
ARTIFICIAL INTELLIGENCE AND ETHICAL PRINCIPLES TRANSPOSED BY MANAGEMENT AT LEVEL FINANCIAL ORGANIZATIONS

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Abstract

The vision of this financial banking organization about its digital future is a key element of the digital transformation strategy to be implemented. In this context, the motto of the organization, reflected in its mission, determines the management to define a new identity of the company, not in terms of limitation to current / existing banking products / services it offers to customers but the future need to meet their needs. that of portability and mobility. Aware that the dynamism of the future has a new concept defined by the digital age, organizations are forced to anticipate the transformation, relying on the development of connectivity.

Artificial intelligence thus becomes an inexhaustible source of potential changes with direct effects both on the way we relate to customers but also on the way employees conduct their business.

The moral and ethical responsibility of any manager, coupled with a high level of professionalism, becomes a motivating factor for both employees to achieve the organization's goals and a permanent example of conduct for external employees that contributes to the institutionalization of ethics within the organization.

In this way, we will pave the way for the use of extended use of artificial intelligence while raising employees' awareness of the need for sensitivity when working with AI technologies.

Keywords: *Artificial Intelligence (AI), Digitization, Digital Economy, Information Technology, Organizational Culture, Code of Ethics.*

Introduction

Modern organizations are the product of the previous revolution in the economy - the industrial revolution. Today, there are very few organizations dating back 300 years, most of them banks and publishing houses. The modern organization is a man-made institution, mainly to allow society to benefit from technological changes.

Nowadays, a new technological change has been accelerated when organizations have invested in digitization in order to be able to move more

easily over the current period generated by the SARSCOV pandemic 19. Banking organizations have understood that innovation is closely linked to digitization.

Globally, innovation and new artificial intelligence technologies have an impact on all industries, products, but especially consumers, and digitalisation is an important element in the development and resilience of a banking organization.

The current business environment is gaining new value in terms of digitizing processes, workflows, and maintaining a proactive attitude is important to maintain balance in the relationship with business partners, in the case of banking organizations with end consumers and customers.

Research methodology, results and discussions

Given the exceptional circumstances caused by the SARS VOC 19 pandemic in the last two years, even banking organizations have had to move quickly to work from home online, collaborate in the digital environment and use electronic data and document management tools playing a very important role.

In this situation, the document management solution aimed at collaborative work of documents and ensuring access to them in / from any location, at any time by automating work processes, a solution designed to be used by all departments in an organization / banking institution, regardless of the specifics of the activity, respectively: the accounting department, human resources, procurement, marketing and sales. Essential for solving the daily tasks of the organization's employees, interoperability ensures the efficiency and continuity of processes and at the same time the productivity of the business.

At the same time, banking organizations / institutions are constantly focusing on the needs of end consumers, paying particular attention to the improved banking experience of customers as a result of the launch of several innovative digital solutions.

The new mobile applications addressed to retail and corporate customers, offer them real-time access to their accounts, in complete security, complete, integrated digital solutions for factoring but also on digital trade finance platforms, designed to manage guarantees, letters of credit and receipts, transfers of money in a safe and fast way.

Thus, in the context of the pandemic, most banking institutions have aggressively promoted the adoption of alternative - digital channels, which has led to a sustained increase in their use, both for retail and corporate customers.

The number one priority of all banking organizations was to protect customers and employees, which materialized through the strict

implementation of hygiene measures in all territorial units, while ensuring business continuity for the front office area, and for back-office employees also opted for the option of transferring to telework for certain periods of time. In this way, customers have received continuous support.

As a result of the effects of the SARS VOC 19 pandemic, the banking institutions have accepted the deferral of payments on outstanding loans, facilitating their access to finance, in particular through programs set up by the government to support the work of economic agents and measures. intended for individual customers due to financial difficulties encountered.

In parallel, as a result of the measures adopted during this period, the leadership of the banking organizations underwent a remodeling process in order to support the continuity of the activity.

The main elements that have generated these changes in approach are:

- the new technology of artificial intelligence - digitization;
- access to information via the Internet;
- the nature of work based on knowledge and adaptation;
- the forms of organization of the less and less hierarchical organizations.

