

# Two speeds for adopting ICT in Spanish companies

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**The adoption of technology by Spanish companies is progressing, although large companies are moving faster than small- and medium-sized firms.**

Large Spanish companies get a passing grade for their adoption of technologies. SMEs get a lower grade, though the percentage of their investment in technology is higher than that of their U.S. and German counterparts, according to the 254 CIOs and IT department heads who participated in the BIT (Business Information Technologies) project in 2007.

The BIT project - led by the University of California, Los Angeles (UCLA) - analyzes progress in the adoption of technology by companies and the impact this process is having on these firms and on industry sectors. The study is being conducted in 20 countries. The PwC&IESE e-business Center, the research center responsible for the Spanish part of the study, is now publishing the second edition of the study.

The Spanish report, titled "[ICT as Change Drivers in Spanish Companies and Developments Over the 2005-2007 Period: Future Trends](#)," presents the responses of 254 CIOs and IT department heads who make their own decisions on technology.

The purpose of the second edition, directed by IESE professors [Sandra Sieber](#) and [Josep Valor](#), is to investigate the current status of technology in Spanish companies in five key areas: the adoption of technologies and infrastructure, internal organization, interaction with customers, use in relation to commercial partners, and the influence of ICT on business results. The analysis looks at two categories: large companies and SMEs. Results for large

companies are compared with those obtained in the first edition of the study in order to gain a broader perspective on the changes taking place.

The responses are also compared with those obtained in the equivalent surveys conducted by BIT teams in the United States and Germany. The United States was selected for comparison because of its key role in the global ICT market, and Germany due to its importance as a driving force in the European economy.

## **Leap forward in large companies**

When the technology adoption rates obtained in 2005 for large Spanish companies are compared with 2007 results, these firms are found to have made significant progress over the period. This is particularly true for the use of biometric technologies, which went to 20 percent in 2007 from 3 percent in 2005; RFID traceability systems, where the rate rose to 37 percent in 2007 from 7 percent in 2005; and security systems, which saw an increase to 84 percent from 61 percent.

Surprisingly, however, there has been a significant decrease in the percentage of respondents in large companies who say they are confident about outsourcing strategic areas such as customer service (30 percent less than in 2005).

In the view of the managers surveyed, technology adoption rates for large Spanish companies (those with over 600 employees) are comparable to those for large German and U.S. companies. This is particularly the case with respect to the adoption of infrastructure and technology, the use of communication applications with commercial partners, outsourcing of IT-related functions and the automation of functions.

However, respondents believe the companies they work for lag behind their German and U.S. counterparts when it comes to reducing hierarchies, use of e-learning, and automation of support and sales centers. They also think Spanish companies are behind German firms in the use of open-source software and application of e-commerce mechanisms between companies.

## **SMEs overcome historical lag in adopting IT**

The representatives of SMEs who took part in this study indicate that there has been a progressive increase in the use of technologies in recent years. According to their responses, over 65 percent of Spanish SMEs have increased investment in this area. Spending has

focused particularly on security solutions, software applications, intranet and extranet solutions, storage hardware, infrastructure, and operating system and connectivity software.

Nevertheless, when responses for this group are compared with those of managers working for large companies, it is clear that SMEs lag behind in technology adoption processes. This difference is especially evident in the case of RFID applications, used by 37 percent of large companies and 15 percent of SMEs, and in the use of biometric solutions (20 percent versus 10 percent), content management technologies (67 percent versus 38 percent), business intelligence tools (63 percent versus 36 percent) and supply chain management applications, which are used by 43 percent of large companies but only 20 percent of SMEs. However, the survey also identifies some exceptions, such as the greater use of wireless networks.

On the whole, however, Spanish SMEs have worked to overcome their historical lag in adopting IT, which explains why their percentage of investment in technology in 2007 is higher than that of their U.S. and German counterparts.

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