

Article

Assessing the Effects of Innovative Management Accounting Tools on Performance and Sustainability

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Abstract: To cope with an increasingly competitive and turbulent environment caused by economic, health, and political crises, companies need to adopt innovative management accounting tools to meet challenges, increase economic performance and ensure organizational sustainability. This paper aims to study the impact of using innovative management accounting tools on companies' performance and sustainable approaches. We investigate the influences among the variables involved in quantitative research based on a survey of 567 senior accountants of Romanian companies. The hypotheses formulated based on the literature were tested using structural equation modeling and artificial neural network analysis. The research results show that those companies that used more intensively innovative management accounting tools performed better and had more tools at their disposal to measure and manage a sustainable approach. Innovative management accounting tools provide more and better information and ways to improve organizational performance and the vector of sustainability to cope with the uncertainty produced by the economic crisis.

Keywords: management accounting; strategic management accounting; innovative management accounting tools; organizational performance; sustainability



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1. Introduction

The increasingly dynamic economic environment is forcing companies to adopt innovative management accounting tools (IMATs) to cope with the uncertainty of the external environment through better cost and revenue management [1–5]. Van der Stede [6] believes that managerial accounting must consider strategic management approaches by introducing opportunities and threats in managing the company's costs and revenues, and taking a sustainable approach to business. Furthermore, the continuous and multiple crises and changes affecting the economic environment at the beginning of the 21st century provide several research opportunities that cannot be met usually [6].

Several authors [1–5] have found that the importance and use of management accounting tools increase during turbulent times, especially during economic crises. Although there are many traditional budgeting techniques still considered essential and widely used by organizations, companies tend to increase the use of IMATs during economic crises, amongst others (in health crises such as those produced by COVID-19, political crises such as those caused by the regional wars), to deal with uncertainties through better management, enabling them to reach a high level of performance and a better integration of sustainable approaches into their activities.

Pavlatos and Kostakis [5] studied the effect of the economic crisis on the degree of IMATs use, using multivariate data analysis techniques, measuring perceptions of the intensity of the economic crisis as an independent construct, and perceptions of the degree of IMATs use. In addition, they investigated the impact of crisis perception on the adoption and use of IMATs [5]. Pavlatos and Kostakis [5] focused on choosing a single sector (production sector) to increase the homogeneity of the sample and the reliability of the results, compared to previous research, which focused on different sectors of the economy [4,7,8].

IMATs can have a significant and positive influence on organizational performance [1–8] through better cost control and providing a dynamic view of organizational operations. Although the benefits of these IMATs are practically proven in the work of organizations in well-developed countries, the abandonment of the traditional tools of managerial accounting is still under debate in both developed and less developed countries. These classic management accounting tools are still widely used by organizations, despite the poor information they provide on organizational costs and results. IMATs play many vital roles in managing costs, budgeting, supporting decision-making, improving evaluation and performance, and supporting strategic management. Therefore, further research is needed to highlight the role of IMATs in supporting organizational performance and sustainability.

To evaluate the benefits of IMATs on organizational activities and results, this paper researches the impact of using innovative management accounting tools on companies' performance and sustainable approaches. Through the six sections of the paper, we introduced the research topic and presented the theoretical background, methodology, results, discussions, and research conclusions.

2. Theoretical Background

2.1. Strategic Management Accounting

As globalization expands and competitiveness increases, companies need to adapt more and more to changes in the external environment and new economic realities [9]. Therefore, companies' competition comes from within the country and from abroad. To combat threats and capitalize on opportunities, organizations seek to adopt the most effective management methods to achieve their strategic objectives [10,11]. Conceptualized in the 1980s, in Simmonds' work [12] to compensate for the lack of management accounting practices, strategic management accounting allowed better control of the company's performance [11,13–15]. Many studies in the existing literature have shown that the innovative practices used in strategic management accounting lead to a better performance for the company [5,11,15–17]. However, other studies (such as Lachmann's [18]) report disappointing results of implementing such practices. In addition to the crucial role of strategic management accounting in developing and implementing competitive strategies [19], it also allows companies a sustainable approach that considers the three pillars of sustainability. Based on these allegations, hypothesis H1 is proposed in this paper:

Hypothesis 1 (H1). *IMATs use exerts, in the perception of senior accountants from Romanian companies, significant positive effects on organizational performance.*

Cadez and Guilding [20] and Tuan [21] point out that traditional managerial accounting is not flexible in allocating and aggregating costs at the business level and focuses on the internal financial reporting situation over the past period, ignoring external data from the company, and various non-financial information (specific to the approach to sustainability at the organizational level). Therefore, to develop cost-based strategies and consider the financial and non-financial results of companies, strategic management accounting can help companies have a strategic approach based on sustainability, allowing them to expand their operations or conquer new markets [11]. Furthermore, Cescon et al. [22] consider that strategic management accounting supports the senior management of organizations in

developing and implementing a strategic vision that is compatible with the principles of sustainable development.

