# Information technology innovationa genuine driver of improving customer relationship management in romanian companies 

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#### Abstract

Consolidating the IT field of the company represents a target for most IT responsible, nowadays. At the same time, organizations expect their IT expenditure to increase in the next decade. This paper aims to underline the new generation of information technology and how to use them to make better business decisions in managing enterprise resources and improve customer relationships. The alternative goal is to place the focus not only on developing new software but also on achieving business results, placing particular emphasis on customer relationship management. The purpose of technology is to solve practical business problems, and one of them is the necessity to understand and maintain relationships with the customers. The paper will reveal the companies' responses to the latest dramatic changes in the informational technologies, in order to cope with the persistence of the global economic crisis and to assure increase of organizational efficiency and profit.


Key words: customer relationship management (CRM), information technology, strategic decision-making process, consolidating IT, business alignment, IT innovation

JEL classification: O33-Technological Change: Choices and Consequences; Diffusion Processes

## Introduction

This paper aims to underline the new generation of information technology and how to use them to make better business decisions in managing enterprise resource and improve customer relationships. Today,
many companies' portfolio of application includes managing and using customer-related databases, customer portfolio management, CRM and customer experience applications.

Thus an enterprise would plan strategies designed to win share of customers and to measure its success on retention and
customer equity. Companies measure the customer's profitability and put customer managers in charge of portfolios of customers. More and more, the enterprise bring products to customers, not just customers to products.

Today we are seeing more and more organizations oriented to develop profitable and long term relationships with customers, as a way of ensuring sustainable development and increase market competitiveness. It is also underlined that IT solutions support these objectives of the customer relationship management. Hoewer, in order to ensure effective and efficient fulfillment of their objectives, organizations need to harmonize their CRM goals with IT strategies and alignment, by designing strategies to automate tasks for sales, service, marketing and communication, to analyze information and to measure the performance of organization relationships.

## Literature review

According to the marketing and CRM specialists, the first requirement is to identify customers: to tag them so that each one can be identified through any channel, across transactions and interactions over time. Once an individual customer can be seen as one complete customer across the company, the company can differentiate customers by both the different values that customers have to the company and the unique needs that each valuable customer has from the company. To learn enough to differentiate customers, the company will interact with customers and keep track of these individual dialogs, learning a bit more with every interaction, at every touch point. Finally, the company
will embark upon the hardest strategy: customization, or treating different customers differently, often by automating the personalization process in a way that increases customer loyalty even as it almost inevitably reduces the cost of operations. These steps are tough. Those companies that can achieve the first three - identify, differentiate, and interact -can claim to have achieved CRM and database marketing (Newel, 2001).

Lately, we could assist to the broaden of understanding of CRM and its role in enhancing customer value and, as a result, shareholder value. Customer Relationship Management (CRM) is placed more and more at a strategic level and enhanced within the company. We could identify five key cross-functional CRM processes: a strategy development process, a value creation process, a multichannel integration process, an information management process, and a performance assessment process.

Achieving success with CRM strategy and implementation also means that the company would pay attention to:

- customer acquisition, customer retention and development;
- managing the customer life cycle;
- creating value for customers;
- managing networks for CRM performance.
The unprecedented developments of web based technologies allow the companies to put in place new ways of performing better CRM activities.We cold mention, among the newest companies' preferences, the digital branding and online advertising ; boundary rationality and impact on making decisions in business and organizations; cross-cultural behavioral variation with impact on business and organizations.

The IT resources are now becoming the engine of successful enterprises, representing not only the operational base, but also the means for management, marketing and communication strategies. The modern management is mainly based on information technology, human resources, strategy and organizational behaviour. This type of managements considers both clear and implicit knowledge as important strategic resources and aims to ensure within the company a better use of knowledge in terms of individual, team or organization as a whole. The result is positive: extraordinary results in innovation, product and service quality, cost decrease and continuous update, according to the market's requests. In order to face new challenges, the companies must improve their digital and technological knowledge and capacities, in spite of all financial restraints.

The technology world has changed dramatically during the last decade. Organizations seeking to find a better way of differentiating themselves from theirs competitors is taking advantages of these information and technologies in order to improve their competitiveness, efficiency, profitability, brand awareness, and many more. To address the enterprise needs, this paper explores the way of how companies approached this modern problem and embrace the new technologies, as foundation of their success.

The indubitable fact is that companies are looking to transform and improve their IT processes and operations, which are involving increasing levels of complexity. For example, IT organizations have started by taking a concerted approach to rolling out collaborative or mobile technologies across the enterprise, to managing their portfolio of
applications, also progressing to data center consolidation and migration to cloud-based services.

