

Case study on the accounting of a software product developer

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Abstract

In international practices applicable to the software industry, revenue recognition is based on the transfer of control over the services provided, typically “over time” when the customer benefits as the entity works—criteria set out in IFRS 15; development costs can be recognized as intangible assets only if the strict conditions of IAS 38 for the development phase are met; lease contracts for equipment are accounted for by recognizing a right-of-use asset and a corresponding liability, in accordance with IFRS 16. These benchmarks explain how the indicators presented in the report faithfully reflect the economic reality of an IT company (IFRS 15, IASB; IAS 38, IASB; IFRS 16, IASB). This report analyzes the activity of a software development company, focusing on internal organization, business strategies, and financial-accounting performance. It presents the main aspects regarding operational flows, accounting treatments applied to acquisitions, service provision, and financing. The analysis of the financial statements highlights the evolution of key economic indicators such as turnover, net profit, labor productivity, and debt level. Additionally, the report includes a relevant case study on the execution of a software project, demonstrating the practical applicability of accounting principles.

Keywords: Accounting, software development, financial analysis, economic performance, project management

1. Introduction

This case study analyzes the economic and accounting activity of SOFTWARE IMAGINATION & VISION SRL, a software product developer in Romania. The study addresses key aspects such as internal organization, business strategies, operational flows, and financial performance, providing a comprehensive perspective on how these elements are reflected in accounting. Through a detailed case study, the accounting treatments applied to acquisitions, production, and financing are highlighted, along with their impact on the financial statements.

Some studies have shown the importance of the Product Owner role within a team involved in IT product development, considering the emergence of new client requirements or the need to obtain specific expertise through collaboration with other team members and the way they validate the completion of activities or specific tasks [5]. In recent years, Romania has become an unexpected force in the technology sector, with a strong IT industry and a growing number of skilled technology specialists [7].

The industrial revolution and the continuous evolution of technology have generated a new type of interaction with society, bringing significant changes both in common perception and in the formation of

human relationships. Over the years, the IT&C sector has become a reliable and efficient “tool” that encourages global innovation and progress. In this context, the economic competitiveness of countries largely depends on their ability or inability to adapt to an information-based society, as well as on the implementation of new technologies to their advantage [6].

In modern software company reporting, contract revenues are evaluated and recognized based on the five steps outlined in IFRS 15: identifying the contract, identifying performance obligations, determining the transaction price, allocating the price to obligations, and recognizing revenue when/as the obligations are fulfilled—essential when projects are staged and have intermediate deliverables (IFRS 15, IASB; KPMG, 2025).

The analysis focuses on key economic indicators such as turnover, net profit, labor productivity, and debt ratio, providing a clear picture of the company’s performance over two years. Additionally, a practical case study on a software development project is presented, illustrating the application of accounting principles in a real context.

Furthermore, the research considers the treatment of internal development costs: research expenses are recognized as expenses, while development costs are capitalized only if the following criteria are cumulatively met: technical feasibility, intention and ability to use/sell, availability of resources, and reliable cost estimation—according to IAS 38 (IAS 38, IASB; ICAEW tracker).

The purpose of this study is to highlight the link between theory and practice, contributing to an understanding of how accounting can support decision-making processes and the performance of an IT company. The results provide valuable insights for both researchers and practitioners, emphasizing the importance of an integrated approach to managing economic resources.

2. Methodology

The methodological approach is that of a case study, applied concretely to a real economic entity, using accounting and financial documents over a two-year period (Year N and N+1). Accounting balance sheets, profit and loss accounts, depreciation statements, lease contracts, invoices, as well as internal company sources were utilized. Additionally, a complete IT project is presented, with detailed accounting entries for each stage, from contracting to collection and reporting.

For performance interpretation, key financial indicators were analyzed: turnover, net profit, profitability ratios (ROA, ROS), labor productivity, gross margin, and debt ratio.

In evaluating these indicators, definitions used in literature and standards were followed: “turnover” reflects revenues from contracts with clients according to IFRS 15, while net profit represents the result after all expenses; for software projects, revenues can be recognized “over time”

if the conditions for the transfer of control during execution are met (IFRS 15; EFRAG, 2023 — PIR IFRS 15).