Strategic management accounting uses IMATs, providing more detailed and more extensive information to company managers [23] and paying additional attention to organizations' external environment and the sustainable side. For example, Ibragimova [24] emphasized the importance of strategic management accounting to manage similar products' prices and optimize costs to achieve the target profit margin [25]. If traditional managerial accounting provides internal and static financial information, strategic management accounting innovative tools can be adapted to the needs of a company's strategic management. Strategic management accounting methods provide information on which strategies are based and non-financial information related to the sustainable vision of the organization [26]. Strategic management accounting improves the strategic systems for evaluating the organization's performance. Based on these allegations, hypothesis H2 is proposed in this paper:

Hypothesis 2 (H2). *IMATs use exerts, in the perception of senior accountants from Romanian companies, significant positive effects on the organization's sustainability.*

2.2. Innovative Management Accounting Tools

Over the last 20 years, the effects and empirical implications of IMATs have been studied, such as activity-based cost (ABC) [27,28], target cost (TC) [29], cost life cycle (LC) [30], economic added value (EVA) [3] and balanced scorecard (BSC) [31,32]. Table 1 shows the main IMATs used by organizations and their characteristics in various researchers' opinions on managerial accounting.

Table 1. Innovative management accounting tools.

IMATs	Description	References
ABC	Activity-based costing is a tool theorized in the late 1980s. Costs are grouped by the activities of organizations, giving management a present and future view of the costs and performance of each activity.	[33,34]
BSC	Balanced scorecard, developed in the 1990s, allows evaluating an organization's performance by considering financial indicators and operational or non-financial ones, offering both internal perspectives related to the activities and external views (on stakeholder issues).	[34,35]
EVA	Economic value added is a strategic planning tool that facilitates management accountability for asset use, cost management, and performance evaluation of capital allocation efficiency.	[36,37]
LC	Product life cycle cost is a tool for tracking and accumulating costs and revenues at different product life cycle stages, maximizing revenue, and reducing costs by making better and more accurate decisions.	[34,38]
TC	Target cost has been designed to overcome the shortcomings of traditional cost management methods. Target costing allows optimized cost planning in such a way as to obtain the desired profit margin. Thus, the cost of the product derives from the market price because the aim is to have a competitive product at reasonable costs.	[39]

Source: own construction based on Faria et al. [33]; Campos et al. [34]; Ballester-Miguel et al. [35]; Kratz and Kroflin [36]; Baltés and Pavel [37]; Mohan [38]; Al-hosban et al. [39].

Some papers have had a collective approach, including comparative or parallel analyzes of several IMATs in the research, either focusing on the basic features of the enterprises

that influence the adoption [40,41] or investigating the evolution of the degree of IMATs use in turbulent times, especially during economic crises [1–5,42]. In addition to the effects of financial crises on IMATs adoption models, a research topic that may be of interest to both academics and accounting practitioners is the analysis of the influence of these IMATs on organizational economic performance, and sustainable organizational approaches, depending on the degree of adherence to these IMATs and the type of instrument used. As a result of internationally adopted sustainability goals, more and more organizations are using managerial accounting to support sustainable development strategies in times of economic turmoil. IMATs are proactive tools that allow the organization to focus on sustainability, instead of traditional managerial accounting tools oriented towards the past and the organization's internal environment [42,43].

To analyze the effects of IMATs on companies' performance and sustainability, we used the technology acceptance model (TAM), proposed by Fred Davis in 1985 [44], revised by Venkatesh and Davis [45] and Venkatesh and Bala [46]. This model analyzed the degree of acceptance of modern technologies in the workplace or private life. Such a model can help estimate the effectiveness and efficiency of IMATs in optimally managing organizational costs and providing adequate information to support well-informed decisions. Starting from the variables defined by Davis [44] in the initial model, we introduced perceived ease of use (PEU) and perceived usefulness (PU), the IMATs use, the effects of IMATs on organizational performance, and the effects of IMATs on sustainability as endogenous variables of the model. The model allows assessment of the effects of IMATs on organizational performance and sustainability in the senior accountants' perception of the usefulness and ease of IMATs use.

The two main variables (PEU and PU) that influence the effects of IMATs on organizational performance and sustainability have defined six exogenous variables as antecedents: innovativeness, information, cost, customization, accessibility, and rapidity. On the other hand, the effects of IMATs on organizational performance and sustainability have defined six exogenous variables as antecedents: increasing levels of performance and sustainability, adequate information for performance and sustainability management, and the influence of IMATs on performance and sustainability. Therefore, this paper aims to identify and evaluate the direct and indirect effects of IMATs use on organizational performance and sustainability. Figure 1 shows the research model.

