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WHAT SHOULD FIRMS LOOK FOR IN A CIO?

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ABSTRACT

Many firms are trying to give Information Technology (IT) a more central role in their business strategies in an attempt to combat the economic downturn. As such, they want to hire Chief Information Officers (CIOs) to manage this process but don't want to upset the existing power balance of the executive team. We propose the CIO's formal position in the firm, the CIO's business and technical knowledge, and the important connections the CIO has established are CIO attributes that may influence the shared understanding of the business and IT executive team members and, in turn, financial performance. Analyzing data collected from 138 CIOs, the results suggest structural power and prestige power are positively associated with social alignment. However, expert power may not be related to social alignment. We also found a positive relationship between social alignment and financial performance. We discuss the implications of these results for research and practice.

Keywords

Chief information officer, CIO, power, social alignment, financial performance

INTRODUCTION

Company4Change¹ is a large, public manufacturing firm located in the United States (US). Its executive team is comprised of a Chief Executive Officer (CEO), Chief Operating Officer (COO), and Chief Financial Officer (CFO). Like so many other companies (Luftman and Ben-Zvi 2010), the economic downturn has caused the firm to experience decreased revenues, hiring freezes, budget cuts, salary reductions, and stalled projects. While the firm previously considered IT as a support function used only to ensure the computer systems were functioning properly and meeting business needs, Company4Change recently determined IT must play a more central role in its business strategies if the firm is going to cope with the recession and gain a competitive advantage. To facilitate the strategic role of IT and ensure IT is embedded in and aligned with the business strategy, the CEO will hire a high-ranking IT professional, or CIO, who will be responsible for applying the firm's IT resources in such a way that both supports and is supported by business initiatives (Carter, Grover and Thatcher 2011; Synnott and Gruber, 1981).

While hiring a CIO to lead the firm's IT initiatives may seem simple, Company4Change's CEO knows strategic decisions are unstructured and ambiguous in nature such that power-seeking behavior is frequently demonstrated by individuals on the executive team (Finkelstein 1992; Jasperson, Carte, Saunders, Butler, Croes and Zheng 2002). To make this power-balance even more complicated, IT resources are restricted due to lower IT budgets and uncertainty is often associated with IT solutions and payoffs (Banker, Hu, Pavlou and Luftman, 2011; Pettey and Stevens, 2010). To ensure the executive team's power balance (i.e. commitment to and understanding of each other) is not adversely affected by a new CIO position, the CEO may need to consider some specific CIO attributes before making an employment decision.

First, the CEO may need to determine where the CIO should be positioned in the hierarchy. On the one hand, a CIO who reports directly to the CEO and is an active member of the executive team may have the greatest influence on the joint development of business and IT strategies (e.g. Byrd, Lewis and Bryan, 2006; Peppard, 2010). On the other hand, it may be better for the CIO to report to the COO or CFO to bridge the gap between IT and operations or finance, respectively (e.g. Banker et al., 2011; Broadbent, 2004). In either case, the issue at hand is whether the CIO should have the opportunity to communicate with the executive team laterally (as a peer) or upwardly (as a representative of the IT support function) (Enns, McFarlin and Huff, 2007).

The CEO may also need to ascertain the type of skills and knowledge the CIO should possess. Many companies err on the side of hiring a technologist for the role, assuming the position is all about technology (Peppard, 2010). However, some companies recognize the CIO is more than a technology expert because the CIO must also fundamentally understand how IT can drive business change and, more specifically, be able to express how the firm can benefit from the use of IT in business language (Applegate and Elam, 1992; Kaarst-Brown, 2005). This suggests the CEO may need to determine whether the CIO should possess business and technology skills as a means of working effectively with the executive team members.

¹ This is a fictitious company created for the purpose of this paper.

