

**Producers and consumers face to face with
the technical advancements of the 3rd millennium**

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Abstract

The globalization of markets as well as the new technical and scientific breakthroughs done in the beginning of the 3rd millennium have had and continue to have a heavy impact upon the behavior of both producers and consumers. Specialists in the field refer to this as the ‘4th industrial revolution’, an ongoing process that will drastically change economy and society as we know it.

Key words: consumer behavior, CRM, automation, prosumer, technology, the fourth industrial Revolution

JEL Classification: L80; M31; O33

**The 4th industrial revolution, the age of machines and
the evolution of the labor market**

Ever since the early 70s, known American futurist Alvin Toffler predicted the evolution of technical progress in his famous book “The Third Wave”, noting that breakthroughs in the manufacturing sector and the development of communication infrastructures based on the advancements in electronics and informatics will lead in the 21st century to the development of the so called “prosumer” (the role of producer and consumer would begin to blur and merge).

Nowadays we experience a world where billions of people can be interconnected with each other through mobile technologies with unprecedented processing power and storage capabilities that would have been considered science fiction a few decades ago. Many of the duties of engineers, designers and such other employees are no longer met in traditional office

buildings, but are instead met from the comfort of their own homes, as a result of the economic advantage brought by replacing transport with telecommunications.

Given that most of the technically advanced countries are currently faced with a so called transport crisis (roads and highways are crowded, parking spaces are rare, pollution is a serious problem) and transportation costs keep increasing everywhere, this replacement is beneficial, telecommunication satellites and fiber optics dramatically reducing the cost of great distance communications.

Our entire economic and social life is influenced by recent technological breakthroughs in areas such as artificial intelligence, robotics, autonomous vehicles, 3D printing, nanotechnology, biotechnology, genetics, quantum computing.

The experts talk about the “fourth industrial”, a revolution of the cyber-physical systems such as computerized industrial environments, household robots, Internet of Things, automated transport, medical engineering, more specifically the involvement of artificial intelligence (AI) in the day to day economic and social life. They show that the spectacular development of technology, although it brings many benefits, it also hides certain dangers, such as unemployment and the generation of an even greater inequality on the labor market at a global level - more than 7.1 million people risk to lose their jobs as a result of automating the manufacturing process. Also it is estimated that in a few decades the world population is likely to contain billions of people as well as billions of robots. People will work to improve robots while robots will take over the majority of day to day activities.

To prepare employees in front of this wave of change, it is necessary to identify well-defined measures that will help direct the workforce towards other activities and professions as well as drastically change our approach on education.

In the context of the new global economy, graduates need strong communication and social skills, as well as analytical and problem solving skills that many of the current graduates of educational institutions do not possess at this moment. Among the fields where work force demand is constantly increasing are those that require serious knowledge in mathematics, computer science and analytics and those that involve more creativity.

The impact of technical advancements upon consumer and producer behaviors

New technologies have impacted the entire economic environment and its two most essential actors: the consumer and the producer.

Under the impact of the ever accelerating economic processes, the modern consumer finds himself in a permanent competition with time. He wants to gain time and be able to spend it at will. With the help of e-commerce, he can order from anywhere in the world in real time. The modern consumer no longer desires only products, but also complementary services that will make his life easier and his acquisitions more profitable. The modern consumer no longer has a passive role in the market, he wants to be heard and even to be able to build the desired offer himself.

The free market has allowed suppliers to offer superior quality products and services, but customer expectations have also increased dramatically. Moreover, if their needs are not met properly, they can react instantly in the online environment through social networks where they can articulate their grievances. Maintaining market share, profitability and customer loyalty are more difficult now than ever. Therefore modern manufacturing companies are trying to develop an effective CRM (customer relationship management) as this represents the most successful strategy to attract and ensure customer loyalty in the current economic environment.

So CRM is a business strategy supported by information technology, strategy whose results optimize profitability, revenue and customer satisfaction by stimulating behaviors that satisfy customer requirements and implementing client centered processes.

The purpose of a CRM system is to help companies to effectively use the technologies and human resources at their disposal in order to gain new insights into customer behavior and their value.

A CRM system allows the producer to:

- ensure an automated workflow (opportunities-deals-orders-shipments-bills-revenue);
- efficiently manage contracts and internal documents;
- efficiently manage marketing, sales, service and support activities by avoiding bureaucracy ;
- easily generate reports and dashboards that provide an overview of the business to the stakeholders;
- develop new functionalities as the business evolves;

Financial services and telecommunications are the top fields when it comes to CRM implementations. Also high-tech companies, producers of daily consumer goods and retailers are among the frequent users of CRM solutions.

The American giant Hewlett Packard Inc. recently signed a contract with Microsoft that allows it to use the CRM Dynamics for a period of five years. HPI will use this solution for sales and services activities in a project that will cover both their own team as well as the channel partners. HPI has a team of 6,500 sellers and 20,000 employees.

Another well-known CRM solution is SAP Hybris. This is a multi-channel solution and integrates any form of relationship with the customer whether it is commercial, marketing, support, etc. It is a unique platform for online, mobility, POS, call centers, social media, digital or print campaigns, B2B or B2C. Its objective is meeting with the client on any possible channel, creating a customized experience and increasing sales. Part of its client portfolio are companies like Vodafone, Samsung, Nikon etc.

Conclusions

The fourth industrial revolution is the greatest challenge that mankind is facing today. It affects the global labor market, relationships between producers and consumers and generally the

entire economic and social life. However, the impact of automation will be felt most strongly in developing countries, as robots will primarily replace cheap labor force with a low level of competence. Therefore the governments of these countries must adopt urgent and well defined measures in order to avoid unemployment and increased social inequity that could have serious consequences.

References

- [1]. F. Buttle - Customer Relationship Management. Concepts and Tools, Ed. Butterworth Heinemann, 2006
- [2]. Y. Claeysen, A. Deydier, Y. Riquet - Marketingul direct multicanal, Ed .Polirom, Bucuresti, 2009
- [3].M. Ioncica, R. Minciu, G. Stanciulescu - Economia serviciilor, Ed. Uranus, Bucuresti, 1996
- [4].Th. Purcarea - Managementul relatiilor cu clientii, Ed. Carol Davila, Bucuresti, 2011
- [5]. A. Toffler - Al treilea val, Ed. Politica, Bucuresti, 1983
- [6]. <http://www.revistamagazin.ro/>
- [7]. <http://www.crmreview.ro/>