Based on these allegations, hypothesis H3 is proposed in this paper:

Hypothesis 3 (H3). *IMATs usefulness has a significant positive indirect effect on organizational performance and sustainability in the perception of senior accountants from Romanian companies.*

Researching the management accounting tools used during the economic crisis in Greece, Pavlatos and Kostakis [4] show that organizations are moving away from traditional managerial accounting tools, such as cost analysis, absorption cost, process cost, cost orders, analysis of return on investment flow, and analysis of residual income, in favor of strategic management tools with a more innovative character. On the same note, Chenhall and Moers [2] point out that management and control systems need to become more complex and use not only traditional tools (analysis of budgets and variations) but also innovative managerial accounting tools, such as BSC, ABC, lifecycle costing and target costing, which support and contribute to improving the profitability of an organization. Finally, Pavlatos and Kostakis [4] analyze the same innovative managerial accounting tools. In addition, they add a performance management system—EVA (economic value added) and their degree of use during financial crises.

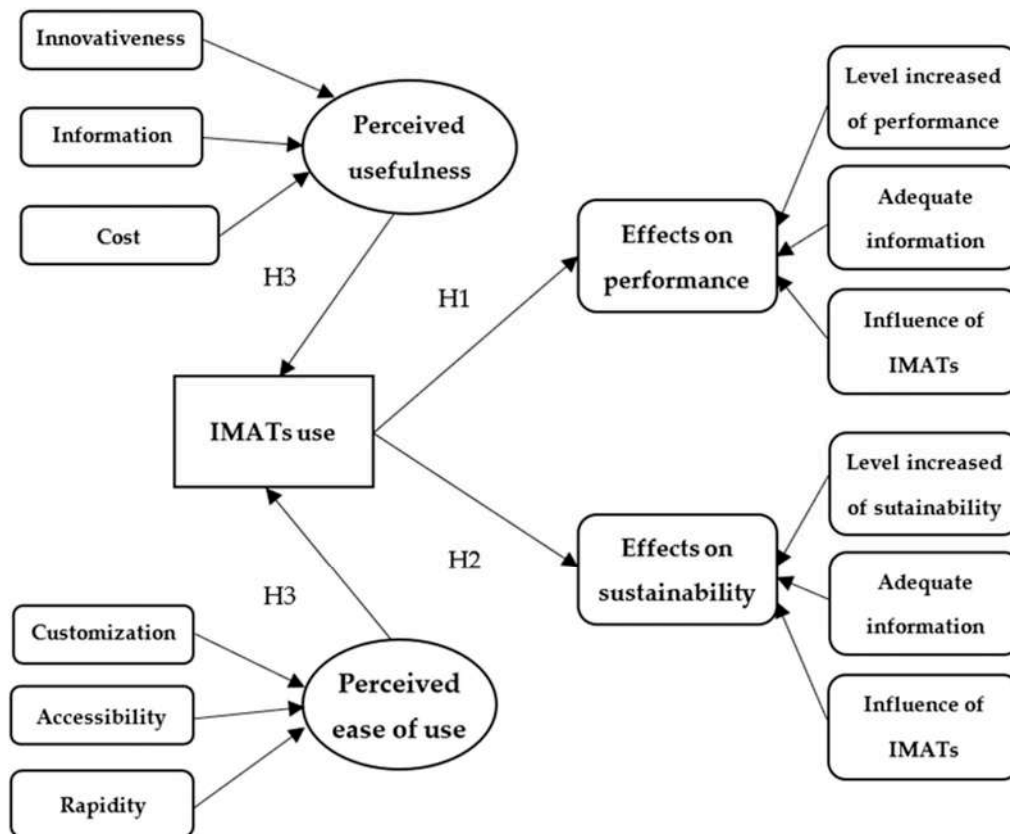


Figure 1. Conceptual model. Source: own construction based on [1–5,11,28,32,41,42,44–46].

Hypothesis 4 (H4). Among IMATs, BSC and ABC are the tools that have the most substantial influence on organizational performance and sustainability in the perception of senior accountants from Romanian companies.

3. Hypotheses, Materials, and Methods

3.1. Research Design and Data Collection

To study the impact of IMATs use on companies' performance and sustainable approaches, we conducted quantitative research on a survey among senior accountants of Romanian companies.

The data collected in a database were subjected to descriptive and inferential statistical analyses. To determine the intensity and meaning of the relationships between the research variables, we used the modeling of the structural equation and artificial neural network analysis. Finally, the obtained results confirmed the hypotheses' validity based on the literature. Figure 2 illustrates the research process.

For data collection, we selected 800 companies from Romania. Representatives of 567 companies responded to the questionnaires sent, with a response rate of 70.9%. Following the validation of the questionnaires (verification of their complete filling) resulted in a group of 554 companies, a representative sample for the total number of companies in Romania (1,106,206 companies). The sampling error was 4.2%. The questionnaires were sent to senior accountants from selected Romanian companies. Of the total number of companies, 177 (representing 31.9% of the companies in the sample) reported using one or more IMATs.

