# Internal Managerial Control and Internal Audit in Crisis Management: Lessons from the Pandemic

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#### **Abstract**

The COVID-19 pandemic has generated many challenges for the society we live in, and in this area of identifying the public sector, it has been the most tested, focusing on its resilience and response in times of crisis, as well as how to which citizens relate with public administrations. Public institutions, not generating profit, but rather consuming resources, are obliged, by the legislation in force and by professional conduct, to be responsible for the use of public funds. In a crisis situation, effective and efficient use of these funds becomes essential, and public entities must adapt quickly to maintain service delivery and public trust.

The scientific effort of this paper aims at how the Internal Managerial Control (IMC) System managed to "impose" itself in a crisis situation and the difficulties that the leaders of public entities faced during this health crisis. The pandemic has highlighted the crucial importance of human resources in achieving the general and specific objectives of public institutions. This study aims to explore the adaptations and innovations implemented within IMC System on pandemic issues highlighting key lessons learned and providing recommendations for building institutional resilience in the face of future crises. It will also discuss strategies to overcome the challenges, ensuring the continued and efficient operation of public services in the context of unprecedented disruption.

**Key words:** COVID-19, internal managerial control, public institutions, risk management **J.E.L. classification:** H83, M42, M48

1. Introduction

The current global context has presented public administration in Romania with a variety of new challenges and limitations due to the COVID-19 crisis. Public institutions have a greater duty in handling the health crisis, which has a considerable economic effect on the entire public sector.

The IMC System is a useful tool for managers of public entities, as it guarantees that financial activities are carried out in accordance with established policies and procedures. This helps prevent errors, discrepancies, and fraud while promoting openness in managing the company's resources. Additionally, an internal control system helps identify areas to improve efficiency and cut down on unnecessary resources.

The pandemic was a significant moment for public institutions in Romania. Many people had to adjust their work settings to adhere to Government rules, such as limiting contact with the public and, in certain cases, colleagues. During this 30-month period, public entity managers faced a crisis as they were tasked with overseeing public involvement and daily operations to avoid the shutdown of the institution.

During periods of emergency, the IMC System acts as the main tool for tackling issues, identifying weaknesses, maximizing resource allocation, and guaranteeing stability. This system ensures specific procedures and supervision are in place to reduce the impact of crises and offer guidance to the organization through structured management. Incorporating risk management into internal control systems is essential for managing crises. Risk management procedures assist in recognizing possible dangers, evaluating their influence, and creating plans to lessen them. This

integration guarantees that organizations are more prepared to address crises (Figo & Anderson, 2009).

The motivation for selecting this subject is the significant issue arising from the COVID-19 pandemic. This has caused us to understand that we must alter our approach to managing risk in the workplace. The crisis demonstrated the significance of embracing digital transformation and utilizing advanced technologies like artificial intelligence to guarantee efficient operations. With the arrival of spring, we are encountering obstacles like poor road conditions, the necessity for increasing training programs, and concerns about information security. Understanding how these dynamics operate is crucial for establishing a robust internal control system capable of handling unexpected events and ensuring the smooth operation of the organization.

The aim of this article is to illustrate the critical importance of maintaining an updated and well-maintained IMC system. By doing so, entities will be prepared to deal with any unforeseen circumstances that could arise. The article's objective is to explain how public institutions can enhance their risk management tactics by incorporating AI and digital technologies into their IMC operations. The key is to strike a delicate equilibrium between harnessing technology for our benefit and addressing the obstacles it presents, in order to effectively manage crises such as the COVID-19 pandemic and maintain operational efficiency.

#### 2. Literature review

Internal control is defined as a method carried out by a company's management to reach particular objectives, guarantee adherence to policies, safeguard assets, and enhance operational effectiveness (Rada & Rada, 2010). Internal control includes policies and procedures implemented by management to ensure objectives are met, comply with regulations, safeguard assets, and maintain information reliability (Ștefănescu et al, 2008). It is crucial to regularly monitor and update control procedures in order to maintain their effectiveness and ensure that the entity's objectives are achieved (Iancu, 2016).

Although the IMC system is utilized in public and private entities as mentioned in the specialized literature, this paper will specifically concentrate on the role of the IMC system in public entities.

Since Romania's EU accession in 2007, IMC has had to comply with EU guidelines and national laws. And from 2007 until present, there have been important changes in Romania regarding the definition of IMC and the majority of these legal modifications have transformed internal control into a highly beneficial instrument for companies. At present, IMC consists of 16 standards and is responsible for guaranteeing the efficiency of operations, the accuracy of financial reporting, and adherence to laws and regulations.

