



# The Role of the Information Technology Executive in Chilean Firms

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## ABSTRACT

*Interviews were conducted with information technology (IT) executives in Chilean firms. The interviews revealed a positive business climate, advanced hardware and software infrastructure within the firm, and utilization of computing resources throughout the organization. The use of information technology for strategic planning and decision support was more limited. In general, the information technology executive reported to a senior manager, who in turn reported to the chief executive officer. Studies suggest that even greater business value could be obtained by aligning information technology and the strategic objectives of the firm.*

## INTRODUCTION

The Gartner Group provides a description of the Chief Information Officer (CIO) as providing "technology vision and leadership for developing and implementing IT initiatives that create and maintain leadership for the enterprise in a constantly changing and intensely competitive marketplace" (Gartner Group, 2002). The position is viewed as a senior management position, reporting to the CEO of the company, and responsible for both IT policy and strategy (Gartner Group, 2002). Studies have found that the degree to which CIOs participate in top management teams influence the success and use of IT initiatives in the firm (Armstrong and Sambamurthy, 1999). Best-practice studies suggest that a firm will obtain greater business value from IT by creating a senior management position, often called the Chief Information Officer, with broad responsibilities that include alignment of the company's information technology with the company's strategic goals (CIO Executive Research Center, 1999; Kearns and Lederer, 2001). The CIO may initiate and lead knowledge management initiatives, business reengineering processes, customer relationship management activities, and Internet uses (CIO Executive Research Center, 1999).

Previous studies of Chilean business and government efforts have shown that infrastructure for IT and ecommerce applications is developing (Davis, 1999; Grandon and Mykytyn, 2002), and that IT adoption is growing (Montealegre, 1998). The use of mobile and wireless technologies is increasing in Latin America, in general, and Chile, in particular (Deans, 2002). Some studies have focused on the adoption of information and communication technologies (ICTs) in developing countries and applied the research to Chile to increase adoption rates (Silva and Figueroa, 2002). Our interviews confirmed these general trends for IT adoption in Chile and focused on the role of the IT executive within the Chilean company.

## PROPOSED RESEARCH METHODOLOGY

This study focuses on the role of the senior IT executive in Chilean firms in order to identify opportunities for increased business value from IT investments. Formal interviews were conducted with approximately 40 senior IT executives in the summer of 2002 to determine the responsibilities and reporting level of the position in firms in Chile. Approximately five interviews were in-depth, and the companies represented some of the largest firms in Chile. The pilot study targeted large firms with advanced technology with the expectation that these firms represented the leading edge of IT strategy in Chile. The responses to the interview questions were used to provide qualitative descriptions of the role of the IT executive in Chilean firms and the use of IT for decision support. A follow-up questionnaire will be used to provide quantitative results.

## RESULTS OF INITIAL STUDY

An industry description of the firms that agreed to participate in an interview is shown in Table 1. Most of the organizations are large companies in Chile, with several of the consulting companies being medium size. Large, international companies are classified by their primary activity.

The interviews revealed advanced technology such as enterprise systems, current releases of enterprise software, excellent computing architectures, and knowledgeable IT executives in the large companies. In one company, the IT executive had completely overhauled the entire enterprise software system in one year with minimal use of outside consultants. On the other hand, sectors such as a public service hospital lacked infrastructure and computer hardware.

In general, the IT executives interviewed described their responsibilities as shown in Table 2. It should be noted that several companies are multinational corporations, so that the senior IT executive was outside of the country. Most IT executives (approximately 80%) described their primary responsibility as highly-technical administration. It should be noted that the administration is high-level and entails significant responsibility for the company's IT. Less than 5% of the reporting companies utilize the IT executive position as a strategic management resource.

Table 1. Industry sector of Chilean companies participating in an interview.

Type of Industry	Number of Companies
Government	6
Finance	4
Education	2
Retail	2
Medical/Pharmaceutical	4
Food/wine	2
Utility/telecomm	4
Construction/engineering	2
Manufacturing	6
Mining	2
Racing	1
Consulting	6
Advertising	1
Other	1
TOTAL	43

Table 2. Description of IT executive responsibilities.

