

Barcelona Treball

Summary of sector trends: ICT and Telecommunications
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Business intelligence development

Although most of the benefits are intangible and Business Intelligence's return on investment (ROI) is complex to calculate, it evidences an increase in workers' productivity and better corporate management. These facts, in economic terms, represent a cost reduction of 5% to 15%.

Managing information is key for companies to survive in a market that is changing, dynamic and global. Learning to use the information to improve company performance is essential to consolidate, grow and, if necessary, diversify.

The Business Intelligence (BI) refers to the intelligent use of enterprise information to facilitate decision making. In other words, it provides information to understand their functioning and to anticipate events, in order to support business decisions at all levels: strategic, tactical or operational.

The concept of BI includes a broad category of methodologies, applications and technologies that focus, access, process and query data, transactions and unstructured information from the company (internal and external) in order to help take decisions. This can be achieved by directly exploiting the information (query) or analysing it, turning it into knowledge.

In addition, the BI can also intervene in different business processes: facilitating the smooth development of tasks to be done by different workers (for example, sales forecasting reports in the case of the commercial area), generating new activities and new skills (for example, the creation of databases), improving communication between different departments or increasing the company's responsiveness.

To implement a BI system in a company, in addition to technology, you must have a thorough knowledge of it (internal and external), including customers, suppliers, competitors, business partners, economic environment, working environment, etc. It is for this reason that professionals with high responsibility within the company, who are responsible for making strategic decisions, have the highest interest in implementing a BI system.

In fact, according to the latest global survey by consulting firm Gartner technology in January 2012, the **CIO (Chief Information Officer), common name for the heads of a company, attach great importance to the implementation of systems related to analysis and business intelligence**, to mobility and to cloud computing. In fact, according to the survey, the top 10 technology priorities for CIOs in 2012 are, in order of preference: Business Intelligence, mobile technologies, cloud computing, collaborative working techniques (workflows), virtualization, update of existing applications, IT management, CRM, ERP and security applications¹.

It is remarkable that, the same survey in 2011 placed the BI in fifth position, reflecting the growing importance of BI for companies and, in particular, for people managing them. Thus, the use of information to generate knowledge produces improvements in business processes and enhances operational efficiency, ensuring success in today's competitive market.

¹<http://businessintelligence.info/docs/estudios/gartner-executive-programs-2012-press-release.pdf>

Impact on the sector

According to the Gartner report, the BI solutions sector is having a fast growth, both domestically and internationally, as evidenced by the fact that the turnover has increased from just over 9,000 million dollars in 2008, to 12,000 million in 2011. BI solutions represent an increasingly larger percentage of business investment in technology. In addition, the BI software segment is the one with the second fastest growth in the global software market in 2011. Although BI shows a greater penetration in large enterprises, more and more SMEs incorporate it.

The emergence and integration of Business Intelligence systems have a direct impact on business opportunities and employment in the telecommunications and ICT. But it also influences transversally other sectors, those that purchase these systems to achieve a better business management.

Regarding the sector of Telecommunications and ICT, according to the 2012 Gartner report on Business Intelligence, **the leading BI platform vendors** (Microsoft, Microstrategy, Information Builders, IBM, Oracle, SAS, SAP, etc.)² **have generated, as least \$ 15 million from the sale of their BI licenses.** In addition, to the sale of licenses, advisory and consultancy services must be added required by firms before implementing a BI system, and the necessary training of the staff to manage it. This requires professionals at different levels: BI software designers and developers, BI consultants and professionals able to assimilate new processes within companies.

According to the 2012 report, conducted worldwide by Gartner, the companies surveyed believe that traditional BI solutions are difficult to implement, maintain, develop and use. Given that employers believe that one of the key aspects to the success of BI is its ease of use, if a BI solution is not easy to use it will not be properly implemented or

It will not bring its full advantage, and efforts are dedicated to its development and deployment will be in vain. Therefore, BI platform companies still have a long way to go if they want to convince businesses, especially SMEs, to adopt BI in their management systems.

This way requires reducing the complexity of the system at user level and to develop specific applications to obtain relevant information in the minimum time. Examples of this are already on the market. For example, the Bingo Intelligence is an application used to generate dashboards easily.

With respect to large multinational companies that have implemented a BI system, although they consider it is complex to use, they also agree that they bring benefits to information and human capital management.

In particular, **SMEs are firms having more difficulties to integrate a BI solution. Some of the disadvantages / advantages** identified are:

- It is expensive to be implemented because it requires software, hardware and professional experts' time, but the information provided by the BI is an asset that, if used properly, provides a rapid return on investment.
- It is complex because BI systems are designed for large companies, but this complexity provides more powerful and useful tools to understand and manage the business than that traditionally used by SMEs.
- It requires time commitment from the company, but once implemented, it eliminates repetitive tasks that do not add value and time spent is recovered at the end.

Companies working on improving their BI solutions are best able to use the information to take the right decisions in each case.

²<http://anibalgoicochea.com/2012/02/10/magic-quadrant-for-business-intelligence-platforms-2012/>

Impact on professional profiles

In an advisory team on the implementation of BI solutions, the dual perspective "business + technology" is indispensable.

A BI consultant properly carries out the tasks when being capable to generate autonomy in the end-user of the BI system so that the end-user is able to create the own reports.

The development of Business Intelligence (BI) has a very positive effect on the profiles of the telecommunications and ICT professionals but also in management, leadership and management of companies in other sectors.

As for telecommunications and ICT BI specialist professionals, they include those working in manufacturing companies or BI solutions integrating firms who develop software and advise clients.

BI software developers are computer experts specialized in BI platforms programming and work in large companies such as Microsoft, SAS, Microstrategy, etc. One of the main tasks to be carried out by these professionals is to simplify the use of BI systems. That is, BI systems should be scheduled so as to facilitate maximum use by end-users. In this sense, they are increasingly required to have a more user-oriented view, to propose solutions to be easily used by the customer.

Advisers or consultants in BI are the connection with the company and are responsible for advising and designing the information system required by the firm. Nowadays, these professionals are asked not only to be experts in BI technologies, but also to practice, additionally, business consulting, which enables them to more accurately advise on the most appropriate BI solution. This is so because, often, small businesses are not able to hire a BI consultant and a business consultant to implement a BI solution, so that a more comprehensive and complementary profile is requested. On the other hand, companies that

already have BI solutions, especially large companies, often require professionals who know how it works, can interpret data efficiently and train other staff. These personnel must be able to adapt to changes and to use digital tools and systems in their daily work.

Note that the 22.33% of the job offers from Infojobs and Infoempleo portals in the months of June, July and August 2012 correspond to the telecommunications and ICT sector. 0.8% of them ask for analysts or consultants in business intelligence.

These professionals are required a university degree, mainly in computer science, engineering, mathematics, physics, business administration and management or technical and market research. As for languages, these professionals are often asked English skills. In terms of experience, a minimum of 2 years working in BI consulting or designing predictive models of business increase is required.

More information about the industry is available on the [Barcelona Treball website](#) Market > Industries [Telecommunications and ICT](#)

This section of the website contains a report on the industry covering employment aspects, where you can see job files for various job profiles and find out the main resources you need to find work in the industry.

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