3. Presentation of the Analyzed Company

Software Imagination & Vision (SIMAVI) is a Romanian IT company, founded in 2019 following the division of the software development department of SIVECO Romania SA. Although relatively new, SIMAVI benefits from the expertise of a team with extensive experience in areas such as education, healthcare, customs, nuclear energy, banking, utilities, manufacturing, and business.

The company is structured according to a European model, with specialized competence centers and internationally recognized experts. SIMAVI provides high-quality IT services directly to European Commission institutions and is recognized as one of the regional leaders in eLearning, eHealth, eCustoms, eGovernment, and eBusiness in Central and Eastern Europe.

Through the implementation and continuous improvement of an integrated quality, environmental, occupational health, and safety management system—in compliance with ISO 9001, ISO 14001, and ISO 45001 standards—SIMAVI commits to meeting the explicit requirements of clients and other stakeholders, while also adhering to applicable legislation, regulations, and contractual obligations.

Regarding IT equipment lease contracts, the accounting treatment after 2019 follows IFRS 16: recognition of a “right-of-use asset” and a “lease liability” for all contracts over 12 months, with limited exceptions; this framework enhances transparency regarding lease financing (IFRS 16, IASB; KPMG overview).

4. Results

The first part is dedicated to a brief analysis of the main indicators from the profit and loss account, while the second part of the results focuses on describing the relevant accounting treatments for the activities carried out by the analyzed company.

4.1 Brief Considerations on the Analysis of Financial Performance

This section of the article presents the results obtained from analyzing the company’s annual financial statements.

Turnover represents the total revenues from the sale of goods and services generated within a specific period, excluding financial and exceptional income. (In reporting under IFRS 15, turnover is equivalent to revenue recognized from contracts with customers, in the amount reflecting the

consideration to which the entity expects to be entitled—including the estimated variable component, where applicable (IFRS 15, IASB).

Table no. 1: Structure and evolution of turnover by the nature of goods sold

Nr.c rt.	Indicator name	N		N + 1		Indice
		Absolut	%	Absolut	%	
1.	Sold production	81.606.423	99,18	84.685.572	99,38	103,7%
2	Trade discounts granted	0.00	0	0.00	0	0%
3.	Revenue from the sale of goods	675.642	0,82	530.052	0,62	78,4%
4.	Turnover (4=1+2+3)	82.282.065	100	85.215.624	100	103,5%

Source: Author's own reasoning based on company data

It can be observed that, although revenues from the sale of goods decreased in year “N+1” compared to year “N,” turnover increased by 3.5%, driven by an approximate 3.7% increase in sold production. In the software industry, turnover growth is often correlated with projects recognized “over time,” based on progress measured by output or input, in accordance with IFRS 15 paras. 35–39 (IFRS 15, IASB; KPMG, 2025).

The following table analyses the evolution of net profit:

Table no. 2: Evolution of net profit

Nr.crt.	Indicator name	N	N+1	Indice
1.	Total revenues	102.403.948	119.329.893	116,52%
2.	Total expenses	88.958.838	106.124.022	119,29%
3.	Net profit (3=1-2)	13.445.110	13.205.871	98,22%

Source: Author's own processing based on data provided by the company

A decrease in net profit can be observed in year N+1 compared to year N. This is due to total expenses increasing faster than total revenues. For internal development projects, part of the costs can be capitalized if they meet the IAS 38 criteria for the development phase—directly affecting the level of expenses and net results (IAS 38, IASB; IASPlus).

In the following example, we present the structure of sales by the destination of product sales:

Table no. 3: Structure of sales by the destination of finished product sales

Nr.crt.	Indicator name	N	N+1	Index
1.	Clients from Romania	55.980.699	107.104.700	191,3%
2.	Clients from Europe	29.234.925	32.664.767	111,7%
3.	Clients from third countries (Africa and Asia)	0	0	0%
4.	Total sales (4=1+2+3)	85.215.624	139.769.467	164%

Source: Author's own reasoning based on company data

Compared to year “N,” year “N+1” brought a significant increase in sales turnover, driven both by higher sales volumes to the Romanian market and by growth in sales to the European market. Sales to clients in Romania increased by nearly 100%, while sales to clients in Europe grew by 11.70%. In intra-community B2B service transactions, the place of supply is, in principle, at the recipient — Article 44 of Directive 2006/112/EC; verification of the taxable person’s status is carried out through VIES, according to the European Commission (EU — VAT Directive; Your Europe/VIES).

