COMPUTERISATION: AN EXAMPLE OF ADAPTATION FOR THE DECISIONAL PROCESS, A MAJOR CHANGE OF THE 21-ST CENTURY

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ABSTRACT:
ECONOMICAL ORGANISATION MUST PERMANENTLY ADAPT THEMSELVES TO THE BUSINESS MEDIUM AND RESPOND THROUGH CHANGES IN FACE OF CHANGE, MAJOR OR MINOR, IN THE SYSTEM WHERE THEY OPERATE. THE CONTINUAL COMPUTERISATION OF SOCIETY MADE THE ADAPTATION EASY THROUGH THE AUTOMATION OF PROCESSING, RATIONING OF PROCEDURES, REDESIGN OF BUSINESS PROCESSES INSIDE ECONOMICAL ORGANISATION. INTERNET HOWEVER, AS A VERY PERMISSIVE (CVASI)GLOBAL INFRASTRUCTURE, HAS DETERMINED A COMPLETE RE-EVALUATION OF ECONOMICAL ORGANISATION, A COMPLETE CHANGE. THE GLOBAL NETWORK REPRESENTED, (THROUGH IT'S INTERNATIONAL, OPEN STRUCTURE, THE MODIFICATION OF CONSUMER BEHAVIOUR AND MARKET DEMAND WHICH IT DETERMINED), THE MAIN CHALLENGE AND AT THE SAME TIME THE MAIN SOLUTION FOR THE MIGRATION ON NEW MARKET SEGMENTS AND FASTER METHODS OF DOING BUSINESS FOR THE CONTEMPORARY COMPANIES[2].

KEYWORDS: DECISION MAKING PROCESS, INFORMATIONS, ORGANIZATIONAL CHANGE, COMPANIES, MANAGEMENT.

In the following paper, we will analyse the impact that the information, the associated technologies and thus the computerisation has on the transformation of organisations. There are three main stages in the evolution of processing paradigm that come to help organisational change and these are[3]:

1. Processing automation: increasing the operation efficiency by the automated data processing;
2. Streamlining processes: streamline and decongest flow problems caused by operational automation;

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3. Redesign: the radical remake of business processes, based on the redefinition of process structure and workflow. All these organisational "rethinking" of structure, function and behaviour, have determined risk and result increase;

The informational revolution and the vast proliferation of informatics, have a powerful mark on decisional processes. It was already outlined, mainly in the developed countries, a computerisation of the decisional processes, which consist in the large-scale use of computers in all the phases of the decisional process by the use of specialised software that is likely to substantially increase the speed and effectiveness of decision-making. Decisional computerisation is the most visible trend, current professional managers have on their desk a computer for daily use to get the necessary information on which certain decisions are based and to outline and compare various decisions and for the control and assess previous decisions[4].

The main variables that determine decisional computerisation are[5]:

- The managers must have the knowledge and abilities necessary for the effective use of computers;
- The endowment of virtually all companies with computers;
- The companies must have information databases with the necessary content for the decision-making process and the assessment for the effects of their implementation;
- The creation of software for general use and decision based, very useful for the managers in the design and implementation of decisions;
- The gradual shaping of an organisational culture with a pronounced informational dimension that will influence in a positive manner decision computerisation;
- Practical demonstration of company performances and the major contribution that the computerisation has in the modernisation plan for decision-making processes.

All the mentioned factors are on an intensified trend meant to determine an increased computerisation of decision-making processes.

The computerisation of decision-making processes generates multiple advantages in the organisation: an increased degree of substantiation, of decision rationality, use of a large volume of processed data and sophisticated models; speed up decisions, having increased chance to fit in the optimal decision-making period; facilitation and increase precision in evaluation and the effects of decisions for managers, mainly in the economic plan; partially relieving mangers from menial tasks like gather, process and verification of information, thus creating the possibility to focus on major components of their activity[6].

At the same time, decisional computerisation has its own disadvantages. Amplification for managerial costs associated with the acquisition and use of computers and software that have a rapid moral wear. Impossibility to computerise a series of quality information that have an important influence over decision-making efficiency[7]. Another, potentially major, disadvantage is a certain trend to over-evaluate the possibility that the computerisation has in decision-making processes thus neglecting the involved human elements[8].

Computerisation appeared as a response to the necessity for data processing, phenomenon caused by the industrialization of society. Certain aspects of daily life remain outside the

[4]Rusu, D., *Organizational changes in electronic business world…*
[5] Malhotra, Y., *Knowledge Management for the New World of Business*, http://www.brint.com/km/whatis.htm.
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[7] Drucker, P., The age of social transformation. The Atlantic Monthly, în G. R. Hickman, Leading organizations: Perspectives for a new era, Thousand Oaks, CA: Sage Publications, 1998
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computerisation's sphere of influence and that for organisations represents a strategic stake from which numerous competitive advantages may occur.

