chi-2 test regarding whether management's involvement had any effect on the likelihood of having a search strategy.

We then make the same suggestion regarding management and the CIO deciding about investments in search technology in hypothesis 7 (H7): Having an appointed management function as the final decision-maker regarding search investments is positively related to the existence of a strategy for search.

As is evident from table 6, our data suggests that companies where the decisions about search investments are made without management involvement are less likely to have an explicit search strategy. The differences indicated in table 5 are statistical significant at the 5% level (χ2= 8.92, df=2, p<0.05). In this case, a separate test of the CIO showed that although there were more often a search strategy in place when the CIO made the decisions, these differences were not statistically significant (χ2= 3.46, df=1, p=0.063).

	CIO makes decision	Other management function decides	Unclear who decides	Total
With strategy	17	29	1	*47*
Without strategy	13	39	12	*64*
Total	*30*	*68*	*13*	*111*
χ2	8.9172			
Critical value 5%	5.9915			
Critical value 1%	9.2104			
p	0.01158			

Table 6. Results from the Chi-2 test regarding whether who decides had any effect on the likelihood of having a search strategy

Discussion

One of the purposes of IT governance, as identified by the IT Governance Institute, is to ensure that IT enables the enterprise to exploit business opportunities and maximise benefits (ITGI, 2003). In this paper, we quantitatively studied the governance of enterprise search, since it is a well-established fact that productivity within an organisation depends heavily on having access to information (*cf.* Miller and Monge, 1986). Organisational members' ability to find information effectively and efficiently is thus increasingly important in today's business landscape. Unlike many other productivity-enhancing features that can be employed at an individual level, enterprise search tools are too complex and too big investments for individuals to handle. A centralised, enterprise-wide approach must be taken but there has been little literature to guide management in these decisions. Our objective has been to remedy this situation.

Firstly, we investigated whether or not the organisational size has an impact on how those responsible for the enterprise search perceived the employees' overall findability (H1), since previous research (e.g., Beath *et al.*, 2012) has suggested that organisations with many employees also have a larger amount of information. Our study covers around 120 organisations, ranging from small (1-250 employees) to large (more than 50000 employees). As our data indicates, there is indeed a link between organisational size and the perceived ability to find information, but it is not a linear relationship. It is perceived to be more difficult to find information when the number of employees reaches a certain threshold and our results indicate that this turning point is around 1,000 employees. In our data, we can see that mean values for ease of finding information in "small" organisations (1-250 people and 251-1000 people) exceed 3.2 (5=Very easy), whereas "large" organisations (i.e., those with more than 1,000 employees) have a mean of around 2.7 (1=Very difficult). This differences between small and large companies was significant ($p<0.05$), while the differences within each group were not significant.

We also investigated whether or not the organisational size has an influence on the extent to which the employees are believed to be satisfied with their search applications (H2). Even in this case our data shows a connection between organisational size and the employees' perceived satisfaction regarding search. Again, we witness a turning point at 1,000 employees where organisations employing less people than that have a significantly ($p<0.01$) greater perceived mean satisfaction level than have larger organisations.

Interestingly enough, both perceived findability and perceived satisfaction pivot around the 1,000 employee mark, with the smaller organisations coming out as winners. These results indicate that organisations' search application(s) might not be efficient enough to handle the growing volumes of information that we see in today's business landscapes. We further tested the correlation between perceived findability and perceived satisfaction and found it significant (H4). This is important since the literature (*cf.* Miller & Monge 1986; Ostroff, 1992) has claimed a relationship between the employees' satisfaction level and their productivity.

Although these results may not be surprising, it is to our knowledge the first time a study has presented empirical support for the relationship between perceived findability and perceived satisfaction. Since many of our taken-for-granted-assumptions turn out to be incorrect, it is important to distinguish between knowing and believing. Further, the 1,000-employee turning point has not been identified in previously literature and therefore provides useful input to both researchers and practitioners. Taken together, we argue that it is increasingly important for larger organisations (who struggle both with satisfaction and findability) to engage seriously in enterprise search in order to keep the employees productive.

Secondly – and from a more direct governance perspective – our results also indicate that having an outlined strategy regarding enterprise search has a positive influence on the perceived level of satisfaction with the organisation's search application(s) (H3). We argue that an established strategy regarding enterprise search indicates that the organisation has an active governance function in place and therefore a more thought-through search solution.

We have seen that an explicit search strategy can help raise satisfaction levels. It is therefore good news to learn that large organisations- where information seeking appears to be a bigger problem - are more inclined to have a strategy for enterprise search in place. Interestingly enough also really small

organisations seem to have implemented search strategies. Previous research on IT governance has found that organisational size has no effect on what form of IT governance an organisation adopts (*cf.* Tavalkolian, 1989; Clark, 1992) and more research is needed to understand in full the implications of these findings.

In our sample, 47 out of the 119 responding organisations had search strategies; ten companies (8%) said that their search strategy was business-related, fourteen companies (11%) claimed it to be IT-related and twenty-three companies (18%) said that they had both a business and an IT-related search strategy. When tested explicitly using an ANOVA, there were no significant differences in satisfaction based on what different strategies the organisations used. We thus conclude that the type of search strategy (business or IT) does not matter as long as there is a strategy.

The existence of an explicit search strategy depend on a number of different factors but in this research we wanted to see whether involvement of IT governance in general, and of the CIO's involvement in particular, were more likely to result in an explicit search strategy. Our results show that this is actually the case (H6). Organisations where management did not engage in search were significantly less likely to have an explicit strategy for enterprise search ($p<0.01$). The CIO's involvement per se also had a significant impact ($p<0.01$). Edmunds and Morris (2000) argued that the information specialist would become more involved in an organisation's overall strategy in the beginning of the 21st century, and we thus draw parallels between an information specialist and a CIO.

Finally, having a clear owner of the search solution also appears to be of significance. We tested whether or not the presence of a search strategy is related to who decides about search investments (H7). Our results show that such a relationship exists; companies where there is no clear decision-maker are much less likely to implement a search strategy ($p<0.05$). In this case, although the CIO was involved more often when a strategy was in place, this difference was not quite big enough to be statistically significant ($p=0.063$). We argue that these findings suggest that a centralised IT governance strategy is to prefer when it comes to enterprise search.

Conclusions

Our purpose with this paper was to find out how findability and satisfaction are affected by the way organisations are governing enterprise search. We have formulated and tested seven hypotheses and found all of them to be supported.

Firstly, our study shows that bigger organisations have a harder time finding the information needed and their employees tend to be less satisfied with their search tools. Secondly, we show that having a management function that is actively engaged in the search program – either through governance or ownership – increases the likelihood of having an explicit strategy for search. Thirdly, we find that the existence of an explicit search strategy and the ability to easily find the information needed are both positively related to perceived employee satisfaction with their search tools.

We thus conclude that it is important to have an explicit strategy regarding enterprise search and that such a strategy is more likely to be in place when there is an active IT governance function involved – preferably including the CIO. We recommend that organisations – and in particular large ones – should take enterprise search more seriously by making sure these issues end up on the CIO's table.

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