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Business Intelligence applied in Small Size for Profit Companies

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Abstract

With the expression, "Business Intelligence" we refer to intelligent technologies that may help companies improve their performances and have better possibilities to survive and develop. Anyway, in this regard, we sometimes have a double negative impression, namely that on one side there is a certain lack of practical indications on how to apply this in everyday companies' life and, secondly, that it is often not taken into due consideration the extremely reduced size of companies, the limited entrepreneurial competences and the scarce availability of technologies. In this paper, apart from highlighting the role of Business Intelligence in practice, we try to find a way to apply it also in small size companies focusing on two critical aspects, namely customer's profitability and their satisfaction level that, especially if considered in their reciprocal interaction, may have a great impact on companies' outcomes though using simple technologies.

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Keywords: Business Intelligence; Small Size Companies; Profitability and Customer Satisfaction Monitoring; Portfolio Segmentation and Optimization Actions.

1. Introduction. CRM and Business Intelligence

As we pointed out in one of our previous contributions, Business Intelligence is quite often strictly related to CRM, Customer Relationship Management that anyway should not be considered in any way only a technology.

In fact – despite the technological aspect regarding the nature of CRM may be still very much widespread – we were able to capitalize on the contributions of many authors, such as Coltmann (2011), Lambert (2009), Lazer (1997), Hasan (2003), Walter Scott (2001) and finally Baran (2013), to state how CRM should be considered a real strategy that nowadays all for-profit companies should adopt for their survival and development.

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With this outlook on CRM we also explained the key role of customer retention to implement a CRM strategy, referring to some important contributions such as Zineldin's (2006), who coined the rather impressing slogan, "The Royalty of Loyalty," and who states, "A company has to create customer relationships that deliver value beyond… the core products.

This involves adding tangible and intangible elements to the core products, thus creating and enhancing the product surrounding. Customer loyalty is an important function to ensure the fulfilment of given customer requirements and companies' profits, survival and competitive positioning."

We then analyzed Business Intelligence and we found quite a different situation. In fact firstly, there is no confusion in definitions as we have in the case of CRM; for instance Luhn's (2010) defines it: 'An automatic system developed to disseminate information to the various sections of any industrial, scientific or government organization. This intelligence system will utilize data-processing machines for auto-abstracting and auto-encoding of documents and for creating interest profiles for each of the action points in an organization'. Beyond this, the fundamental importance of BI to businesses seems to be fully appreciated; in fact according to Moss (2008), 'In today's highly competitive and increasing uncertain world, the quality and timeliness of an organization's business intelligence (BI) can mean not only the difference between profit and loss, but even the difference between survival and bankruptcy.'

Finally, we highlighted the fundamental contribution by Pennarola (2006), who gives one of the more complete representations of a CRM system that is very effectively summarized in Figure 1 which also displays the vital interconnections between the operative and analytic components, two separate parts that nonetheless have to be fully and constantly integrated.

In fact, in this way, it is possible to integrate a standard database with all possible relevant data so to build up an advanced customer warehouse, the indispensable pre-requisite for advanced Business Intelligence.

As we already said in the abstract, rather than focusing on all aspects, we considered only profitability and customer satisfaction level that, nevertheless, seem to us of the utmost importance.

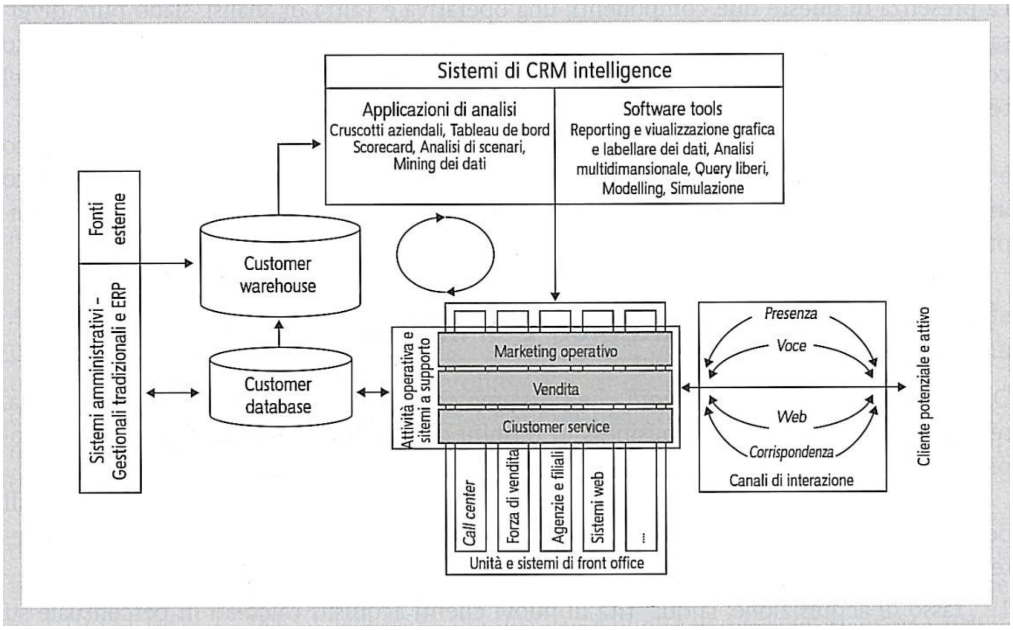
Sistemi di CRM intelligence
Applicazioni di analisi
Cruscotti aziendali, Tableau de bord
Scorecard, Analisi di scenari,
Mining dei dati
Software tools
Reporting e viualizzazione grafica
e labellare dei dati, Analisi
multidimansionale, Query liberi,
Modelling, Simulazione
Fonti esterne
Sistemi amministrativi - Gestionali tradizionali e ERP
Customer warehouse
Customer database
Attività operativa e sitemi a supporto
Marketing operativo
Vendita
Ciustomer service
Call center
Forza di vendita
Agenzie e filiali
Sistemi web
...
Unità e sistemi di front office
Presenza
Voce
Web
Corrispondenza
Canali di interazione
Cliente potenziale e attivo

Fig 1 Architectural plan of operative and analytical CRM business intelligence. Source: Pennarola, F. & Perrone, V. 2006.

As we can see in the figure 2, data may come basically from two different sources, namely they may be internal or external data, as we can see in the same figure respectively on the left and the right

side of the data warehouse; in the first case the focus is inside the company, analyzing and improving processes and technologies, controlling costs and so on

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