Some specialists give a primordial role to computerisation in organisational change thus neglecting the contribution of other factors like social, political and economic. Indeed, computerisation represents the most important factor in achieving change, however it is completed by the organisational factors such as organisational culture (it is necessary a dynamic culture that promotes initiative and innovation) and the organisational structure (the structure must permit inter-functional cooperation and collaboration), and human resources (this implies instruction, motivation, evaluation and staff compensation).

Computerisation offers new solutions in communications, hardware, software, and the redesign of economical processes in companies thus concluding that computerisation has entered in the economic domain with all it's instruments not as a simple spectator but as an actor on the scene of the economical processes[9].

Changes that appear as a consequence for computerisation are profound, structural. They correspond to an ever faster process of innovation, the appearance of new distribution channels, a competition dynamics that may surprise even the most shrewd and flexible managers. Moreover the value of a company it's no longer based on the physical wealth (like products) but on intangible goods, like brand, consumer experience, supplier integration, key information value aggregation[10].

Organisational changes that come due to computerisation have different amplitudes and various impact effects, as of consequence can be classified as[11]:

- Internal changes, with different importance:
    - Radical changes for the "intimate" aspects of the organisation: modification of the organisational function and structural function; changes for organisational input and output. Thus we find the increase of importance for an somewhat atypical resource (knowledge), which is added to the traditional production factors and, at the other end, changes in the nature of the product or the service supplied by the organisation;
    - Changes in "fluidisation" or organisational internal rationalisation: streamlining for processes in the framework of organisation through the exploitation of new mechanisms such as on-line payment systems, the introduction of technologies that support collaboration between employees and electronic work, and others;
- Changes in the relation with business partners, especially important regarding the impact on society – can have as an result the convergence for areas of activity and economic activity;

The necessary qualifications for a manager in the context of computerisation are different from those sufficient for an "traditional" leader. The role for the manager in the new business environment passes from command and control to foresight and coordination having as a fundament a more coherent and sustained vision on the necessity and impact of change[12]. A good manager needs a vision on change, which he is capable to share to the other involved parties, a lot of flair in choosing resources with which to sustain the change, the power to stop in all points capable to support him in the road to the objective on change, to refresh it's resources.

[9] Rusu, D., *Organizational changes in electronic business world…*
[10] Rusu, D., *Organizational changes in electronic business world…*
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[12] Drucker, P., *The age of social transformation…*

Communication with those whom have already experienced the same changes is beneficial, reinventing the wheel and the afferent efforts do not serve anyone. Loosing trust and hope for success, hesitation on the course of change are natural – however they can be counteracted by the elements somehow sentimental presented above – open vision, optimal exploitation of sources, communication. "The effective mission statement is short and sharply focused. It should fit on a T-shirt," wrote Peter Drucker[13].

In the context of computerisation, company managers should discover new ways to identify and deliver unique values for employees, partners and other elements that are handy. They must become collaborative in practice and holistic in thinking. The support systems for decision and activities must surpass traditional barriers, offering information that can be used by partners[14].

In this context, managers should take into consideration new technologies, experimental, that appear on the horizon and to be prepared to face necessary changes in the corporation strategy accordingly to new technologies. In the relation with technologies, managers must often have a reaction of "planned abandon" – to be capable to renounce them in the moment when they no longer serve the organisation, no matter how efficient may have been or how much employees are attached to them[15].

In computerisation success formulas are not valuable for a long period of time. Due to the ever-decreasing barriers at the entry in the electronic market and the ease of imitation of successes, competitors appear (from the virtual nothingness) and cancel that which for a company represents at a moment it's competitive advantage. In these conditions organisations, must admit the constant character of change, to be permanently future-oriented, capable to reconfigure through new force giving partnerships, through participation in the new business ecosystems. Survival of a company will depend in the new conditions on their ability to redefine and continuously adapt their purpose and actions for achieving these goals – in other words, the organisation's ability to anticipate and exploit surprises[16].

Thus, organisations are outsourcing some functions, decompose and recompose value change, around the costumer, not the product, manage to "computerise" their entire activity. The collaboration inside and outside organisations is essential, same as integrations for information and knowledge used in a unified and coherent system[17].

Through permanent reconfiguration we must not understand the disappearance of traditional, functional organisation – functions still represent the main axis for change[18].

Disappearance of functions and in this manner of any frontier inside organisation will lead to disorganisation – they are necessary for the separation of people, work tasks, products and places. The permeability of frontiers given by the separations of functions must remain in order to allow circulation of ideas, information, knowledge, decisions, talent, rewards and actions[19].

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