The high volume of information that a company has, coming both from endogenous and exogenesis sources, is in continuous change, with multiple positive effects on the business. The company's informational resources are connected to those external, through different methods: email, Internet, websites, portals resulted to the fact that the stakeholders have access to more and more informational resources. They need to manage a higher data volume coming from separate sources, to understand and relate more informed clients, to apply and adapt to upgraded complex instruments and technologies, without forgetting the company's financial resources. Dedicated digital applications are developed, and in the same time they are included in complex integrated systems.

The enterprises want to get useful information from their data to transform business operations and to remain competitive in their area of activity. The challenge is aggravated by new advanced applications that require instant access to new types and high volume of data generated by social networks, sensors and mobile devices, as well as the exponential increase of data within business applications.

One of the main changes referred to the fact that $80 \%$ of the world's information is unstructured. At the same time, access to information has been democratized, as the information is (or should be) available for all. In the new era, the companies need to improve their traditional IT approaches with technology that allow enterprises to benefit from the big data era.

The big data era will be led by the
enterprises that could have at their disposal new platforms containing: exploration and development toolsets, visualization techniques, native text analytics, machine learning, cloud computing, virtualization and mobility, all based on enterprise stability and security, among other requisites. The point of inflexion created by social media represents a permanent change in the approach of the organizations. Almost $90 \%$ of the information in real time created now is unstructured data. The companies that use this new source of relevant information are in a very good position to increase the income, to reinvent the relationships with the clients and to create a new brand value. Clients share their experiences in online, providing increased control and influence over brands. This changed balance of power from enterprises to clients also requires new approaches in the marketing process, new instruments and new challenges, in order to stay competitive. The organizations that are open to getting relevant information from social media will be much more prepared to anticipate future changes in the market and technology.

But the increase of the information technologies comes along with the democratization of information and the consumerization of the IT services, at the same time. Democratization of information should make the information available to broad masses of the people, leading to social equality. The technology influenced the spread of information and at the same time, the dissemination of information influenced the individuals and the communities, as well as the way companies are doing business. We are witnessing a real data explosion. This volume is so huge, that $90 \%$ of the global data were created during the past two years. The volume, the
variety and the frequency of the information available on digital sources (such as social networks, among traditional sources - sales and market researches) represent actually the most important challenge that the companies have to face. The market is changed by the influence of new generations, with different access points and information consumption. Companies need to adapt their strategies and to answer the new Millennia's generation's requirements.

## The drivers of the decisions concerning implementation of new information technologies

The new technologies are there and could be implemented. The question is: are these organizations ready to adopt the new revolutionary technologies? Who are the drivers of this IT transformation? Which part of the organization should be in charge with innovation and adopting new technologies and how they could assess the strategic advantages and threats which come along with a new technology? Who is responsible, for example, for the acquisition of new CRM software and application, well as well for the related databases?

Chief Executive Officer (CEO) is the highest-ranking corporate executive of a company, in charge of total management of an organization. The CEO must lead the interests of the company, also take the lead in the innovation path and develop a management culture at the organization level that recognizes the need to implement corporate initiatives to achieve corporate earnings goals. Most CEOs agree on the importance of IT innovation to business strategies. Still, most executives say it is difficult to allocate
appropriate resources to strategy and innovation. A recent study indicates that the money spent on the IT innovation budget is moving away from innovative business solutions, and moving toward maintaining the day-to-day IT environment.

Chief information officer (CIO) is responsible for the information technology in an organization. The CIO responsibilities include anticipating trends in the market place with regards to technology as it is about ensuring that the business navigates these trends through expert guidance. At the same time, the general strategy of the organization should be followed and aligned with the proper strategic IT planning. CIO should be a consistent contributor in establishing strategic goals for an organization. The CIO manages the implementation of the useful technology to increase information accessibility and integrated systems management. The prominence of the CIO position has significantly increased as the information technology has become more and more important in the modern organization. The CIO should lead the technological progress of the organization.

According to latest studies, CIO mentioned as their concerns the followings:
> Understand the IT needs of the business side of the company, their preferences and trends, such as CRM
>Reveal to the CEO and to the board the link between IT, business strategy goals and budget formation
>Obtain good knowledge with respect to company's vertical and country markets and challenges
>Identify key business drivers for the adoption of crucial IT solutions
> Involve in the process of business IT related decision-making processes.
The main topics of the decade, with respect to business development, are as follows:

- Setting up the business priorities to be assessed by IT
- IT strategic priorities
- IT spending dynamics and sourcing
- IT strategy execution and operations management preferences, new software and hardware solution penetrations and investments priorities.
Knowing the correct trends of IT market and making the right investment choices and decisions are very important for every company. IT strategies and execution plans and measures of technology adoption are present in many large companies. Therefore, many of these are facing the powerful and divergent interests of the organizations: CEO and business managers, the business service managers (such as HR, finance, legal and supply chain) and the IT side of the company. Ensuring these interests are in alignment is critical to the success of the strategically IT decisions being made.