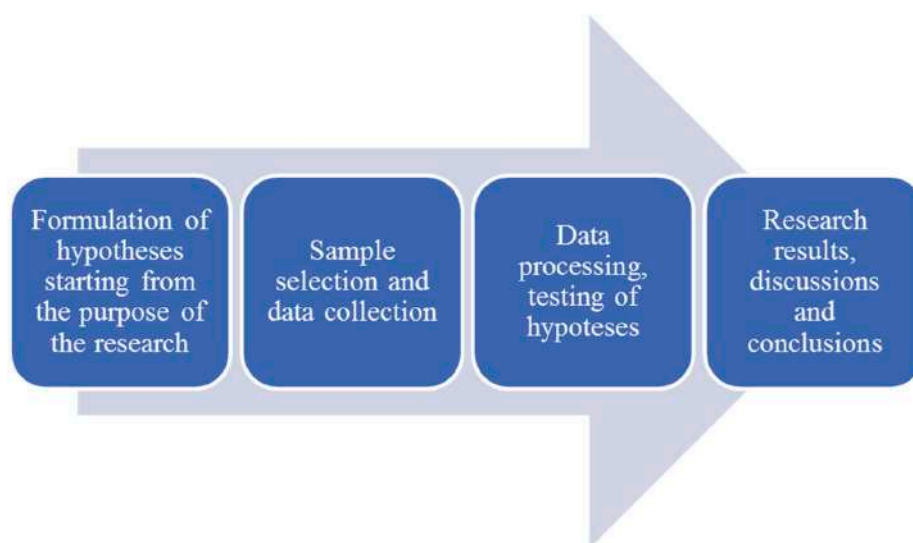


Figure 2. Research process. Source: own construction.

Email data collection has many advantages compared to traditional data collection techniques, such as reducing data collection time, higher response rate, and reducing the total cost of the survey [47]. Before sending the questionnaire by email to senior accountants in the selected companies, the questionnaire was pre-tested and distributed to ten specialists (senior accountants) and researchers in managerial accounting. The final version was sent by email, with a letter stating the research purpose and the relevance of the results. To maintain confidentiality and as a means of combating biases, the questionnaires were anonymized. The data collection period was November 2021 to February 2022.

To ensure the sample's representativeness, we used stratified sampling. The control variables used to structure the sample were the size and the economic sector. Table 2 renders the sample structure according to control variables.

Table 2. Frequencies and descriptive statistics.

	N	Min	Max	Mean	Std. Deviation	Skewness	Kurtosis
Size	554	1	3	1.78	0.828	0.430	−1.411
Sector	554	1	3	2.28	0.779	−0.529	−1.165
IMATs_use	554	1	2	1.32	0.467	0.776	−1.402
ABC	554	1	4	1.51	0.976	1.623	1.067
BSC	554	1	4	1.43	0.943	1.944	2.169
TC	554	1	4	1.35	0.798	2.275	4.034
EVA	554	1	4	1.19	0.660	3.708	12.702
LC	554	1	4	1.15	0.594	4.152	16.141
Innovativeness	554	1	5	2.99	1.254	−0.054	−0.830
Information	554	1	5	3.24	1.230	0.040	−1.034
Cost	554	3	5	3.57	0.585	0.443	−0.698
Customization	554	2	5	3.68	0.698	0.107	−0.409
Accessibility	554	2	5	3.71	0.706	−0.056	−0.268
Rapidity	554	2	5	3.69	0.728	0.062	−0.442
Organizational_performance	554	2	5	3.63	0.881	0.009	−0.771
Information_for_performance	554	2	5	3.58	0.858	−0.035	−0.643
Influence_on_performance	554	2	5	3.41	0.796	−0.048	−0.494
Organizational_sustainability	554	1	5	3.26	1.059	−0.122	−0.519
Information_for_sustainability	554	1	5	3.19	0.943	−0.145	−0.460
Influence_on_sustainability	554	1	5	3.17	1.025	0.104	−0.633

Source: own construction using SPSS v.20 (SPSS Inc., Chicago, IL, USA).

3.2. Selected Variables

The questionnaire used to assess the impact of management accounting tools (MATs) on organizational performance and sustainability was structured into six sections: control variables, the degree of IMATs use in organizations, perceived usefulness, perceived ease of use, effects on performance, and effects on sustainability. To measure the impact of IMATs use on the companies' performance and sustainable approaches, we chose five instruments that are most used in other research papers to measure management accounting innovations [1–5,28,32,41]: balanced scorecard (BSC), activity-based costing (ABC), target cost (TC), lifecycle cost (LC) and economic value added (EVA), tools used and strategic managerial accounting or value-based management. In addition, in our research, we used scales validated in previous research for each item, proving reliable and valid [1–5].

Table 3 shows the survey structure, the items of the questionnaire, and the possible answer options.

Table 3. Questionnaire design (constructs and items).