Finally, the CEO may also need to consider how the CIO will fit into the firm's existing social network (Bassellier and Benbasat 2004; Day 2007). This may include an evaluation of the formal and informal relationships the CIO has established with key individuals in the industry and firm. Ideally, these relationships would help the CIO establish lines of communication that allow the CIO to fully understand the business (Chatterjee, Richardson and Zmud 2001; Tarafdar and Qrunfleh 2009). On the other hand, these relationships may have little or no effect if the CIO is viewed as a newcomer who is unequal to the high-level executives or if the CIO's ideas conflict with those of the business (Kaarst-Brown 2005; Law and Ngai 2007). Therefore, the CEO may need to assess the value the firm places on the CIO's connections, determine whether the CIO has established relationships that are beneficial to the firm, and evaluate the CIO's potential acceptance by the executive team.

Taken together, this suggests the Company4Change CEO may be able to give IT a more central role in the firm's strategic decisions if the CEO considers who the CIO will report to in the hierarchy, what knowledge the CIO should possess, and the social network the CIO has developed. Prior research proposes these CIO attributes may have an impact on the shared understanding of an executive team and, ultimately, firm performance (e.g. Bunderson, 2003; Enns, Huff and Golden, 2003; Medcof, 2008). While some researchers have empirically examined various CIO attributes as antecedents of the shared understanding between the CIO and executive team (e.g. Preston and Karahanna, 2009), we did not find any studies that considered these three types of power nor the ultimate impact on financial performance. Therefore, this study is designed to facilitate an understanding of the attributes that CEOs should look for in a CIO to ensure the executive team will continue to work well together while also giving IT a more central role in the firm. Thus, we focus on the following research question:

What power attributes should a CEO look for in a CIO to ensure executive team social alignment?

The remainder of this paper is organized as follows. In the next section, we discuss the relevant literature and present our research model of how CIO power may impact the executive team's social alignment and, ultimately, the firm's financial performance. The research method and results sections describe our data collection process, sample, and empirical results from the linear regression. We conclude with a discussion including key findings, implications for theory and practice, limitations, and suggestions for future research.

RESEARCH MODEL

Social alignment refers to "the state in which business and IT executives within an organizational unit understand and are committed to the business and IT mission, objectives, and plans" (Reich and Benbasat 2000 p82). Through social alignment, firms have the ability to develop and share knowledge, understanding, and commitment between business and IT such that the two can be integrated or aligned with each other (Armstrong and Sambamurthy, 1999; Bassellier and Benbasat, 2004; Broadbent, Weill and Neo, 1999).

Structural power is the "CIO's level of legitimate power due to his or her formal position within the hierarchy of the organization" (Chen, Preston and Xia 2010 p245). In this case, the focus is on power residing in the position rather than the person (Finkelstein, 1992; Greve and Mitsuhashi, 2007). As such, an individual with a formal position on the executive team (and who may report directly to the CEO) has direct access to conversations with the executive team. This interaction may be integral in giving the CIO and executive team members a chance to share their knowledge such that they can develop a shared understanding and commitment to each other's objectives (Preston and Karahanna, 2009); therefore, we posit:

H1a: Structural power will be positively related to social alignment.

Expert power is the ability of CIOs to deal with strategic contingencies of the firm through the development of their business and technical knowledge (Finkelstein, 1992; Medcof, 2008). Business knowledge refers to the gathering of information about how the business functions (McNulty, Pettigrew, Jobome and Morris, 2011). Technical knowledge refers to the CIO's understanding of technology. A CIO who possesses both business and technical knowledge may be more likely to understand the business priorities, opportunities, and needs for strategically using IT and then may be able to more clearly communicate the strategic importance of IT to the executive team (Smaltz, Sambamurthy and Agarwal, 2006); therefore, we posit:

H1b: Expert power will be positively related to social alignment.

