MANAGEMENT RESILIENCE AND PROFITABILITY OF IMPLEMENTING ARTIFICIAL INTELLIGENCE AT THE LEVEL OF THE BANKING FINANCIAL SYSTEM DURING THE PANDEMIC PERIOD

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Abstract

The years 2019-2021 were marked by an unprecedented health crisis, which quickly turned into a severe economic crisis. Although an economic recovery is expected, its multivalence and timing depend to a large extent on health developments and the implementation of economic recovery programs. Banking financial institutions are key players in resilience and economic recovery.

In this paper, we aim to present the need to implement Artificial Intelligence (AI) as a central element of the process of digital transformation of the banking financial system / organizations, regardless of the activity, a situation that involves identifying new strategies and implementation plans in order to of the high degree of resilience of organizations, on several levels.

Thus, we set out some considerations on the profitability of implementing Artificial Intelligence (AI) 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 opposition of a improper profit / benefit obtained illegally / immorally.

Keywords: *Organizational Resilience, Pandemic, Participatory Management, Social Distancing, Vulnerabilities.*

Introduction

Organizational resilience is a key to success. Being resilient means being resistant to shock and being able to adapt to very stressful, traumatic or potentially traumatic situations that a person or entity faces throughout life. This statement could be reflected in the fact that, resilient under negative emotions, the person or entity in question does not allow negative emotions to take control so as to influence their decisions, they do not give up and recover quickly from major stress.

In the field of business, the resilience of a company is the ability of its management to cope with a catastrophic event, such as an economic crisis, a financial crisis or a pandemic, the ability to prepare, manage (absorb, adapt and transform) but also learn from shocks. For a better understanding of the terms, we define shock as a sudden and extreme change that impacts any entity, but also different from a predictable change. The pandemic situation we are going through helps us to identify strategies and implementation plans that increase the degree of resilience on several levels.

Research methodology, results and discussions

During this period, perhaps more than ever, there is a need for efficient and participatory management, with extensive vision and communication skills, coordination of activities between several departments or divisions, between shareholders or the board of directors and employees. Management must also ensure an organizational culture that includes the need for lifelong learning, the implementation of technological developments, artificial intelligence to be able to respond faster, more efficiently in the face of a crisis. At the same time, it is necessary to implement a system of rules / methodologies and / or procedures that can quickly detect, in real time, the shocks and at the same time evaluate their impact as they occur.

In this context, it is necessary to have an overview, current, informed and permanently prepared to ensure sufficient financial resources, to implement flexible measures for the relocation of these resources, but also to inject additional funds where and when necessary to stabilize. and ensure business continuity. This includes, among other things, both the financial reserves, if any, and the forecasting, respectively taking into account, in time, some financing options that can be accessed in emergency situations.

Another important aspect that we must keep in mind is both human resources and other resources, which are related to the specifics of the organization's activity. Of paramount importance has been the ability to always and easily access an "overview" of what exists in order to make an informed decision on how to relocate and use these resources. Last but not least, we need to take into account the degree of flexibility and alternative ways of delivering the organization's products and / or services to end consumers.

The assessment of the functions of the organization, according to the strategic directions mentioned above, must be done quickly both during the crisis and after the crisis in order to identify vulnerable areas and to be able to plan mitigation actions.

Assessing an organization's resilience depends on the specifics and context of each crisis. However, it is essential to make a qualitative and quantitative analysis in order to understand the level of resilience and plan for the future, in order to ensure business continuity.

Analyzing the experiences of other companies and institutions in Romania, but also those outside the borders, always provides extremely useful examples for business leaders. It is essential to be able to understand the importance of connecting the three stages: the shock, the recovery from the shock and the preparation for future shocks.

Used in disciplines such as engineering, economics, psychology, ecology or statistics, in recent years the concept of resilience has been used more and more often as an action associated with the success of an organization. Thus we can say that organizational resilience is the ability to recover / reposition or adapt quickly to crisis / unfavorable situations or changes and can be characterized by the sustainable term.

However, regardless of the definition or the term adopted, we consider as a successful organization that organization that remains strong in the midst of financial crisis, resisting shocks and their consequences, adapting its change policies and making the most of the opportunities they have. bring this.