The leadership model has undergone a major change in the new context of digitalization, moving from the traditional leadership model to the digital leadership model. Below we will define the main characteristics of a digital leader:

- the ability of the leader to turn “knowledge” into the main raw material at the level of an organization;
- the open attitude of the leader regarding the ability to understand and anticipate the disruptive impact of the latest technologies in the most diverse fields;
- capitalizing on the knowledge regarding the actuality / advancement of the technology by tracing the new directions of development of the organization;
- the leader’s ability to identify the latest trends that are likely to affect the various internal flows as well as the entire operating ecosystem of the organization (from big data and cloud computing to automation and robotics);
- knowing and accepting the limits of one’s own competence and expanding the field of knowledge by consulting with colleagues and relevant experts in the field.

Aware of the new features of his mandate as well as his own limitations, the digital leader abandons the authoritarian leadership model and opens up to a better relationship with the community. These coordinates in turn diversify depending on the leadership in this digital age and how it

is defined. Redefining leadership, as a result of this phenomenon but also as a destructuring of previous, vertical hierarchical models, leads to the replacement of old structures with new, horizontal, agile ones that facilitate communication between organization directors, project managers, work team coordinators, directors of equipment suppliers.

In this context, digital leaders are more innovative, open-minded, bolder, more digitally extroverted, and more agile in approaching business opportunities than traditional leaders. Such a transformation of the leader in the digital age is achieved by:

- clear definition of roles based on ongoing / ongoing projects and not on positions held in the organization, which allows the same person to be a manager in one project and a consultant in another;
- transferring responsibility to work / project teams and empowering decentralized decisions;
- frequent redefinitions of the organizational structure through well-defined iterations, so that each work / project team has the power / ability to self-organize;
- applying rules in a transparent manner, respecting them by everyone, including the CEO, and excluding political / group games or interests from the organization;
- the opening of new business lines meant to capitalize exclusively on trends and discoveries in the field in which the organization operates.

Digital technology will thus play an increasingly important and important role in our lives, of banking organizations, but also in other types of organizations, regardless of the field of activity they carry out. Therefore, there is still an urgent need for people with vision, the so-called “skills magnets, dream designers, masters of consciousness, or organization architects and programmers of the future.” These characteristics are not just about addressing a leadership position, they are ultimately about all the professional positions in an organization.

Among the most common digitization solutions adopted by organizations we can list:

- a) solutions for archiving documents in electronic format - involves the transition of documents from letter format to digitized documents;
- b) electronic invoicing - involves the use of services for sending, receiving and processing invoices in real time, thus generating cost reductions;
- c) document management - involves redefining the standard principles of centralizing documents, in terms of processes on smartphones, laptops or scanners giving an extra speed in searching and structuring information;
- d) digitization of communication with final customers / consumers aspect that simultaneously contributes to strengthening the relationship with

them and optimizing costs - involves the use of text messages on the phone (SMS), web chat, social media, mail, etc .;

e) digitization of data collection - involves a recording device or a smartphone, a tablet, a laptop, a portable scanner and the connection to the Internet directly or through a router for the electronic transfer of information collected, an operation that allows instant processing while reducing both time operational as well as the cost of travel, which can sometimes be eliminated altogether;

f) automation and / or digitization of e-mail processes - involves the creation of a platform through which all information entering the organization is collected and centralized - thus streamlining labor productivity by simultaneously, significantly reducing the response time in the relationship with the customer.

Transposing the principles of digital ethics into modern banking organizations through artificial intelligence; Free will and ethical robots or ethics for robots

If we refer to the general principles of ethics in organizations, we must consider its entire color palette:

- personal ethics;
- ethics of individuals - is characteristic of employees / shareholders / members of the organization in order to achieve the objectives respecting the internal rules;
- ethics of the organization - which highlights the rules, habits, norms and / or internal procedures necessary to achieve its goals;
- ethics of the organization - aims at its direct relations / interactions with customers, suppliers, competitors, media, with the entire civil society as a whole.

All these interdependent dimensions influence each other, so we can say that an organization can be considered ethical only insofar as its members have a behavior that attests to such a qualifier. In this context, any organization that will promote its own moral principles, through the mandatory institutionalization of a set of rules of conduct, will not tolerate within it employees / shareholders / members of the organization that violate these rules or moral values. The practice supports the theory and shows us that the observance of moral principles within the company invariably leads to their behavior and relations with the external environment.