At present, the rules governing internal managerial control procedures in Romania is set out in Order no. 600 dated April 20, 2018 which approves the Internal Managerial Control Code for public entities. This is the standard set of rules that all public institutions, no matter their area of operation, must adhere to.

Some authors discuss the relationship between IMC and the audit function, emphasizing how they work together effectively. Authors see the internal audit process as an ongoing and organized endeavor to enhance the effectiveness of the management process. The auditor plays a vital role in enhancing internal controls by offering assurance, advising, and overall support at every level of the organization (Zecheru, 2014).

# 3. Research methodology

This article utilizes a qualitative research approach in examining specialized articles related to the topic from a research methodology perspective. To maintain the article within a research field that blends observations and enhancements to the IMC System, the author found it beneficial to also explore views on potential enhancements to the IMC System in public institutions, but also limitations, if the case.

The database for these articles were: ScienceDirect, CEEOL, Wiley Journals, Google Scholar, Emerald Management Journal and other databases and the keywords used for the research were: "internal managerial control", "internal control in Romania", "internal control during pandemic" etc.

All the articles and opinions were incorporated into the present paper and the results are detailed as follows.

# 4. Findings

The author categorized the findings made into two groups: one focusing on internal control and auditing amidst the pandemic, and the other on the changes and possible enhancements with the pandemic's arrival. The control and internal audit functions operate as a dynamic, adaptive system, continuously evolving in response to organizational changes and external influences. An occurrence like the pandemic brought about alterations concerning the necessity for digitalization and enhancing infrastructure, highlighting the importance of continuously updated risk management and procedures tailored to meet the institution's current requirements.

### 4.1. IMC and IA And The Pandemic

To examine how institutions reacted to the pandemic, we reviewed multiple case studies and identified key concepts.

A thought-provoking article that grabbed my attention discussed the implementation of social distancing protocols and remote work options. Singh & Best (2023) noted that this method allowed internal audit functions to concentrate on areas with high risk and adjust to changing needs. Discoveries show that the pandemic has sped up the digital transformation in internal audit divisions, emphasizing the significance of educating and training audit personnel in new technologies. Organizations that had already adopted technologies like continuous monitoring controls saw enhancements in audit efficiency and effectiveness, especially in dealing with risks and maintaining compliance. The authors also noted that organizations that had previously invested into continuous controls monitoring technologies found that their transitions were smoother and were more readily accepted. Still, implementing continuous monitoring controls was difficult due to the absence of support from upper management and inadequate training for internal audit personnel. This case study shows that previous technology and education investments play a vital role in ensuring that internal audit operations are effective during crises.

From the author's point of view, if we were to examine the conclusions drawn by the two authors and apply them to public institutions in Romania, they would encounter similar challenges to a significant degree. Nevertheless, there are several sectors where telecommuting is not feasible, and workers are required to report to the office on a regular basis. Nevertheless, incorporating these technologies would be advantageous for auditing, though the transition may not be as seamless as the scenario described. This is a result of the need for ongoing enhancements to the infrastructure and the necessity for training personnel in using these systems.

In a paper published by Jarva & Zeitler (2023) which examined the impact of COVID-19 on AI, indicates that the transition to remote auditing brought about both advantages and difficulties. The shift to remote audits has been fast and effective, made easier by strong information and communications technologies. Nevertheless, difficulties were encountered when auditing non-digital procedures and holding remote interviews, as they frequently did not have the same level of effectiveness as face-to-face interactions. Interviewees stressed the indispensable importance of being present on-site for specific audits, pointing out the psychological influence and ability to physically examine certain items. The future of auditing may consist of a mixture of on-site and remote audits, taking into account risk assessments and individual organizational requirements.

Another study conducted by Passetti et al (2021) in Italian cooperatives highlights the dual role of management control in addressing technical and ethical aspects during the pandemic. Using various measures, the organization was better able to adjust and reduce the effects of the pandemic. The research contributes to current understanding by providing practical insights into the role of management control during an unprecedented crisis, emphasizing the importance of integrating

social values and organizational tactics to enhance resilience during emergencies. These actions also helped to collaborate with neighboring communities and decrease inequalities caused by the pandemic. This study highlights the importance of flexible and adjustable management control systems in times of crisis. There are also other opinions formulated by Zhu & Song (2021) that emphasizes that as the pandemic grows more severe, the positive effects of internal control also increase, suggesting that companies in areas with widespread outbreaks saw greater benefits from strong internal controls.