The most common question is how can resilience be achieved by an organization? One of the best known theories is the one published by a British association, known as AIRMIC (Association of Risk and Insurance Managers in Industry and Commerce), and the 5R theory: Risk Radar, Resources, Organization Relations, Response rapid response to incidents, as well as the review and adaptation of the organizational environment.

In the following I will briefly present the importance of the terms of the 5R theory:

Risk radar, as defined by the term, is a "failure concern", consisting in a permanent focus and analysis of errors, their causes, the detection of aspects that need to be learned / corrected from the mistakes of the past.

Resources, embodied by human strength, are employees of the "moral compass" of an organization.

Existing relationships at the level of an organization define both internal communication at the level of its own employees and that with external partners.

In the event of an incident, an organization must have a firm, quick and clear response to prevent the incident from degenerating into a crisis or even a disaster.

The revision requires immediate changes / improvements and adaptations, as key elements in ensuring the resilience of the organizational environment

In this regard, it is essential to have an organizational culture in which risk and incident reporting is done quickly to enable the organization to have the shortest possible response times. An organizational culture that favors ignoring the reporting of risks and incidents can have serious consequences, destabilizing, thus progressively damaging organizational resilience.

Continuing this idea, some specialists in the field of organizational resilience wonder if we are wrong when we consider that the state of normalcy is represented by the stability and maintenance of the status developed and held over time.

We can consider that normality means permanent change and adaptation, and a period of short-term stability would happen accidentally. Ultimately, this approach may be the key to the success of a resilient organization.

1. The current situation and prospects for the resilience of the Romanian banking system

This analysis process contributes to a better understanding and clarification of some important aspects regarding the current situation and the perspectives of the financial-banking system in Romania.

Banks, key players in resilience and economic recovery, have been severely affected by the SARS VOC 19 pandemic, forcing them to adjust their customer policies through social distancing with a strong impact on both their own business and revenue.

In the post-crisis period, the dynamics of the Romanian banking sector proves its resilience to various external and internal shocks, some of significant magnitudes (changes in the EUR /USD exchange rate, depreciation of the national currency, SARS VOC 19 pandemic - reduction / limitation of the program with public, telecommuting, etc.), against the background of proactive measures adopted by all banking financial institutions.

At the same time, we find that the process of adapting to the new regulations on banking supervision and resolution adopted at European level involves significant efforts and costs.

Analyzing the impact of the SARS VOC 19 pandemic as well as the post-crisis period, we cannot fail to emphasize the fact that, at the level of the Romanian banking system, three important phenomena were registered:

a) some good loan portfolios, initially outsourced, were internalized or repurchased, which led to:

• improving the quality of banking portfolios;

• supplementing banks' revenues;

b) limiting the adjustment of the number of employees in this sector; on the other hand, banks have to face the challenges posed by the crisis:

• increasing the volume of non-performing loans;

• increasing their forecasting costs;

• weaker short-term financial results.

c) major investments in digitization processes that will allow customers to access online banking services and products, given that, for more than a year, banking institutions have had to transfer both the activity carried out with customers in units in the environment online as well as the activities carried out by the back office staff in tele-work regime.

As we can see, during this period, the upward dynamics of the non-performing loans rate accentuated against the background of the economic crisis in Romania, but also worldwide.

Faced with the challenges of financial stability induced by this situation, both the National Bank of Romania and the Government acted proactively, adopting a set of measures aimed at mitigating the negative effects of the crisis, measures that have proven effective by clearing bank balance sheets. commercial, by:

- monetary policy measures;
- the removal from the balance sheet of all exposures representing fully provisioned non-performing loans, which places the non-performing loans rate on a stable downward trend;
- measures regarding the bank resolution;
- establishing provisions for all exposures that are delayed in fulfilling the debt service of more than 360 days and for which no legal proceedings have been initiated;
- setting up provisions for exposures to debtors of insolvent legal entities;
- measures to make the regulatory framework more flexible for credit institutions and NFIs;
- a set of government measures that have come to the aid of both small and medium-sized enterprises and individuals, such as: supporting employers to pay technically unemployed employees, postponing rates on ongoing loans due to business interruptions, new credits granted to the personnel involved in the fight against SAR VOC 19, different types of credits, with low costs, for the support / development of the activities of the economic agents;
- operational measures: ensuring the proper functioning of payment and settlement systems in national currency.

