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World economy is experiencing some important transformations, mainly due to the rapid evolution of the informational and communication technologies. In the last years, new technologies flooded the production processes. They have allowed the improvement of the processing and use of the economic information and the general accelaration of the economic flows.

The technical progress interferes with the economic activity through the re-engineering of the production lines, the revolution in the field of building materials and store, shopping center, malls and industrial hall building, the considerably shorter time period these are being built and they become available for the commercial activity, the revolution in the field of supply, merchandise storage and manipulation, the appearance of different types of intelligent machineries and equipment, merchandise storage software improving the way the client is served at the counter. The industrial revolution determines a reorganization of the economic activity, a resetting of the trade economic activity by directing the trader towards the client using new commercial techniques and strategies.

*Key words: technology, technological revolution, technical progress, development, production, trade, improvement of the trade activity.* 

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#### **Conceptual aspects regarding trade**

The notion of commerce has a complex contain, determining a economic function that consists of buying raw materials or products to sell them in the same physic stadium, but in conditions convenient for the buyers. The same notion, defines the profession of a group of economic agents, who take action on the market determining the trade acts.<sup>140</sup>

Commerce, through its functions and through the nature of the activities developed, represents the main component in the system of the national economy, and represents that economic activity of mediation of the economic goods trade, through commercial specialized enterprises, both inside the borders of a country and in relation to other countries. The economic category of commerce has a very complex contain and plays an important role on both social and economic plan. On social plan it has a strong psychological loading, through promoting commercial ethics, forming the taste and the education of the clients, studying the consumer's behavior in taking buying decision<sup>141.</sup>

Also trade represents a point of contact between citizens and the local community, through which pass the most recent information, in terms of life styles, cultural schemes and common activities<sup>142</sup>.

<sup>&</sup>lt;sup>140</sup> Dumitru Patriche (coord), Ion Stănescu, Mihai Grigorescu, Mihai Felea, *Bazele Comerțului*, Editura Economică, București, 1999.

<sup>&</sup>lt;sup>141</sup> Lefter Chirică, *Comerț și economie comercială*, Editura Economică, București, 2009.

<sup>&</sup>lt;sup>142</sup> Carmen Eugenia Costea, Andreea Simona Săseanu, *Economia Comerțului Intern și Internațional*, Editura Uranus, București , 2009.

Commerce, as a branch of an economy, is assimilated to the goods way, activity that appears between production and consumption, with the mention that the circulation of goods has several productive aspects, as a result of the activities which represent an extend of the production process, such as: manipulation, transport, storing, portioning, stowage, etc., operations that increase the value of goods <sup>143</sup>.

Modern contemporaneous economy is characterized through a high rhythm of development, in which commerce is in the center of all economic activities. Development is lengthened to commerce, market relations, thing that led to a globalization of market and to a harmonization of the interests of participants. In a global approach, the economic category of commerce includes interior and exterior trade, with their main components: import, export, re-export and transit activities<sup>144</sup>.

# The influence of the technology of information and of communication over commercial activity

World economy passes through a period with strong transformations, mainly generated by the fast evolution of informatics technologies and by communications. Electronic commerce becomes fast a spectacular component of globalization; the expansion of electronic transactions could represent an major opportunity for commerce and development<sup>145</sup>. This process can be the source of an important number of success histories through which developing countries and their enterprises can reach new levels of international competitiveness and participate actively at the global informational economy. The international community must support developing countries and their efforts for a better understanding and knowledge of the various aspects of electronic commerce, technical, legislative, social and cultural aspect. The phenomenon electronic commerce prefigures to stay an important field on the international agenda for a long period of time, because of the deep macroeconomic and social implications that begin to be better understood. The nowadays performers of commerce turn their attention to developing the dimensions of electronic commerce<sup>146</sup>.

In order to evaluate the potential impact of electronic trade over economic and social development of developing countries will be studied aspects regarding the size, the purpose and the growing speed of the electronic commerce, the tendency of this type of commerce and the way in which this affects the economic activity<sup>147</sup>.

The main implications of electronic commerce are<sup>148</sup>, the following:

- It allows the increase of connectivity in economy. The possibility to connect to the Internet permits communication and doing transactions from all around the world at any time.
- It allows the opening of the commerce. In the opened electronic commerce as the Internet support which he develops on, consumer is as well involved, he has a new role, being a partner in creating products.
- It changes the relative importance of time through accelerating the production cycles, through
  offering organizations possibilities to collaborate to product and sell and the consumer to
  develop its transactions in a short period of time.
- It transforms the market changing the way of business development. This kind of traditional intermediary are replaced, there appear new products, new markets, lengths between business

<sup>&</sup>lt;sup>143</sup> Lefter Chirică, *op.cit*, pp.13.

<sup>&</sup>lt;sup>144</sup> Lefter Chirică, op.cit,pp.18-19.