When combining these different studies, it is clear that the ability of audit functions and management control systems to adapt is essential in overcoming the difficulties brought about by the pandemic. Singh & Best (2023) and Jarva & Zeitler (2023) emphasize the speed-up of digital transformation and the transition to remote auditing, highlighting the significance of adopting technology and providing training. The results indicate that companies that already had continuous monitoring technologies and strong information and communication infrastructures were more prepared to manage the sudden changes caused by the crisis. Nevertheless, obstacles like the requirement for being physically present on-site and the efficiency of remote engagements continue to exist, suggesting that a combination of both methods could potentially be the upcoming trend in auditing.

Additionally, Passetti et al (2021) emphasize the dual function of management control in navigating technical and ethical elements amidst the pandemic, underlining the significance of integrating social values and organizational tactics to enhance resilience. This all-encompassing approach not only reduced the immediate impact of the crisis, but also encouraged collaboration and reduced inequalities, highlighting the broader societal significance of management control systems.

According to their research, Zhu & Song (2021) maintain that regions with high pandemic severity see greater benefits from strong internal controls. This indicates that strong internal controls are crucial for the organization's resilience and play a significant role in managing crises.

Overall, these studies suggest that the pandemic has emphasized the importance of adaptable and reactive audit and management control systems. Organizations that had already embraced technological advancements and continuous surveillance were better equipped to transition smoothly and maintain effectiveness. However, it remains essential to keep focusing on infrastructure improvements and offering personnel training. The future of internal audit and management control involves integrating both remote and on-site strategies tailored to unique organizational requirements and risk assessments in order to ensure technical expertise and ethical responsibility.

# Mitigating Uncertainty: The Importance of Risk Management

Managing risks is deemed essential to achieve organizational objectives because attempting to eradicate risks completely would lead to a lack of action and failure to accomplish goals. It is important to have a systematic and structured approach to handling risks, which includes identifying, analyzing, evaluating, responding to, monitoring, and communicating risks. Public entities must implement the "Risk Management" internal control standard to meet management regulations and establish efficient internal control systems (Costescu, 2008; Zaharia, 2013; Dăneci-Pătrău et al. 2014).

Some authors also viewed risk management as a beneficial concept to evaluate internal control. From an internal control standpoint, risk management is a procedure in which an organization foresees, recognizes, assesses, and suggests remedies for potential future dangers, which can be addressed with proper readiness and resources (Sustano, 2018), and is also viewed as the instrument that enables timely responses to the appearance of risk threats (Frigo & Anderson, 2009). Having a precise comprehension and portrayal of potential dangers is crucial for successful decision making and risk management. Ambiguous or inaccurate risk descriptions can result in incorrect or insufficient analyses, leading to mismanagement or wrong decisions that may result in substantial losses. Therefore, it is crucial to guarantee that the interpretation and depiction of risk are precise and effective to prevent any negative impact on risk management and decision making processes (Avent, 2016). When examining the pandemic era, numerous risks linked to any primary

function of a government entity shared the common factor of restricted interaction with the public. In numerous instances, it was not feasible because of the nature of the activity, so the leaders had to devise solutions to ensure the activity could proceed as normally as feasible.

An effective risk management system must be accompanied by a monitoring and control system that is necessary for all organizations. These systems are necessary for reducing risks and guaranteeing the safety of both employees and production operations. Additionally, it offers data-driven approaches for detecting problems early on, leading to improved decision-making, enhanced efficiency, and more significant cost reductions. An effectively executed monitoring and control system can serve as a strong tool in guaranteeing the success of a company.

Given these points, incorporating and properly executing risk management frameworks in public organizations not only comply with regulations but also improve overall organizational readiness. Organizations can enhance their ability to navigate uncertainties and ensure operational continuity, even during crises like the COVID-19 pandemic, by adopting a systematic approach to identifying, analyzing, and addressing risks. Ensuring risk descriptions are accurate and clear is essential, as it directly impacts the quality of decision-making and organizational results. Hence, it is essential to have ongoing monitoring and strong internal controls to promote a risk management culture that is proactive, ultimately protecting the organization's goals and interests of stakeholders.

# 4.2. What Positive Changes Would Help The IMC System?

Certainly, when considering the benefits that could improve the IMC system, it is important to include artificial intelligence, automated compliance monitoring, improved decision-making support, predictive maintenance, among others. All these concepts, which could appear to be inspired by science fiction films, are actually ideas that have been explored by corporations and experts in the field.