2. Measures for better resilience of the banking institution.

The resilience of the banking system represents the ability of banking institutions to respond, to be able to return to the previous situation and to be able to resume operations at an acceptable level of services offered to consumers, customers and contractual partners in the event of major disruptions.

Leonardo Badea, Deputy Governor of the NBR, explained in an article in Ziarul Financiar that: provided by the Government will be eliminated ".

In this context, we can say that the level of uncertainty remains very high and the need to build and improve the resilience of banking institutions becomes a mandatory measure, in the context in which the scenarios identified and analyzed can and will generate a number of negative surprises that can not be ruled out. just countered.

European Central Bank President Christine Lagarde believes that "the recovery may not be linear, but rather unstable, in an on-off mode", given that disruptions to certain activities are on the rise, leading to higher risks. of cyber attacks, failures at the level of essential service providers and more recently the occurrence of natural disasters, new pandemics, both nationally and globally, as happened during this period. Operational measures to restrict the movement of persons and goods as well as to close down activities have significantly affected all sectors of the economy but especially the financial sector.

All these aspects, corroborated with the increasing expectations of the clients of the financial-banking system but also of the participants in the free market of financial services, have determined an increase of the level of attention from the regulators from all over the world. Only the rapid interventions of the authorities, respectively of the governments, of the national banks, of the central bank, etc. led to the avoidance of a massive liquidity crisis that could lead to significant bottlenecks in both national economies and the financial system.

Thus, the operational measures on settlement and payment systems were accompanied by monetary policy actions aimed at consolidating liquidity in the financial-banking system and ensuring the proper functioning of the money market under conditions generated by the COVID-19 crisis.

The need to build and improve the resilience of banking institutions is no longer an option, it thus becomes an obligation of the entire financial-banking system, perceived and extended throughout the financial-banking industry. It is imperative that all banking financial institutions remain competitive, maintain their confidence in the market, ensure and support financial stability, thus becoming the engine of the economy through the unconditional support it provides to all economic agents together with national governments that adopt and establishes operational-governmental measures.

Among the most important measures, we list:

- rapid adaptation to respond to the crisis and ensuring continued customer support by introducing appropriate health measures and adapting the organization, on the one hand, but also facilitating customer access to finance;

- focus on customer needs by accelerating the digital offer for both retail customers and companies, but also improving their business approach.
- orientation of the lending activity on the SME and individuals segment, which implies:
    - sustained growth of the SME loan portfolio;
    - active participation in government programs dedicated to customers in the SME segment;
    - increase of the leasing portfolio;
    - New consumer loans granted due to simplified flows and reduced costs;
    - Significant cost reduction and resilient operational performance.
- the lower level of net income recorded for the whole year 2020 compared to that recorded during 2019, but also their slight increase during 2021 compared to the whole year 2020, reflects the resilience of the business model and income in the current context of the crisis economics generated by the SARS VOC pandemic 19.

In this situation, it is absolutely necessary to implement a cost reduction plan, which combines both tactical and structural measures. Thus, except for non-recurring, exceptional expenses, both staff costs and other categories of expenses are reduced.

3. Regulatory action on operational and technological resilience in the current SARS COV19 pandemic crisis

The crisis caused by the COVID-19 pandemic has accelerated the consolidation of the banking sector in both Central and Eastern Europe (CEE), given that in the coming years, under the current conditions, small banks risk not passing the test of capital and capital challenges. profitability, and the intervention of regulators on operational and technological resilience is paramount as shown in the latest edition of the Deloitte CEE Banking M&A study, conducted in 16 countries, including Romania.

The intervention of regulators in the case of operational and technological resilience can only be done following an integrated, multidisciplinary approach to the entire financial / financial-banking services sector, an approach designed to cover the full range of services: financial consulting, legal and tax services, audit , management consulting services and especially risk.

Regulatory priorities are based on an assessment of the main risks and potential vulnerabilities in the financial-banking sector.

Risk factors have a direct impact on banking institutions due to internal and external vulnerabilities in the economic environment in which they operate. In terms of risks, the main vulnerabilities identified outline four priority areas, namely:

• credit risk management;

• sustainability of business models;

• solidity of capital;

• governance.