Structure	Items	Answer Options
Economic variables	Size Economic sector	small, medium, large agriculture, industry, services
The IMATs use in organizations	Use one or more IMATs in your managerial accounting practices	No, Yes
The degree of IMATs use in organizations	ABC BSC Target costing EVA Lifecycle costing	Never used in the past Used but abandoned Partial used Intensively used
Perceived usefulness	MATs innovated the organizational, managerial accounting MATs provide rich information Implementation costs	On a scale of 1 to 5 (1—total disagree, 5—total agree)
Perceived ease of use	Allow easy customization of the organizational context It is easy to implement and manage Implementation time	On a scale of 1 to 5 (1—total disagree, 5—total agree)
Effects on performance	Organizational performance has increased over the last three years. MATs provide adequate information for optimal cost management. Financial performance has increased as a result of MATs implementation.	On a scale of 1 to 5 (1—total disagree, 5—total agree)
Effects on sustainability	Organizational sustainable orientation has increased over the last three years. M.A.T.s provide adequate information for sustainability accounting. Sustainability performance has improved as a result of MATs implementation.	On a scale of 1 to 5 (1—total disagree, 5—total agree)

Source: own construction based on [1–5,11,28,32,41,42,44–46].

3.3. Used Methods

For the H1–H3 hypotheses, we used structural equation modeling (partial least square) [48]. The model of structural equations is as follows:

$$\eta = B\eta + \Gamma\xi + \zeta, \quad (1)$$

where:

η, ξ —latent variables;

B —matrix of coefficients relating the latent endogenous variables to each other;

Γ —matrix of coefficients relating the endogenous variables to exogenous variables;

ζ —disturbance.

For structural equation modeling we used SmartPLS v3.0 (SmartPLS GmbH, Oststeinbek, Germany), allowing structural equation modeling in the partial least square variant.

For the H4 hypothesis, we used a multilayer perceptron (M.L.P.) in the artificial neural network analysis. A perceptron involves obtaining an output layer from an inputs layer through a hidden layer using an activation function [49]. For our model, we used the hyperbolic tangent function:

$$f(n) = \frac{e^n - e^{-n}}{e^n + e^{-n}} = \frac{e^{2n} - 1}{e^{2n} + 1} \quad (2)$$

where:

e —Euler number;

n —input variable;

$f(n)$ —output variable.

For artificial neural network analysis, we used SPSS v20 (SPSS Inc., Chicago, IL, USA), allowing setting variables in a multilayer perceptron.

4. Results

Starting from the technology acceptance model (TAM), proposed by Fred Davis in 1985 [44], we defined the latent values of perceived ease of use (PEU) and perceived usefulness (PU) as influencing factors of IMATs use. Perceived ease of use (PEU) has as antecedents: customization, accessibility, and rapidity, while perceived usefulness has as antecedents: innovativeness, information, and cost.

To increase the significance of quantitative research for the IMATs use variable, we used a single item to illustrate whether organizations use IMATs in managerial accounting. This aspect leads to a maximum load of the only exogenous variable (with a value of 1000). IMATs use influences organizational performance and sustainability, affecting organizational performance and sustainability being defined as latent variables. The antecedents of effects on organizational performance are increased performance, adequate information for performance management, and the influence of IMATs on performance. In contrast, the antecedents of effects on organizational sustainability are the level of increased sustainability, the adequate information for sustainability management, and the influence of IMATs on sustainability.

The conceptual model was applied and tested using SmartPLS v3.0 (SmartPLS GmbH, Oststeinbek, Germany), allowing structural equation modeling in the partial least square variant. The relationships established in the model, the R square values, the path coefficient values, and the loading of the exogenous variables are found in Figure 3. All exogenous variables have a load above 0.7, which determines that we continue testing the model's initial theoretical form.

Researching the reliability indicators, we can see that the model is reliable (Table 4), with Cronbach's alpha recording values above 0.7, composite reliability recording values above 0.8, and average variance extracted (AVE) recording values above 0.6, according to the requirements indicated in the S.E.M. literature [48]. Reliability indicators for IMATs were 1000, given that this latent variable has only one exogenous variable.

Table 4. Model reliability.

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted (AVE)
Effects on performance	0.880	0.926	0.808
Effects on sustainability	0.811	0.888	0.726
IMATs use	1.000	1.000	1.000
Perceived ease of use	0.850	0.909	0.770
Perceived usefulness	0.860	0.914	0.781

Source: own construction using SmartPLS v3.0 (SmartPLS GmbH, Oststeinbek, Germany).