While business and IT executives agree on intent, they often disagree on delivery and execution. Both business executives and chief information officers (CIOs) say IT is a critical component of their business and that new technologies will continue to change the competitive landscape. Technology invades all aspects of current business operations and is considered a critical innovation tool that can help support future growth. Delivering on that promise is the challenge for the IT organization. But when it comes to execution, IT professionals and business executives have very different perceptions. Business leaders are less likely than their IT counterparts to
say that IT contributes to various aspects of business strategy. In fact, nearly half of CEO agrees that the IT department focuses primarily on day-to-day IT requirements.

Business strategy should emphasize how organizations enable both businesses and IT people to execute their responsibilities in support of business/IT alignment and the creation of business value from IT enabled corporation investments.

Establishing the general strategy of the company should always provide good insights into the management and contribution of IT within organization. It also takes into consideration gaining business value from IT. Today, many organizations use Information Technology in their planning and execution of strategy, in order to ensure that IT brings value to their businesses.

In our opinion, a correct assessment of new technologies and an early implementation, in line with the general strategy of the company, could gain an important advantage for the company, leading to success or failure of the entire organization.

The list of the newest challenges concerning the emerging technologies could include: mobile workforce, smarphones and tablets penetration and usage areals, mobility strategies, cloud penetration.

The technology innovation combined with the increased business demands, have led to the migration of traditional computing systems towards the smarter computing. The companies could have different approaches of this migration, from client-tuned systems, to the world of appliances, till the adoption of the entire new technology and philosophy of cloud. Some of them could appreciate the IAAS concept (Infrastructure as a Service), PAAS (Platform as a Service) or

SAAS (Software as a Service) depending on their organizational capabilities and characteristics, their needs and resources, as well as their expertise and IT behaviour.

IT executives must be able to move beyond fixing the past and participate more actively in planning for their companies' future by focusing on the following actions: maximizing the value of IT assets, reducing IT complexity, focusing innovation efforts on the customer and creating a more strategic IT organization.

Companies that fail to transform their IT organizations and functions will lag behind their competitors and put their future growth at risk.

## The use of social media in modern Customer Relationship Management a new approach

Thanks to social media, any customer can now become an editor, a broadcaster or a critic. Facebook has announced reaching over 900 million of active users, and each user posts about 90 announcements per month. Twitter users send over 200 million messages every day. Modern companies use social networks to communicate ( $56 \%$ of the executives consider social networks an important communication channel), but face difficulties in obtaining relevant information from the many unstructured data provided by clients and potential clients. A big number of companies and organizations are present in these networks, creating and offering relevant and official information.

Therefore, social media means any tool or service that uses the Internet to facilitate conversations. Social media is the quintessence of the democratization of information,
transforming people from contents readers into publishers. But it is much more than that, because social media is not all about Facebook and LinkedIn. Social media is an on-line environment that facilitates the mass collaboration. It is about social networking, social creation, social publishing and social feedback. And all these are powered by social technologies.

So, as we mentioned before, mass collaboration makes the difference. This collaboration includes the employees, the customers and prospects, as well as all partners. The community has now something to say about a company's marketing and communication, customer support, innovation and R\&D.

The companies discovered that they could engage their worth clients to participate in developing their current and future products and services, for marketing strategies for increasing loyalty and improved sales. Therefore, one could say (Gartner, 2011) that the great social media success is about mobilizing communities around a defined and common purpose.

There are many applications of these developments of social media in business and organizations. The news arises from the fact that the individuals and their online behavior - interests, aversions, passions - influence the making of economic choices and decisions. Practically speaking, there are numerous applications at a business and organizational level, with a special focus on the effects of technology implementation and usage on economic agents' behavior and deci-sion-making processes.

We could describe the main impacts of new technological changes over the businesses as follows:

[^0]branding and advertising issues of the companies,

- social media is dramatically changing the customers relationship management, as we know it,
- Consumers' online behavior deeply influences both marketing and digital marketing in this globalization age.
By using new technologies and analysis methods, the information can offer many advantages. For example, the so-called "Oscars Senti-meter" has combined the daily number of tweets with the language recognition technology, in order to identify positive, negative and neutral opinions included in the 140 characters messages, about the most probable Oscar movies. This process is called "the feelings' analysis". A similar project was developed for the Super bowl in USA and its results have influenced the players' contracts and the value of sponsorship contracts. Besides this analysis of feelings, the companies study the posts from social networks and measure their influence. This is a proof that companies start to pay an increased attention to the voices that can influence. In the same time, they offer equal attention to the "feelings" tendency, to predict the consumer's opinion on a shopping season, for example.