Prestige power is defined as the "managers' reputation in the institutional environment and among stakeholders" (Finkelstein, 1992, p.510). Prestige power is greatest when the CIO is connected to powerful people outside and inside the firm. Connections outside the firm indicate the CIO may be connected and knowledgeable about the industry and IT profession such that it may be possible to develop a stronger employee base and gather information about new technologies (Finkelstein, 1992; Medcof, 2008; Swanson, 1994). Similarly, a CIO with connections already established inside the firm may suggest the CIO could easily socialize and integrate into the firm's environment (Perrewe and Nelson, 2004; Preston and Karahanna, 2009). Based on these connections, the executive team may be more likely to trust the CIO's judgment such that:

H1c: Prestige power will be positively related to social alignment.

Financial performance "measures trends in return on investment, profitability, liquidity, market share, and business growth" (Mithas, Ramamsubbu and Sambamurthy, 2011 p243) where firms with higher levels of alignment are more likely to see higher levels of financial performance than firms with lower levels of alignment (Cragg, King and Hussin, 2002; Croteau and Raymond, 2004). Since we expect the relationship between social alignment and financial performance will be positive, we posit:

H2: Social alignment will be positively related to financial performance.

The model is illustrated in Figure 1.

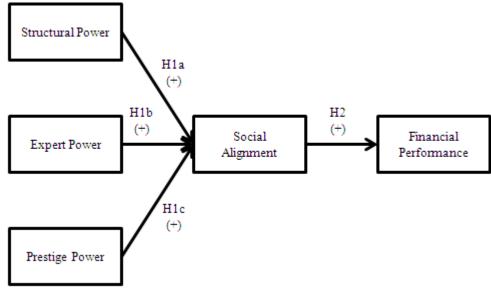


Figure 1. Research Model

RESEARCH METHOD

In June 2011, the lead author created and administered a Survey Monkey² questionnaire to the most senior IT professional in the firm³. These IT executives had titles such as CIO, Director of IT, Vice President of IT, and Chief Technology Officer (e.g. Banker et al. 2011; Preston and Karahanna, 2009). The respondents were contacted by a third-party national market research firm, *Research Now*, with a CIO panel of almost 2,500 members. Of the 1,077 CIOs who received the survey via e-mail, 218 panelists clicked on the survey link page that sent them to the survey (see Appendix A for the full survey). Of these, only 138 responses were useable (e.g. failure to respond completely, screening question elimination). While this response rate of 12.8% is low, this is consistent with research conducted on CIOs where response rates range from 7 to 20% (Oh and Pinsonneault, 2007; Preston, Karahanna and Rowe, 2006).

RESULTS

We used Linear Regression in IBM SPSS Statistics Version 19 to analyze the research model. First, we tested the relationships between the power variables and social alignment (H1a-H1c). The results indicate structural power (H1a: $\beta = 0.25$, t = 2.74, p<0.01) and prestige power (H1c: $\beta = 0.41$, t = 4.21, p<0.001) are significantly related to social alignment; therefore H1a and H1c are supported. We found expert power was not significantly related to social alignment (H1b: $\beta = 0.11$, t = 1.22, p=0.22); therefore, H1b is not supported. Overall, the model is supported with the following model fit statistics: $R^2 = 0.466$, Adjusted $R^2 = 0.454$, F-value = 39.04, and p<0.001.

Second, we tested the relationship between social alignment and financial performance (H2). The results indicate social alignment is significantly related to financial performance (H2: $\beta = 0.40$, t = 5.11, p<0.001); therefore, H2 is supported.

² www.surveymonkey.com

³ This survey is a subset of data collected in a larger questionnaire from the lead author's dissertation (Gerow 2011).

Overall, the model is supported with the following model fit statistics: $R^2 = 0.161$, Adjusted $R^2 = 0.155$, F-value = 26.09, and p<0.001.