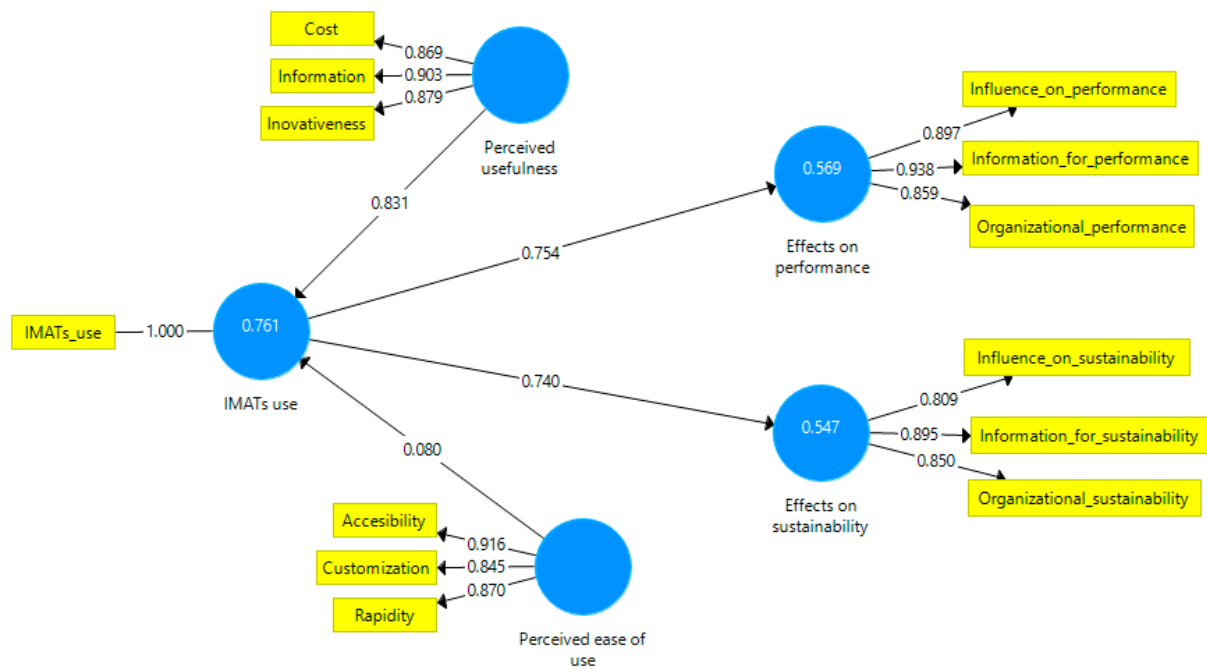


Figure 3. Empirical model. Source: own construction using SmartPLS v3.0 (SmartPLS GmbH, Oststeinbek, Germany).

Analyzing discriminant validity using the Fornell–Larcker criterion [48], we can say that the model is valid and has high confidence and significance (Table 5).

Table 5. Discriminant validity.

	Effects on Performance	Effects on Sustainability	IMATs Use	Perceived Ease of Use	Perceived Usefulness
Effects on performance	0.899				
Effects on sustainability	0.455	0.852			
IMATs use	0.754	0.740	1.000		
Perceived ease of use	0.157	0.416	0.480	0.877	
Perceived usefulness	0.581	0.582	0.870	0.482	0.884

Source: own construction using SmartPLS v3.0 (SmartPLS GmbH, Oststeinbek, Germany).

Paths coefficients that are established among IMATs use, effects on performance, effects on sustainability, T statistics coefficients (with a value above 3), and *p* values (with a value below 0.005) indicate strong influences of IMATs on performance and sustainability, which confirms the hypotheses H1 and H2 as valid (Table 6).

Table 6. Paths coefficients.

	Coefficients Paths	T Statistics	<i>p</i> Values
IMATs use -> Effects on performance	0.754	47.381	0.000
IMATs use -> Effects on sustainability	0.740	45.837	0.000
Perceived ease of use -> IMATs use	0.080	3.283	0.001
Perceived usefulness -> IMATs use	0.831	59.051	0.000

Source: own construction using SmartPLS v3.0 (SmartPLS GmbH, Oststeinbek, Germany).

To investigate the H3 hypothesis, we used a bootstrapping procedure that allowed us to calculate specific indirect effects established among perceived ease of use and perceived usefulness, on the one hand, and effects on performance and effects on sustainability, on the other hand (Table 7).

Table 7. Specific indirect effects.

	Coefficients	T Statistics	p Values
Perceived ease of use -> IMATs use -> Effects on performance	0.060	3.242	0.001
Perceived ease of use -> IMATs use -> Effects on sustainability	0.059	3.262	0.001
Perceived usefulness -> IMATs use -> Effects on performance	0.627	35.393	0.000
Perceived usefulness -> IMATs use -> Effects on sustainability	0.615	33.631	0.000

Source: own construction using SmartPLS v3.0 (SmartPLS GmbH, Oststeinbek, Germany).

From the analysis of Table 7, the H3 hypothesis is confirmed as valid, IMATs usefulness exerting a significant positive indirect effect on organizational performance and sustainability.

To investigate the H4 hypothesis, we used multilayer perceptron (M.L.P.) from artificial neural network analysis, a feature of SPSS v.20 software (SPSS Inc., Chicago, IL, USA). We defined influence on performance (IOP) and influence on sustainability (IOS) as dependent variables and the degree of use of five IMATs introduced in the research as independent variables: balanced scorecard (BSC), activity-based cost (ABC), target cost (TC), lifecycle cost (LC), and economic value added (EVA). As a function of activating the hidden layer and the output layer, we used the hyperbolic tangent function. In the hidden layer, a single unit is defined as the perceived usefulness of the IMATs. The average overall relative error of the perceptron is 0.531.