The ECB's global banking regulators and supervisors have focused on operational and technological resilience, with the main factors of resilience being:

• the risks associated with the operational complexity created by the increasingly acute dependence of banking institutions on emerging technologies;

• the financial investments of these banking institutions in digitalization to ensure the continuity of the delivery of banking services in the online environment, but also to be able to manage the continuity of internal processes and flows so that banking financial activities are not interrupted.

The risks associated with resilience are varied, in a continuous dynamic and interconnection, which leads to their disposition on several levels of operational risk, such as: labor, processes, technology and third parties, thus generating increased attention to the management of standards. on the resilient measures implemented.

Regulators continue to focus on ensuring that the risks posed by operational complexity and the interconnection between a banking institution and the wider ecosystem are not passed on to financial markets, and that the interests of customers and market participants are protected during business interruptions.

In this regard, six areas identified as majorly affected by the increased level of oversight of regulators were identified, namely:

a) orientation towards complete business services. Authorities expect banks to have a resilience approach to banking services that prioritizes the resilience of key services, rather than focusing on individual systems and applications. The criteria for identifying these services must take into account the impact on customers and the market, as well as the interconnection between the banking institution and the other participants in the banking financial market;

b) impact tolerances based on the impact on customers and on the banking financial market. Regulators expect banking institutions to establish impact tolerances, with clear indicators and results, for the most important banking services, in order to quantify the interruptions that could be tolerated. They want banking institutions to demonstrate that they can meet their impact tolerances in a variety of scenarios;

c) aligning a coherent set of capabilities. Supervisors want banking institutions to move beyond traditional approaches to managing resilience by categories and move to a full-fledged banking institution framework that includes a comprehensive range of capabilities needed to resume and recover business services and to meet the objectives of several interrelated programs (for example, business continuity plan, disaster recovery plan, cyber or third party risk management).

d) an approach that promotes a cohesive response to a wide range of disruptions. Supervisors require banking institutions to demonstrate better integration between their incident management and crisis management protocols and to implement a risk-free crisis management structure that can respond to various types of disruptive events. They expect banking institutions to increase the speed, transparency and promptness of communication with customers, the market, regulators and internal stakeholders in order to rebuild customer confidence and the level of market confidence in the event of partial business disruptions. Starting with 2020, the banking activity, both the one regarding the direct relationship with the clients and the internal one, of back office, was transferred in the online environment due to the effects generated by the SARS VOC 19 pandemic;

e) an integrated testing strategy and framework. Regulators expect banking institutions to demonstrate the complete resilience of key banking services, including: people, processes, technology, data, and third-party components. Banking institutions need to be able to implement an integrated testing framework that is gradually increasing in terms of the rigor, complexity and scope of the tests performed, the key assumptions of stress tests and strategies for continuous improvement, including key findings in resilience plans and capabilities;

f) the supervision performed by the board of directors and the senior management. Regulators want both the board of directors and the top management of a banking institution to take an active role in establishing the bank's resilience strategy, in line with its strategy and risk appetite. In this regard, the authorities expect both the board and senior management to receive regular reports on the institution's resilience risk profile, including emerging risks and trends (market-specific or bank-specific) that may pose a threat to the continuation of essential services. Business.

Conclusions

The pandemic situation we went through and still go through, as well as the economic crisis generated by it, forces us to identify new strategies and implementation plans that increase the degree of resilience on several levels, management must ensure an organizational culture that includes the need to learn continuous, the implementation of technological developments, of artificial intelligence in order to be able to respond faster, more efficiently in the face of a crisis but also to respect the ethical principles.

Focusing on the macroeconomic framework, identifying the factors that led to the transformation process and the actions taken for digital transformation, we see the need to implement a system of rules / methodologies and / or procedures to detect shocks quickly, in a timely manner and to assess their impact as they occur.

In this context, an overview is needed, current, informed and permanently prepared to ensure sufficient financial resources, to implement flexible measures for the relocation of these resources, but also to inject additional funds where and when necessary to stabilize and ensures business continuity.

Another important issue we addressed is the need to identify the sources needed for digital transformations related to new technologies, in changes in consumer habits and in the pressure exerted by purely digital organizations in terms of resilience in the banking system. We deduced that, under the influence of these factors, traditional organizations trigger the process of digital transformation, the execution of which depends on the level of resilience and digital maturity of that organization.

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