DISCUSSION

We began this paper with Company4Change's CEO looking to hire a new CIO to ensure IT has a more central role in the firm's business strategies in the future. Due to the unstructured and ambiguous nature of IT initiatives and the political environment inherent in every firm, the CEO determined he/she would need to consider the CIO's position in the hierarchy, the CIO's business and technical knowledge, and the connections the CIO has established. Using this scenario, we developed our research question, "*What power attributes should a CEO look for in a CIO to ensure executive team social alignment?*", to determine whether reporting structure (i.e. structural power), business and technical knowledge (i.e. expert power), and social networking (i.e. prestige power) are important power attributes associated with the CIO's ability to develop and share knowledge, understanding, and commitment with the executive team members. We found structural power and prestige power may be important for facilitating social alignment among the executive team members and the CIO while expert power may not be important. We also found social alignment is positively associated with higher levels of financial performance. Implications for research and practice are discussed in the following paragraphs.

Structural Power

Since we only surveyed the CIO, it may be necessary for future researchers to collect the perceptions of all the executive team members. Based on our research, it seems the executive team may view the CIO as equal when the CIO plays an active role on the executive team and/or reports directly to the CEO. For practice, CEOs may need to ensure the CIO reports directly to him/her and is actively involved with the executive team members to ensure communication is occurring.

Expert Power

Due to the inconclusive findings for the expert power hypothesis, future research is needed to further explore this relationship. For example, business knowledge may not be considered a source of "expertise" since the executive team members also possess business knowledge. Therefore, it may be important to compare the qualifications of CIOs to those who did not earn the position (i.e. individuals rejected during the hiring process).

Prestige Power

Social networking sites (e.g. LinkedIn, Facebook) are a source for developing connections with business executives. It may be interesting to empirically evaluate the importance of these sites on higher-level executives. For example, some research questions could include: Do CIOs with more connections on LinkedIn have stronger connections with their executive team members? Do LinkedIn or Facebook connections between the potential CIO and executive team result in a higher likelihood of hiring that CIO and, in turn, result in a higher level of social alignment? For practice, CEOs should potentially only hire CIOs who come highly recommended by the firm's executive team members and/or executive team members at companies the CEO trusts (e.g. customers, suppliers).

Social Alignment-Financial Performance Relationship

Social alignment may be another critical resource companies should develop to enhance their financial performance (in support of the Resource-Based View of the Firm). In particular, the CEO may need to encourage communication and commitment among the executive team members. For research, other variables previously examined that may need to be studied alongside social alignment include variables like digitization (e.g. Barua, Konana, Whinston and Yin, 2004), strategic alignment (e.g. Sabherwal and Chan, 2001), IT infrastructure flexibility (e.g. Kim, Shin and Grover, 2010), and management capability (e.g. Mithas et al., 2011).

CONCLUSION

In this paper, we investigated the relationship between a CIO's structural, expert, and prestige power and social alignment with the executive team (and its relationship with financial performance). We found CEOs should consider allowing CIOs to report directly to them and encourage formal involvement in executive team activities (i.e. structural power) to positively influence social alignment among the executive team members. We also found CEOs should consider hiring CIOs with good reputations and connections with executive team members inside and outside the firm (i.e. prestige power) to facilitate social alignment. However, we did not find a positive relationship between a CIO's understanding of business and technology (i.e. expert power) and social alignment. Additionally, our results demonstrate sharing knowledge, understanding, and commitment between IT and the business may enhance a firm's financial performance. Hence, this study suggests CEOs should specifically consider structural and prestige power when hiring a CIO as a means of encouraging social alignment among the executive team members in financial performance of the firm.