The bias acting on the hidden layer is negative and of low value. This bias is represented by the cumulative influence of other innovative management accounting tools. The bias acting on the output layer is represented by the perceived ease of IMATs use and other external influences of IMATs. This bias has a positive and relatively small influence on performance and a positive and medium influence on sustainability (Figure 4).

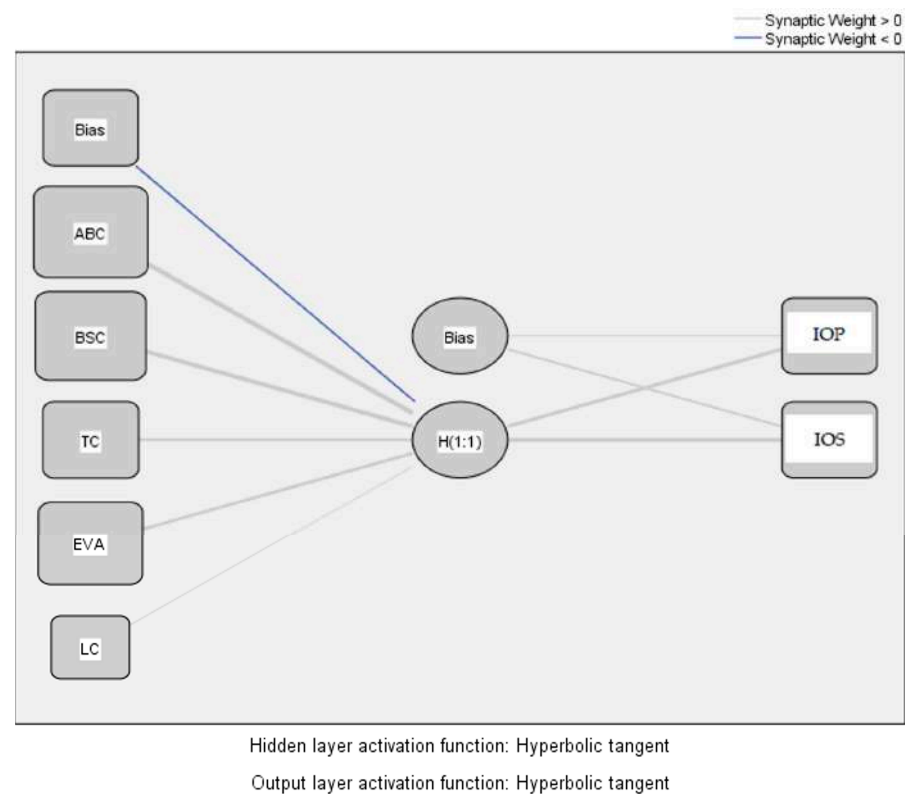


Figure 4. M.L.P. for the degree of IMATs use in organizations. Source: own construction using SPSS v.20 (SPSS Inc., Chicago, IL, USA).

Figure 3 and Table 8 reveal a significant influence of IMATs on sustainability, especially organizational performance. Among IMATs included in the research, two tools (ABC and BSC) strongly influence organizational performance and sustainability. Two tools (TC and EVA) exert medium influence, and LC has a low influence through their perceived usefulness.

Table 8. Predictors and the importance in the M.L.P. model.

Predictor	Hidden Layer 1	Output Layer		Importance	Importance Normalized
	H(1:1)	Influence on Performance	Influence on Sustainability		
Input Layer	(Bias)	−0.108			
	ABC	0.896		0.310	100.0%
	BSC	0.748		0.282	91.1%
	TC	0.311		0.161	52.1%
	EVA	0.444		0.229	74.0%
	LC	0.050		0.017	5.5%
Hidden Layer	(Bias)		0.085		
	H(1:1)		0.465	0.245	0.487

Source: own construction using SPSS v.20 (SPSS Inc., Chicago, IL, USA).

Following artificial neural network analysis, the H4 hypothesis is valid. Among IMATs, BSC and ABC are the tools that have the most substantial influence on organizational performance and sustainability.

5. Discussion

Because traditional management accounting tools provide limited information [50] and are not strategically valuable, and do not provide non-financial disclosure, IMATs were introduced at the end of the 20th century [51–57]. IMATs are tools that provide information useful both for external and internal stakeholders [57]. Many studies have attempted to assess the potential benefits of several innovative management accounting practices and tools in industry and service companies in different countries: Malaysia [11,58,59], Indonesia [60], Nigeria [61], Turkey [62], Romania [63,64], Greece [4,5], Poland [65], Vietnam [14,66].

Most previous research has focused on using and adopting one or more IMATs in different national and economic contexts instead of illustrating the influences of IMATs on financial and non-financial performance and their alignment with the company's sustainable vision [55,57,67–74]. Following the research and confirmation of the hypotheses, we highlighted the beneficial effects of IMATs on the organizational performance and sustainability of the Romanian companies involved in our study.