<sup>&</sup>lt;sup>145</sup> Ion Gh. Roșca, Cristina Mihaela Bucur, Carmen Timofte Stanciu, Octavian Paiu, Mirela Vișean, Comerțul Electronic, Concepte, Tehnologii și Aplicații, Editura Economică, București, 2004.

<sup>&</sup>lt;sup>146</sup> Idem ,pp50.

<sup>&</sup>lt;sup>147</sup> Idem pp.50.

<sup>&</sup>lt;sup>148</sup> Idem pp.50

partners. The work organization is changed, through the apparition of some new knowledge distribution canals, interactivity between people is opened at their workplace, it appears the need of more flexibility and adaptability.

Even though at present electronic commerce continues to face with the limits of implementation methodologies in the economies of some countries, its role and impact over the economic activity stays a major reality<sup>149</sup>.

A result of the Internet commerce consists of costs reduction and research, diminishing the distance between seller and buyer, developing individual profiles for buyers. This desiderate will come true in a climate of trust between buyers and sellers that is based on assuring the security of confidential data. Electronic commerce and other communication technologies decrease the importance of time as a factor that determines the structure of the economic and social activity. Time is saved, you can buy more efficient and the buyer does not interrupt his activity at the workplace.

The reason why business-to-business commerce has raised is because of the special impact that it had upon associated costs to the inventory, sales execution, product procurement, distribution costs, and lengths with the banks.

Another source of the efficiency of the electronic commerce is the opportunity for the "limit borders" of new entrances, business models, technology changes, which separate an industry from another<sup>150</sup>.

The advantages that come from a business on the internet are: significant decrease of distribution costs and sales administration costs, improvement of the services offered to the clients and the automating of orders and permanent up-dating information about products, eliminating errors, the speed of information. For business people there are a series of opportunities in electronic commerce: they can create their own firms can give information about themselves on the internet page, they can exploit Internet as a different distribution canal, they can build a new business centered only on global network, can establish new business contacts.

The evolution of industrial developed societies is determined by several aspects<sup>151</sup>. An aspect would be the acceleration of the development rate in technological areas who have determined fast changes in products and processes. A second aspect would be the speed of global commerce, thing that gives individual companies a much more flexible market, but also much more unsecure to compete on it. A third aspect is the frequent fluctuation in lifestyles and the consumers preferences owned to the communication means and international travels, etc. Another aspect is represented by the new values, ambitions and attitudes towards work, that come from the desire of employees to participate at solving problems and elaborating organizational decisions.

If we look towards computer development in the last 30-40 years, we can see the accelerate change of the world<sup>152</sup>.

From its first operation, in 1920, computer has reached only in 1964 the commercial feasibility and success. In a similar way, the transistor needed decades to be incorporated in commercial products, like audio means, navigation instruments or computers. The silicon microchip integrated circuits have followed the same transformation through a shorter process, from innovation to commercial use. In the last three decades, the changing rates became shorter and faster transformations of technical progress in commercial products<sup>153</sup>.

<sup>&</sup>lt;sup>149</sup> Ion Gh. Roșca, Cristina Mihaela Bucur, Carmen Timofte Stanciu, Octavian Paiu, Mirela Vișean, *Comerțul Electronic, Concepte, Tehnologii și Aplicații*, Editura Economică, București, 2004.

<sup>&</sup>lt;sup>150</sup> Ion Gh. Roșca, Cristina Mihaela Bucur, Carmen Timofte Stanciu, Octavian Paiu, Mirela Vișean, *Comerțul Electronic, Concepte, Tehnologii și Aplicații*, Editura Economică, București, 2004

<sup>&</sup>lt;sup>151</sup> Claudiu Emil Ionescu, GH.Gh.Ionescu, Design și management, Editura Universitații de Vest, Timișoara, 2006.

<sup>&</sup>lt;sup>152</sup> Idem, pp.48.

<sup>&</sup>lt;sup>153</sup> Idem, pp49.

#### Progress in organizational culture of the manager. Technological change

Success companies use *integrated design management*, as a mean to assure that all the products, communications and services of the organization use to the business in general<sup>154</sup>.

Acceleration rates of changing have asked an organization and improved process to grow the adapting capacity of the companies to the new conditions. In order to accomplish this, there are three business strategies<sup>155</sup>:

The first one refers to the total understanding regarding market development before design development. Another strategy refers to the concentration on commercial transformation and viable of ideas, innovation on commercial success products. Another aspect supposes the design of an organization well integrated to support the development of the product in an environment of changing conditions, with product systems or cascade development form a product to the next one.

The term of design and especially "fabrication design" implies aspects<sup>156</sup> as: Basic characteristic of the system (lot, flux line, etc.) Available processes (e.g.: smelting, turning, etc.) Storage capacity and goods manipulation The attitudes and qualifications of the workforce The level of usage of processes and machines Quality standard and control procedures Materials used and detail storage Retail market evolution under the impact of technical progress

## Recipes of a store implementation, aspect of technical progress

Technological revolution is surprised in all commerce forms, either en detail or en gross sales.