REFERENCES

- 1. Applegate, L.M. and Elam, J.J. (1992) New Information systems leaders: A changing role in a changing world, *MIS Quarterly*, 16, 4, 469-490.
- 2. Armstrong, C.P. and Sambamurthy, V. (1999) Information technology assimilation in firms: The influence of senior leadership and IT infrastructures, *Information Systems Research*, 10, 4, 304-327.
- 3. Banker, R.D., Hu, N., Pavlou, P.A. and Luftman, J. (2011) CIO reporting structure, strategic positioning, and firm performance, *MIS Quarterly*, 35, 2, 487-504.
- 4. Barua, A., Konana, P., Whinston, A.B. and Yin, F. (2004) An empirical investigation of net-enabled business value, *MIS Quarterly*, 28, 4, 585-620.
- 5. Bassellier, G. and Benbasat, I. (2004) Business competence of information technology professionals: Conceptual development and influence on IT-Business partnerships, *MIS Quarterly*, 28, 4, 673-694.
- 6. Broadbent, M. (2004) Where's the strategy?, CIO Insight, 46, 35-36.
- 7. Broadbent, M., Weill, P. and Neo, B.S. (1999) Strategic context and patterns of IT infrastructure capability, *Journal of Strategic Information Systems*, 8, 2, 157-187.
- 8. Bunderson, J.S. (2003) Team member functional background and involvement in management teams: Direct effects and the moderating role of power centralization, *Academy of Management Journal*, 46, 4, 458-474.
- 9. Byrd, T.A., Lewis, B.R. and Bryan, R.W. (2006) The leveraging influence of strategic alignment on IT investment: An Empirical examination, *Information & Management*, 43, 3, 308-321.
- 10. Carter, M., Grover, V. and Thatcher, J.B. (2011) The emerging CIO role of business technology strategist, MIS *Quarterly Executive*, 10, 1, 19-29.
- 11. Chatterjee, D., Richardson, V.J. and Zmud, R.W. (2001) Examining the shareholder wealth effects of announcements of newly created CIO positions, *MIS Quarterly*, 25, 1, 43-70.
- 12. Chen, D.Q., Preston, D.S. and Xia, W. (2010) Antecedents and effects of CIO supply-side and demand-side leadership: A staged maturity model, *Journal of Management Information Systems*, 27, 1, 231-271.
- 13. Cragg, P., King, M. and Hussin, H. (2002) IT alignment and firm performance in small manufacturing firms, *Journal of Strategic Information Systems*, 11, 2, 109-132.
- 14. Croteau, A.M. and Raymond, L. (2004) Performance outcomes of strategic and it competencies alignment, *Journal of Information Technology*, 19, 3, 178-190.
- 15. Day, J. (2007) Strangers on the train: The relationship of the IT department with the rest of the business, *Information Technology & People*, 20, 1, 6-31.
- 16. Enns, H.G., Huff, S.L. and Golden, B.R. (2003) CIO influence behaviors: The impact of technical background, *Information & Management*, 40, 5, 467-485.
- 17. Enns, H.G., McFarlin, D.B. and Huff, S.L. (2007) How CIOs can effectively use influence behaviors, *MIS Quarterly Executive*, 6, 1, 29-38.
- 18. Finkelstein, S. (1992) Power in top management teams: Dimensions, measurement, and validation, Academy of Management Journal, 35, 3, 505-538.
- 19. Gerow, J.E. IT-Business strategic alignment: Essays examining types of alignment and their relationship with firm performance, in: *Department of Management*, Clemson University, 2011, pp. 1-352.
- 20. Greve, H.R. and Mitsuhashi, H. (2007) Power and glory: Concentrated power in top management teams, *Organization Studies*, 28, 8, 1197-1221.
- 21. Jasperson, J.S., Carte, T.A., Saunders, C.S., Butler, B.S., Croes, H.J.P. and Zheng, W. (2002) Review: Power and information technology research: A metatriangulation Review, *MIS Quarterly*, 26, 4, 397-459.
- 22. Kaarst-Brown, M.L. (2005) Understanding an organization's view of the CIO: The role of assumptions about IT, *MIS Quarterly Executive*, 4, 2, 287-301.
- 23. Kim, G., Shin, B. and Grover, V. (2010) Investigating two contradictory views of formative measurement in information systems research, *MIS Quarterly*, 34, 2, 345-365.
- 24. Law, C.C.H. and Ngai, E.W.T. (2007) IT Infrastructure capabilities and business process improvements: Association with IT Governance characteristics, *Information Resources Management Journal*, 20, 4, 25-47.
- 25. Luftman, J. and Ben-Zvi, T. (2010) Key issues for IT executives 2009: Difficult economy's impact on IT, *MIS Quarterly Executive*, 9, 1, 49-59.
- 26. McNulty, T., Pettigrew, A., Jobome, G. and Morris, C. (2011) The role, power, and influence of company chairs, *Journal of Management and Governance*, 15, 1, 91-121.
- 27. Medcof, J.W. (2008) The organizational influence of the chief technology officer, R&D Management, 38, 4, 406-420.
- 28. Mithas, S., Ramamsubbu, N. and Sambamurthy, V. (2011) How information management capability influences firm performance, *MIS Quarterly*, 35, 1, 237-256.