In an article written by Chan (2023) and published by ISACA that explores how AI could be used in the risk management process, the author delves into how AI transforms continuous auditing by enabling the examination of entire data sets and transactions, rather than just samples. This comprehensive approach leads to thorough audits and the detection of previously unnoticed discrepancies. AI-driven tools like Microsoft's Security Copilot, which uses OpenAI's GPT-4, are adept at addressing threats, assessing risk levels, and providing practical insights and reports. Furthermore, AI enhances risk assessments by analyzing data from IoT devices to verify evidence, oversee controls, and oversee compliance tasks. AI systems are constantly evaluating fresh information to improve the precision of forecast results and validate parameters. Nevertheless, companies must carefully evaluate the possible risks, collection of information, and challenges to protect data when implementing AI. In general, AI revolutionizes how risks are evaluated by automatically analyzing data, enhancing decision-making, and providing accurate risk data promptly, ultimately improving risk management strategies.

An important perspective is that with the rise of AI and platforms like ChatGPT, work across various sectors is being transformed, leading to a widespread adoption of these technologies. Romania's public institutions will gradually implement this change with the help of the National Recovery and Resilience Plan, leading to better quality services and work from officials. Certainly, utilizing this tool for controlling and auditing activities carries advantages as well as potential risks, which will be explored later. Among these benefits, Chan detailed the potential advantages in terms of risk mitigation.

Of course, these aspects of the digitalisation of public institutions and, moreover, internal control and audit functions also have shortcomings. Paul et al., 2024, argued that digital transformation includes fundamental changes in organizational characteristics through the integration of information, computing, communication and network technology. The authors discuss how digital transformation affects value creation, client engagement, innovative business models, and improvement of operational efficiency. The article also discusses obstacles such as digital exclusion, potential privacy issues, and ethical use of data and technology.

Other authors, such as Bjerek-Busch & Damp; Aspelund (2021), identified various obstacles to the implementation of digital transformation in public organizations. These include external obstacles such as rules, budgetary restrictions and interconnections of government organizations. The

obstacles within the organization include segmented structures, upper-level leadership and staff's insufficient digital skills and mindset. Managing obstacles are related to traditional administrative responsibilities, a lack of strategic prevision and a refusal to accept change.

Certainly, these technologies' potential was enhanced during the pandemic, leading organizations across the board to seek permanent solutions for their implementation. The merging of digitalization and AI in IMC operations offers great potential and significant difficulties, particularly evident in the COVID-19 crisis. AI technologies improve the effectiveness and precision of internal controls through ongoing auditing and thorough data analysis.

AI-powered tools and automated compliance monitoring enhance operational efficiency and regulatory compliance by analyzing IoT data, overseeing controls, and improving risk assessments, all in line with Romania's National Recovery and Resilience Plan. Nevertheless, challenges like digital exclusion, privacy concerns, regulatory constraints, budget limitations, staff skill gaps, inadequate infrastructure, and resistance to change hinder efficiency, further exacerbated by the lack of necessary resources and reluctance to adapt. Effective internal control systems require strategic planning, investment in infrastructure, training, and change management, especially during crises like the COVID-19 pandemic, to strike a balance between the advantages and disadvantages.

## 5. Conclusions

The pandemic has shown us how important it is to have a defense system that corresponds to the general and specific objectives of the institution, this system being the internal control system, in order to face unexpected challenges.

The use of digital technologies and advanced technologies such as AI have considerably improved risk management and strengthened operational efficiency and helped monitor compliance. The pandemic has accelerated the use of digital tools, showing us how important it is to keep learning and improving our skills in new technologies. Research suggests that companies that had already invested in technology and had a strong infrastructure were better equipped to deal with the crisis.

But, public institutions have their own set of challenges, such as aging infrastructure, employees who need to learn new skills. There are a lot of rules and restrictions, not enough money and people who don't want to change things, which makes it even harder to make digital technologies work. It is very important that institutions have clear and honest descriptions of risks and make good decisions during a crisis to manage things well.

In order to maximize the benefits of digital transformation and avoid problems, public institutions should carefully plan their infrastructure investment, provide continuous training and effectively manage changes. To ensure the smooth running of the business and maintain trust, it is important to use remote and on-site audit strategies. By updating the risk management framework and using AI technologies, public institutions can be more resilient and prepared for emergencies. This allows them to use public funds wisely and to provide good services to the people.

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