4.2 Analysis of Relevant Accounting and Tax Treatments

First, we will specify the VAT treatment for service acquisitions from the EU compared to those from outside the EU, after which we will provide a brief analysis of accounting treatments grouped by the company’s activities.

4.2.1 Regarding VAT

As a general rule, the place of supply for intra-community B2B services is the location where the recipient has its business activity established. The recipient applies the reverse charge mechanism for VAT. Practical examples: (i) Consultancy services purchased from the EU: Reverse charge applies, and the transaction is reported in Form 390 VIES for intra-community taxable service acquisitions.

The VAT treatment for service acquisitions from outside the EU is based on Article 278(2) of the Fiscal Code, according to which the place of supply between taxable persons is where the recipient has its business activity established. If services are supplied to a fixed establishment of the recipient, the place of supply is that fixed establishment. If the place of supply is in Romania, the Romanian recipient may be required to pay VAT either through the reverse charge mechanism (if registered for

VAT) or by direct payment (if not registered). Service acquisitions from non-EU persons are not considered intra-community acquisitions and are not reported in the recapitulatory statement.

Certain services may be exempt from VAT under Articles 292–296 of the Fiscal Code (e.g., services related to export/import, financial services, medical services, etc.). The recipient must justify the exemption with specific documentation. Non-EU suppliers must issue invoices without VAT if the recipient is a taxable person. If the invoice includes VAT charged by the supplier’s country, the recipient may request a correction or pay VAT in Romania based on the invoice amount (avoiding double taxation). In this case, the Romanian VAT-registered recipient reports the acquisitions in the VAT return and in informative statement 394. VAT becomes due on the service provision date or the invoice date if issued earlier. Self-billing must be completed by the 15th day of the following month.

Consistent application of the above rules is supported by EU case law and tax guidelines, including post-Brexit situations, where Article 44 continues to apply for B2B transactions (Loyens & Loeff, 2021; CJEU references to Art. 44).

4.2.2 Specific treatments for the acquisition of goods and services

The company’s activity consists of providing software services, and the invoices received from suppliers cover various services: consultancy, telephony, repairs, energy, as well as purchases of consumables, fixed assets, or inventory items. Considering these, the activities include:

a) *Purchase of the basic registration certificate from ONRC, according to invoice no. 2236::*

628	=	401	
Other third party services		Suppliers	30 lei

b) *Purchase of a fixed asset (office furniture), according to the invoice and delivery note:*

%	=	404	
214		Suppliers of non-current assets	5.950 lei
Fixtures and fittings			5.000 lei
4426			950 lei
Input VAT			

Depreciation of the fixed asset: 5,000 lei / 120 months = 41.66 lei/month

6811	=	2814	
Depreciation of non current assets		Depreciation of other tangible assets	41,66 lei

For tangible assets, the cost model is applied with systematic depreciation over their useful life; for intangible assets resulting from internal software development, the capitalization criteria are those

of IAS 38, while for licenses/cloud subscriptions it is assessed whether they give rise to an asset or a periodic expense (IAS 38, IASB; IASPlus).

4.2.3 Accounting treatments for service production

The company's activity is not the production of goods, as it provides services. The invoices issued by the entity are for software development services under contract, with VAT at 19%; the company does not apply cash-based VAT. The company does not provide services to the general public, and therefore does not use a cash register, and consequently does not issue Z-reports.

- *provision of services regarding the use of the IT system, according to Invoice no. 2237*

628	=	401	
Other third party services		Suppliers	38.950,00 lei

- *Reverse charge recognition:*

4426	=	4427	
Input VAT		Output VAT	7.400,50 lei

- *invoicing of service provisions (according to the contract):*

4111	=	%	
Customers		704	46.350,50 lei
		Services rendered	38.950,00 lei
		4427	7.400,50 lei
		Output VAT	

For services delivered in stages, the identification of distinct performance obligations and the method for measuring progress are decisive for the timing of revenue recognition (IFRS 15, IASB; EFRAG PIR).