Almaryani and Sadik [63] analyzed strategic management accounting in Romanian companies and the role of IMATs in achieving strategic goals. Similar to Almaryani and Sadik [63], we found that the innovative tools used in strategic management accounting cannot wholly replace traditional management methods, especially in small and service companies. Most companies in Romania currently maintain a traditional management accounting implementation, but medium and large companies use strategic management accounting to promote sustainable organizational development. Ma et al. [11] consider that the top management of S.M.E.s prefers traditional management accounting, does not understand the role of accounting, and does not pay enough attention to strategic management accounting.

The model regarding the influence of IMATs in improving the performance and organizational sustainability in the perception of senior accountants of Romanian companies provides us with testing and confirms the validity of the formulated hypotheses information on the relationships and influences established between the variables studied (IMATs).

The analysis of the results indicated that the IMATs analyzed in the research have a relatively high degree of use at the level of Romanian companies. These findings also

confirm the findings of Pavlatos and Kostakis [4,5], who concluded that Greek companies widely use these IMATs. In line with the findings of Chenhall and Moers [2] and Pavlatos and Kostakis [4,5], we found the BSC is the most widespread compared to the rest of the IMATs, since it allows management of the intangible elements of the company, permitting an integrated approach to performance, by following all the pillars of sustainability: economic, social and environmental. At the same time, BSC has a solid strategic focus, enabling better control over all other elements of the company's cost and performance of management and employer actions [31]. The use of target costing allows for more substantial customer orientation, enabling companies to be more connected to the competitive environment than other companies using other IMATs. Costs are managed starting from the customers' price to obtain the desired profit margin [29]. ABC is a tool that offers stricter cost control and eliminates those that do not add value [5]. EVA supports the managerial decision-making process, focusing on added value and profitability [75], allowing for a better comparison with the competition. Lifecycle cost reduces the cost at each stage of a product or service's life cycle through better cost management depending on its stage [5,32].

In recent decades, companies have been under increasing pressure to operate sustainably and transparently, leading them to adopt IMATs that allow for more sustainable guidance [76]. External influences and internal responses cause a series of internal fluctuations; both are essential factors in integrating more innovative tools in management accounting practice [5,77,78]. IMATs allow a better response to external pressures by providing more detailed information to substantiate senior management decisions of companies. Erokhin et al. [43] point out that sustainable managerial accounting and sustainability reporting have become integrated tools for measuring accounting performance that communicate information on all dimensions of sustainable development: economic, environmental, and social. In an increasingly dynamic and turbulent economic environment, organizations rely on sustainable and strategic management accounting and sustainability reporting as processes for collecting, analyzing, and communicating information related to the three pillars of sustainability (economic, environmental and social). The multidimensional and interdisciplinary nature of the management accounting area allows management accounting to strengthen the sustainable dimension of the organization by transforming it into a social and institutional activity. Management accounting supports a socially responsible organization to influence a multitude of stakeholders and provides tools to be influenced by them. IMATs allow management accounting to become a social practice, determined by the nature of the organizational and social environment [43].

Although research on the use of IMATs in the integrated approach to sustainable management accounting and sustainability reporting has been based mainly on case studies in developed countries [79], this is a potentially important area of management accounting. In line with Celik's research [80], we believe that organizations can ensure a higher level of sustainability by using innovative accounting practices and tools that take into account not only financial aspects. Furthermore, IMATs can be added to other strategies or actions of organizations, such as strategic planning and sustainable innovation, corporate sustainability strategies, entrepreneurial leadership, empowering leadership, innovative work, and organizational learning, to deal with the crisis generated by COVID-19 and to ensure the resilience of organizations through increased performance and increased sustainability [81–84].

6. Conclusions

6.1. Theoretical Implications

The paper proposes a conceptual framework for investigating the extent of implementation and IMATs use and their potential influence on companies' performance and sustainable approaches. Previous research in management accounting has provided some evidence to support the benefits of modern management accounting and optimized cost management to improve companies' financial and non-financial performance [57,85].

6.2. Practical Implications

Following research, the paper demonstrates that IMATs have a significant and positive influence on organizational performance. However, the adoption of IMATs and the abandonment of traditional managerial accounting practices are tricky in developed and less developed countries, especially in small enterprises that do not have enough expertise to apply innovative management accounting tools.

The paper demonstrates that the innovative tools of management accounting contribute to the development of sustainable management accounting by including social and environmental vectors, giving a complementary role (compared to conventional) to the strategic management accounting system. Furthermore, similar to Zyznarska-Dworczak [85], we have emphasized the multidimensional and interdisciplinary nature of research in management accounting.

6.3. Limitations and Further Research

The sample used consists only of Romanian companies' representatives (senior accountants) within the paper. The geographical and implicitly cultural component is a limitation that can be overcome by extending the sample to companies in other countries. Another limitation is the transversal manner of the research. The future direction of research may be a longitudinal analysis at different times of the degree of IMATs use and the influences on companies' performance and sustainable approaches. Another area of research aims to determine the objective effects of IMATs on the financial and non-financial performance of the organization. The COVID-19 crisis also allows for an innovative approach to managerial accounting.

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