Responsibilities	Number of Companies
Administration, technical management, user support, evaluate new technologies, sourcing	36
Reporting to higher-level IT executive outside country	4
Coordinating outsourced functions	1
Strategic planning with CEO	2
TOTAL	43

Table 3. Organizational reporting structure for IT executives interviewed.

IT executive reports to:	Number of Companies
Director of Finance	13
Manager; IT executive not part of senior management team	17
Manager; IT executive part of senior management team	5
CEO	4
Outsourced or no information	4
TOTAL	43

These observations are reinforced by the organizational reporting structure shown in Table 3. About 70% of the IT executives are not considered senior managers, reporting to either the director of finance or to a line manager. Approximately 20% of the IT executives are considered senior management, with only 9% reporting directly to the CEO.

## DISCUSSION

Information systems strategic alignment can be described as the fit between the strategic orientation of the business and the strategic orientation of the information systems used in the business (Chan, Huff, Barclay and Copeland, 1997). Previous studies have suggested that the firm's IT becomes more effective with alignment, and, concurrently, that the business itself becomes more effective by better utilizing its IT (Chan, Huff, Barclay and Copeland, 1997; Kearns and Lederer, 2001). These studies suggest that significant business value can be obtained by aligning IT and business management strategies.

Best-practice studies have indicated that a firm can obtain value by expanding the role of the IT executive to a CIO, a position that has a senior management perspective, in order to develop alignment between its IT and business strategies (Gottschalk and Taylor, 2000). IT can then become an integral player in developing and obtaining a firm's strategic objectives. Chan (1999) describes the relationship through strategic and structural alignment. An antecedent of strategic alignment is a close linkage between business and IS plans, and an antecedent of structural alignment is the direct report of the CIO to the CEO (Chan, 1999). In general, as indicated in Table 2, these types of relationships are not evident in Chilean firms, suggesting that an opportunity exists for Chilean businesses to capitalize on their investment in IT infrastructure by expanding the role of their IT executive to a senior management position.

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## REFERENCES

- Armstrong, C. and Sambamurthy, V. (1999). Information technology assimilation in firms: the influence of senior leadership and IT infrastructures. *Information Systems Research*, December, 10(4), 304-327.
- Chan, Y. (1999). IS strategic and structural alignment: Eight case studies. *Proceedings of the Association of Information Systems*, Atlanta, GA, 390-392.
- Chan, Y., Huff, S., Barclay, D. and Copeland, D. (1997). Business Strategic Orientation, Information Systems Strategic Orientation and Strategic Alignment. *Information Systems Research*, June, 8(2), 125-150.
- CIO Executive Research Center (1999, 23 April). What is a CIO? Accessed from <http://www.cio.com/research/executive/edit/description.html>.
- Davis, C. (1999). The rapid emergence of electronic commerce in a developing region: The case of Spanish-speaking Latin America. *Journal of Global Information Technology Management (JGITM)*, 2(3), 25-40.
- Deans, C. (2002). Global trends and issues for mobile/wireless commerce. *Proceedings of the Eighth Americas Conference on Information Systems*, Boston, MA, 2396-2402.
- Gartner Group (2002). Mission of the CIO. Accessed from [http://www.cio.com/research/executive/edit/gartner\\_description.html](http://www.cio.com/research/executive/edit/gartner_description.html).
- Gottschalk, P. and Taylor, N. (2000). Strategic management of IS/IT functions: The role of the CIO. *Proceedings of the 33rd Annual Hawaii International Conference on System Sciences*, Maui, HI, 4-7 January, 2811-2820.
- Grandon, E. and Mykytyn, P. (2002). Developing an instrument to measure the intention to use electronic commerce in small and medium sized businesses in Chile. *Proceedings of the Eighth Americas Conference on Information Systems*, Boston, MA, 1524-1537.
- Kearns, G. and Lederer, A. (2001). Strategic IT Alignment: A Model for Competitive Advantage. *Proceedings of the Twenty-Second Conference on Information Systems*, New Orleans, LA, 1-12.
- Montealegre, R. (1998). Waves of change in adopting the Internet: Lessons from four Latin American countries. *Information Technology & People*, 11(3), 235-260.
- Silva, L. and Figueroa, B.E. (2002). Institutional intervention and the expansion of ICTs in Latin America: The case of Chile. *Information Technology & People*, 15(1), 8-25.

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