Social media is a tool of an increased importance, very relevant when it comes to creating a brand, having a relationship with clients, and increasing clients' loyalty. All these factors can be combined to increase brand awareness and create new business. "Social culture" is more and more talked about, and the culture and management of change represent the base of a real transformation of a business. Many companies organize a special agenda for social media, by
preparing an integrated plan to be more competitive and to have a measurable ROE.

The social component is included in business processes. For a good evolution, enterprises must encourage social behaviour of thinking and technology within the company's strategy, in areas such as client service, human resources, marketing, and operations. Many companies hire a strategist for the social media zone. This very important person acts like a lawyer of social media, and works with the employers to make them understand the importance of social mass media. They are also responsible for the brand protection in the online environment.

The idea is for a company to develop activities in those fields that are interesting and important for the community. There is such an increased activity in social media, that it can be very difficult for the CEO to pay attention to the company's relationship with the customer in social media.

Just like people tend to use more and more social media in their personal lives, companies must include these communication channels in their plans, to allow their clients to discuss about - and with - brands in a real dialogue.

An IBM study, in which over 1700 marketing directors from 64 countries and 19 industrial sectors took part, has shown that most of the marketing directors admit a relevant and on-going change in the way we interact with clients. In the same time, the research shows that the methods used to evaluate the marketing process are also continuously changing or updating. The IBM research has shown that while $82 \%$ of the marketing directors want to increase the usage of social media instruments in the next 3 up to 5 years, only $26 \%$ constantly read blogs,
$42 \%$ follow independent analysis and $48 \%$ read consumers' analysis, to change the marketing strategies.

The point of inflexion created by social media represents a permanent change in the approach with clients, according to the study. The marketing directors that use this new source of relevant information are in a very good position to increase the income, to reinvent the relationships with the clients and to create a new brand value. Clients share their experiences in online, providing increased control and influence over brands. This changed balance of power from enterprises to clients also requires new approaches in the marketing process, new instruments and new challenges, in order to stay competitive.

New terms have been embraced by the companies; such is "social marketing", described as marketing performed on social media platforms. Still, the marketers do not agree whether social marketing should definitively become an integral part of the sales and marketing mix. The idea that transcended is whether social marketing is worthy of an investment. Today's questions are more sophisticated, exploring scalable, proven ways to build social media presence and engagement with our prospects and customers. The enthusiasm for the potential of social marketing remains strong, as many of the responsible expect to improve their social media practices and link them to tangible business results in 2012.

Many companies have plans to solidify their social marketing strategy, grow their social footprint and engage with the audiences for maximum return. Many allocate resources for social media activities and discover the top social platforms and social media management tools they use to make their
jobs easier, more efficient and impactful.
The truth is also, that executives and senior managers are looking for best results in the following key areas - ROI, integration of social with lead generation and sales and expansion of social presence and reach. While social marketers feel they do not have the necessary resources to execute initiatives successfully, they must meet the expectations of senior management who demand to see tangible business value. Many and many companies gain experience in social marketing moving beyond growing social presence and reach. Their focus will shift to active social media management for increased lead generation and sales.

Social presence is measured by a number of metrics, such as: number of followers \& fans, social mentions across platforms, traffic to website, share of social conversations, lead generation, volume of sales and other.

The main social media platforms which try to get the attention of the individuals and companies are: Facebook, Twitter, LinkedIn, Blogs, YouTube, Forums, Flickr, SlideShare, foursquare, Trumblr . It worth mentioning also: Google +, Bestvendor, Getapp, QQ, Renren, Wiebo (Chinese Social Media), Podcasts, Pinterest, Proprietary communities.

## Conclusion

As some conclusions need to be drawn, we could underline that there is an indubitable fact that companies are looking to transform and improve their processes and operations based on information technology. For many organizations, increasing efficiency, adding improved business value, reducing costs and enhancing business-IT alignment have become the permanent core mission.

No doubt than the technologies contribute and add sustainable value to businesses and customers. One could say, at the same time, that many companies, caught in operational mode, are not well positioned to help create or implement the types of strategies that set a business apart. IT can move beyond fixing the past and more actively plan for the future, by closing the gap between the needs of business and the ability to deliver the requested efficiency, integrity, availability of the company's business.

In this view, the customer relationship management activities could only benefit from the development of information technologies.

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