An organization's own strategy reflects both its position ethically and socially by combining the ambition of professional ethics which is inseparable and foldable from the ambition of a high level of economic efficiency with that of investing in progress. In other words, choosing a strategy with a high

degree of efficiency implicitly confers the means of a demanding practice of ethics and vice versa. We can say that: at the level of an organization, strategy and ethics are intertwined and intertwined to form a unitary whole.

In this regard, we conclude that there is undoubtedly a return on the application / implementation of ethics at the organizational level, which should be perceived as a medium-term and especially long-term investment of the organization, as it automatically leads to profit / benefit, with the mention to oppose an improper profit / benefit obtained illegally / immorally.

The leadership skills and qualities of the managers in an organization implicitly determine the quality / ethical involvement of the employees within it.

The moral and ethical responsibility of any manager, coupled with a high level of professionalism, becomes a motivating factor both for employees to achieve the company's objectives and a permanent example of conduct for external employees that contributes to the institutionalization of ethics within the organization.

Free will - a controversial philosophical issue related to the endowment of artificial intelligence and its conscious implementation is a real challenge that urges meditation.

In other words, this eternal challenge of transposing artificial intelligence is difficult because inventions such as computers / digital devices are deterministic machines, which run precise instructions given by humans in a certain context and well-defined purpose, unlike classical analog systems whose possible errors cannot be fully anticipated.

There are tolerances and uncertainties regarding the behavior of any analog device, which means that unexpected or unwanted modes of behavior can occur, even in simple systems, as they have the ability to generate chaotic feedback loops, which automatically prevent predictions in which they will act.

On the contrary, we can say that because computers are as accurate and unambiguous as logic, they represent the physical interpretation of mathematical logic, and in digital devices there is no uncertainty or confusion that can be caused by chance.

In this context, the question of scientists is asked: "how can an artificial intelligence, running on a deterministic computer, have free will ...? Free will thus become at this utopian level, one of those topics that scientists are careful to avoid. " Most scientists resign themselves to being aware that they have no way to explain it. We can create / formulate / develop mathematical equations that accurately demonstrate when and how a neuron acts, we can perform chemical reactions with precise results, we can anticipate ion transfer by exact

differential equations, but can we say that it exists in intelligence technologies artificial transposition / replication of human brain patterns for what we call free will?

Free will is not just an issue of artificial intelligence, it is a concept in its entirety that science has failed to explain to our biological brains in its entirety.

Scientific attempts to replicate the human brain have shown that it is not algorithmic, so it cannot be modeled by any conventional digital computer, which has led to the conclusion that free will is an attribute that resides directly in human interaction with each other, people and the environment.

Ethical robots or robotics ethics - Keeping the register, another question of form and substance that concerns the scientific society and not only "Is there a need for a code of ethics for robots? - Absolutely! But I don't think a new code of ethics is needed. The one we humans have created for thousands of years is only good." says Paul-Louis Pröve - Artificial Intelligence Expert at Lufthansa Industry Solutions

Extrapolating and analyzing at the level of a banking institution the behavior of front and back office employees, we find that it is guided by the principles and rules of ethics presented in both the "Ethical Framework" and the "Code of Conduct" which addresses all staff members of an organization. banking. This begs the question: "whether in the banking system one of the main areas in which artificial intelligence has been and is being implemented in a fast way, robots and automated processes that have successfully taken over some of the activities carried out, until recently human resources, do they need their own code of ethics? »

Manuela Lenzen - Journalist in the field of science, among others and in the field of artificial intelligence states in her article that "there is no need for a code of ethics for robots, which in principle is not difficult to create, but we could say impossible to implement because robots are machines without conscience and moral principles, but at the same time it is imperative to have a code of ethics for researchers / producers as well as for users who are human beings and responsible for their actions ».

From a legislative point of view, there is a concern for the actions of a robot that acts autonomously, without command from its user. Returning to the previous statement that there are no rules and laws applicable to robots / artificial intelligence, and they cannot be held accountable, it is necessary to clarify who is legally responsible for their uncontrolled actions. Thus, it is necessary to develop a legal and ethical code, which people / society, the only ones directly responsible for the actions of the robots, must debate, adopt, adopt and update it permanently / periodically, in order to could determine

who is responsible, because even without free will, we want the behavior of robots to be properly analyzed.

The theory that robot ethics could take the form of laws has been expressed since 1942 by Professor Isaac Asimov, who promoted the three laws of robotics with which artificial intelligence robots were programmed:

- “The first law: a robot cannot injure a human being or, by inaction, allow a human to be injured”;
- “Second law: a robot must obey orders given by humans, unless such an order would conflict with the first law”;
- “Third law: a robot must protect its own existence as long as such protection does not conflict with the first or second law.”