- 29. Oh, W. and Pinsonneault, A. (2007) On the assessment of the strategic value of information technologies: Conceptual and analytical approaches, *MIS Quarterly*, 31, 2, 239-265.
- 30. Peng, M.W. and Luo, Y. (2000) Managerial ties and firm performance in a transition economy: The nature of a micromacro link, *Academy of Management Journal*, 43, 3, 486-501.
- 31. Peppard, J. (2010) Unlocking the performance of the chief information officer (CIO), *California Management Review*, 52, 4, 73-99.
- 32. Perrewe, P.L. and Nelson, D.L. (2004) Gender and career success: The facilitative role of political skill, *Organizational Dynamics*, 33, 4, 366-378.
- 33. Pettey, C. and Stevens, H. Gartner EXP worldwide survey of nearly 1,600 CIOs shows IT budgets in 2010 to be at 2005 levels, in: *Press Releases*, Gartner, 2010.
- 34. Preston, D.S. and Karahanna, E. (2009) Antecedents of IS strategic alignment: A nomological network, *Information Systems Research*, 20, 2, 159-179.
- 35. Preston, D.S., Karahanna, E. and Rowe, F. (2006) Development of shared understanding between the chief information officer and top management team in U.S. and French organizations: A cross-cultural comparison, *IEEE Transactions on Engineering Management*, 53, 2, 191-206.
- 36. Reich, B.H. and Benbasat, I. (2000) Factors that influence the social dimension of alignment between business and information technology objectives, *MIS Quarterly*, 24, 1, 81-113.
- 37. Sabherwal, R. and Chan, Y.E. (2001) Alignment between business and IS strategies: A study of prospectors, analyzers, and defenders, *Information Systems Research*, 12, 1, 11-33.
- 38. Smaltz, D.H., Sambamurthy, V. and Agarwal, R. (2006) The antecedents of CIO role effectiveness in organizations: An empirical study in the healthcare sector, *IEEE Transactions on Engineering Management*, 53, 2, 207-222.
- 39. Swanson, E.B. (1994) Information systems innovation among organizations, Management Science, 40, 9, 1069-1092.
- 40. Synnott, W.R. and Gruber, W.H. (1981) Information resource management: Opportunities and strategies for the 1980s, John Wiley & Sons, Inc., New York, NY.
- 41. Tarafdar, M. and Qrunfleh, S. (2009) IT-business alignment: A two-level analysis, *Information Systems Management*, 26, 4, 338-349.