Technical progress involves in economic activity through introducing new technology in the production lines, revolution in the field of construction materials and stores building, commercial centers, malls and industrial sites, period of time considerable smaller where they built and become more available for the commercial activity, revolution in the field of goods supply, storage and manipulation, the invention of new types of machines and intelligent equipment, inventory software with spectacular effects upon the development speed, reorganizing, reallocation of the economic activity of commerce, methods who shorten the time of implementation of a store.

The passing from traditional commerce to the modern commerce is another effect of technical progress, because of the production at industrial scale, of the possibilities to group thousands of goods assortments on areas of thousands of square meters, sophisticated machines and qualified staff and intense prepared to monitor and assure the good development of the technological flux. An effect of technical progress is the evolution of retail market, which in Romania has reached to consist of a total number of 1192 stores in 261 towns (at 31 September 2009), towards 582 stores opened in 103 towns, in 15 November 2006.<sup>157</sup>

The tendency on the national retail is of growing, thing revealed by the market quota of 37.50 % that hold the first 25 de retailers in Romania, comparatively to percentages as 90% in Finland, Sweden - 82%, Slovenia - 82%, Ireland - 81%, Estonia - 79%, Austria - 79%, Germany and

<sup>&</sup>lt;sup>154</sup> Idem, pp56.

<sup>&</sup>lt;sup>155</sup> Idem pp.57.

<sup>&</sup>lt;sup>156</sup> Idem pp172.

France - each  $70\%^{158}$ , market quotas that are hold by the first 5 retailers in the enumerated countries.

The strategies used by the multinational companies from the modern commerce, regarding supplying and selling the goods, goods on the shelf, the way of supplying the shells with goods for an efficient buying, the introduction of computerized equipments and of high technology for manipulating and the transport of the goods inside the stores which replace more and more staff, the high technologies and software used for the goods inventory, to monitor the activity, have contributed to the birth of some types of new stores, standardized, unitary conceived at the level of the entire market area where they develop their activity: hypermarket, supermarket, minimarket.

The high technology introduced into building process, development and innovations from the field of building materials determine the possibility to realize buildings of diverse structures, in very short periods of time.

The same standardized form of organization is met in all the departments of such a selling point, the structure of stores, the organization of the product department, equipment with commercial furniture, equipment used, human resource departments regarding qualified personnel through standardized programs specially conceived for this types of stores, performing logistic systems which corroborated determine the easiness of implementation this stores format: some locations are equipped with electronic labels on the shelf, that assure firstly the competitiveness of the prices and secondly the lack of differences between the price on the shelf and the one that you get when you pay.

Platform for fruits and vegetable <sup>159</sup>, is a new modern logistic system.

The implementation of a concept performing through which this type of platform becomes the unique costumer of the supplier, and for the store one of the most important suppliers. The main difference towards the regular system consists of the fact that the demand activity is centralized, receiving and delivery towards the platform (the transfer of ownership and quantitative and qualitative checks are done on the platform).

The main advantages of this type of platform are the following :

- administrative work reduction (shortage of time for orders, operations, checking documents several times);
- improvement of the parameters length to stocks (rotation, stock zero);
- the reduction of losts in shops through improvement the quality of the products received;
- qualitative and quantitative reception at the level of articles is made on the platform;
- reducing the time necessary for reception in stores and increasing the time destinated to selling;
- reducing the minimum quantity ordered by the store.

Through the implementation of this platform are aimed some objectives:

- checking and improvement of the quality and refreshment of the products;
- the homogeneity of the quality and refreshment of the products between stores;
- reducing the stock zero;
- reducing the minimum order;
- obtaining smaller prices for shopping because of buying a big volume and because of the existence of a single point of delivery for the supplier;
- the possibility to make speculative shopping and store them temporary in better temperature conditions;

<sup>&</sup>lt;sup>158</sup> "Fabrica de bani" magazine, article" 'Când devenim ostaticii unei piețe libere?"07.02.2008.

<sup>&</sup>lt;sup>159</sup> www.metro.ro

- reducing the time necessary to the reception et the stores and the concentration of the staff on selling;
- reducing the number of sales to stores;
- reducing the losses in stores through verifying and improvement the quality of the products;
- reducing the administrative costs.

Conclusions

- business-to-business commerce has raised because of the special impact that it had upon costs associated to inventory, sales execution, products procurement, distribution costs, lengths with banks;
- success companies use the *management of integrated design*, as a way to make sure that all their products, communications and services of the organizations the business generally speaking;
- growing the number of stores as a result of the technical progress, has determined the apparition of some new standardized stores, unitary conceived for all their branches.

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