In his book, Asimov pointed out that the divergences between these three laws will make their application difficult, despite their hierarchical organization. The limits of Asimov’s laws are highlighted by the subsequent introduction of the fourth law, “Law Zero: A Robot Cannot Injure Humanity or Inact It Allows Humanity to Be Injured.” This fourth law has the number zero because it precedes the three listed above. The principle refers to the situation in which, if a robot injures a human, this may be the best solution. In fact, this new principle creates a new set of problems:

- «how can a robot decide what will hurt humanity? »
- «What does it mean to hurt humanity? »
- “Will we be able to manually program the ethical values of our intelligent machines? »

We can assume that they will try to learn to behave ethically even in the context in which we humans sometimes act in ways that are not in accordance with the ethical standards that society has set.

Certainly intelligent machines that will learn by observing human behavior will encounter learning difficulties due to the random observance by people of ethical values. At the same time, it is possible that robots, due to the fact that they do not have any of the human vulnerabilities, do not acquire higher ethical standards than humans.

In the current context, the most important principles that need to be taken into account when it comes to legislating artificial intelligence, robots as a result, are:

- “artificial intelligence systems have access to sufficient data to comply with both security standards such as Human Rights and the principle of equal opportunities and the protection of personal data (GDPR)”;
- «making a clear documentation about the process of developing and testing artificial intelligence systems, in the sense that they will not develop autonomously, without understanding how they work or make certain decisions (a phenomenon also known as black box effect)”;

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- “information on the operation and use of robots should be transparent, for example, the user / operator should know the capabilities and limitations of a system and its accuracy in performing the tasks for which it is used”;
 - “the systems themselves should be predictable and adaptable and responsive when it comes to errors, such as those that may occur in the case of attempted manipulation or cyber attacks”;
 - “systems should be supervised by a human element and human intervention should be allowed at all times during their operation”.

Regarding the principles of ethics, we have at least four mandatory characteristics that should be observed in the proper functioning of artificial intelligence technologies:

- “respect for human autonomy over new technologies”;
- «prevention of causing / exacerbating physical / mental damage for employees and customers»;
- “compliance with the principle of equity”;
- “the ability to explain and understand the process by which this type of system runs / operates”.

In conclusion, it is not enough to develop a robot that complies with the norms / standards in force, but one that cannot be used, at least without substantial changes, for illicit and immoral purposes.

Conclusions

Postponing that technology is essential to the process of transformation, we wanted to understand the relationship between digital strategy, information technology strategy, organizational strategy and ethical principles, concluding that in mature organizations, a synergy is created that serves modern organizational interests.

The process of digital transformation is a complex and time-consuming one, the success of which depends on the skills of the organization in planning and executing it. We have identified these competencies as residing in dynamic capabilities, translated into the ability to detect the need for change and the ability to adjust the functioning of an organization in order to capture and leverage new sources of value.

At the same time, banking organizations / institutions are constantly focusing on the needs of end consumers, paying particular attention to the enhanced banking experience of customers as a result of the launch of several innovative digital solutions compliant with existing rules / standards, without substantial changes, for illicit purposes and / or or immoral.

Regarding the ethical principles analyzed, we have concluded at least four mandatory characteristics that should be observed in the proper functioning of artificial intelligence technologies.

The strong orientation of the organization towards innovation is governed and assisted by the appropriate internal structures, which allow it to identify new trends in types of structures: human and technological.

Even if, at first sight, based on the analysis, we can say that the banking system is relatively easily influenced by the effects of digitalization, the mobility of the future and the transformation of the leaders' mentality show that in this sector of digital technologies transformation.

Looking not only at the duration of implementation, but especially at the concrete results obtained, we can say that the opening of financial banking institutions to launch offers of digital products and services is the result of changing the perspective on the bank-consumer / customer relationship, developing employees' digital skills. as well as the evolution of organizational culture.

The implementation of new strategies for the digitization of banking products and services has also been adjusted so as to gain in agility. Convinced, as a result of the analysis, that the realization of a digital transformation strategy at banking level is governed by principles that can be identified and replicated at the level of any organization, companies appreciate that the process of implementing artificial intelligence is conditioned by specificity / interest / availability to each organization, regardless of the object of activity.

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