APPENDIX A: FULL SURVEY

Structural Power (5-point Likert scale from 1=Strongly Disagree to 5=Strongly Agree):	
Thinking about the formal interaction you have with the executive team members in your firm, to what extent do	you agree
with the following statements:	
• I attend all executive team meetings.	
• I am invited to executive team conferences.	
• I have the same formal authority as executive team members such as the COO or CFO.	
• I receive the same institutional backing as executive team members such as the COO or CFO.	
• On the organizational chart, I occupy the same level as executive team members such as the COO or CH	O.
Thinking about the importance of your role to your firm, to what extent do you agree with the following statement	nts:
• Many people in other departments depend on me to deliver good outcomes for the services I provide	
• I feel that I play a central role in making the organization function efficiently	
• I feel that I play a central role in making the organization function effectively	
• Executive team members have few alternative sources for IT services I am responsible for delivering	
Expert Power (5-point Likert scale from 1=Completely Uninformed to 5=Extremely Well Informed – Ada	pted from
Preston and Karahanna (2009)):	
Please indicate how well informed you are about each of the following:	
Your firm's present products	
Your firm's future products	
• Your firm's present markets	
• Your firm's future markets	
 Your firm's present business strategies 	
Your firm's future business strategies	
Your firm's present general business practices	
Your firm's future general business practices	
Your firm's competitors	
Your industry's practices	

Thinking about information systems as they relate to your firm, please indicate how informed you feel about the following: Information systems in general • . Information systems within your firm How IT may be used for strategic advantage ٠ Emerging technologies ٠ Competitors' use of IT • Systems development processes ٠ Difficulties of developing information systems • Costs associated with information systems • How IT fits into your firm's overall strategy • Information systems support of the business processes within your firm ٠ **Prestige Power:** Thinking about how you utilize professional relationships and connections external to your firm, please indicate the frequency with which you contact executive teams... (7-point scale: 1=Never, 2=Every few years, 3=Annually, 4=More than once a year, 5=Monthly, 6=Weekly, 7=Daily – Adapted from Peng and Luo (2000)) at customer or potential customer firms. • ٠ at supplier firms. at competitor firms. • • involved in industry association(s) your company belongs to. Thinking about how you utilize professional relationships and connections with executive team members within your firm, please indicate the frequency with which you are involved in... (7-point scale: 1=Never, 2=Every few years, 3=Annually, 4=More than once a year, 5=Monthly, 6=Weekly, 7=Daily - Adapted from Preston and Karahanna (2009)) informal contact such as meeting at the coffee machine or in the hall • informal exchanges such as impromptu phone calls or e-mails ٠ socialization outside work (for example, social gatherings, golf, tennis, etc) • Thinking about your reputation among colleagues outside your firm with whom you interact regularly, please indicate the extent to which you agree or disagree with the following. My colleagues... (5-point Likert scale from 1=Strongly Disagree to 5=Strongly Agree) value my competence. • value my contributions. ٠ ٠ respect my ideas. ask for my opinions. • follow my suggestions. ٠ think the way I do my job adds value. • respect my personal quality. • Thinking about your reputation among the executive team, please indicate the extent to which you agree or disagree with the following. The executive team... (5-point Likert scale from 1=Strongly Disagree to 5=Strongly Agree) value my competence. • value my contributions. ٠ • respect my ideas. ask for my opinions. ٠ follow my suggestions. ٠ think the way I do my job adds value. • respect my personal quality. Social Alignment (5-point Likert scale from 1=Strongly Disagree to 5=Strongly Agree – Adapted from Preston and Karahanna (2009)): Thinking about the views that you and your executive team share in regard to IT in your firm, please indicate the extent to which you agree or disagree with whether you and your executive team members have a... shared view of the role of IT as a competitive weapon for your firm. • shared understanding of how IT can be used to increase productivity of your firm's operations. • shared understanding of the role of IT in your firm. • common view about the prioritization of IT investments for your firm. •

Financi (2004)):	al Performance (5-point Likert scale from 1=Very Low to 5=Very High – Adapted from Croteau and Raymond
•	The sales growth position relative to our principal competitors is
•	Our executive team's satisfaction with the sales growth rate is
•	The market share gains relative to our principal competitors are
•	The return on corporate investment position relative to our principal competitors is
•	Our executive team's satisfaction with the return on corporate investment is
•	Our executive team's satisfaction with return on sales is
•	The net profit position relative to our principal competitors is
•	The financial liquidity position relative to our principal competitors is