4.2.4 Case study on transactions related to a software development project

This case study follows a software development project, analyzing the transactional flow from budgeting to final payment. The aim is to highlight the key stages, challenges, and lessons learned in order to optimize financial and project management processes. The Romanian service provider is the company SOFTWARE IMAGINATION & VISION, and the beneficiary is a transport company, referred to here as ABC SRL. The subject of the contract is the development of a Task Management Application, and the contract value is 240,000 lei, including 19% VAT. The project duration is estimated at 6 months, with the contract price to be settled as follows: 25% as an advance payment, 50% upon delivery of the prototype, and 25% upon project completion.

Stage 1: For the activities carried out upon contract signing, requirements analysis, and project planning, the advance invoice is issued:

4111	=	%	
Customers		419	60.000 lei
		Advance payments from customers	50.420 lei
		4427	9.580 lei
		Output VAT	

- *Advance receipt:*

5121	=	4111	60.000 lei
Cash at bank in lei		Customers	

Stage 2: Delivery of the Intermediate Version + Internal Testing (50%)

The activities carried out focused on developing the core functionalities (task creation, user assignment) and internal testing (QA) to identify bugs. 50% of the contract is invoiced, plus the adjustment of the advance payment.

- *Invoicing 50%:*

4111	=	%	
Customers		704	120.000 lei
		Services rendered	100.840 lei
		4427	19.160 lei
		Output VAT	

- *Advance adjustment:*

4111	=	%	
Customers		704	0,00 lei
		Services rendered	50.420 lei
		4427	9.580 lei
		Output VAT	
		419	
		Advance payments from customers	(50.420 lei)
		4427	
		Output VAT	(-9.580 lei)

- *Intermediate payment receipt:*

5121	=	4111	120.000 lei
Cash at bank in lei		Customers	

Stage 3: Upon project completion, client-environment testing is conducted, along with various bug fixes and requirement adjustments.

4111	=	%	
Customers		704	600.000 lei
		Services rendered	50.420 lei
		4427	9.580 lei
		Output VAT	

- *Final payment receipt::*

5121	=	4111	60.000 lei
Cash at bank in lei		Customers	

Project-related expenses concern the salaries of the team, consisting of a developer and a tester.

Total salary expenses: 20,000 lei/month × 6 months = 120,000 lei.

641	=	421	120.000 lei
Salaries		Employees - salaries payable	

- *For the smooth execution of the project, expenses related to the purchase of the software license were recorded (12,000 lei, including VAT):*

%	=	401	12.000 lei
628		Suppliers	
Other third party services			10.084 lei
4426			1.191 lei
Output VAT			

5. Conclusions

This paper aimed to analyze the economic and accounting activity of SOFTWARE IMAGINATION & VISION SRL, a company active in the information technology sector, through a structured approach addressing internal organization, strategy, accounting policies, and financial performance. As a result of the research, it can be concluded that SOFTWARE IMAGINATION & VISION SRL is a well-structured company with a clear development vision and a stable position in the software industry market. The rigorous application of accounting policies and a performance-oriented approach enable the company to respond effectively to market challenges and ensure sustainable growth.

The study contributes to a better understanding of how accounting reflects the economic reality of an entity and emphasizes the importance of integrating accounting analysis into an organization's decision-making process. This approach is essential for the professional preparation of future economists, especially in the current context, characterized by digitalization and continuous transformation.

6. Bibliographic References

- [1] Balanuță V., (2010), Analiza rentabilității veniturilor din vânzări ale întreprinderii prin prisma aportului propriu al colectivului de muncă, asem, ediția a VIII-a.
- [2] Calotă T.O., (2022), Contabilitate. De la teorie la practică. Metodă și modelare, Editura Universitară, București.

- [3] Calotă T.O., (2022), Contabilitate. De la teorie la practică. Ciclul contabil și închiderea exercițiului financiar, Editura Universitară, București.
- [4] Gherghina, R., Duca, I., (2012), Gestiunea financiară a întreprinderii, Editura Universitară, București;
- [5] GHIBA, A. C. (2022). Rolul de product owner în cadrul echipelor contemporane de dezvoltare a produselor IT care lucrează cu principii „agile”. *Journal of Romanian Literary Studies*, (28), 716-722.
- [6] Purcărea, A. A., Negoită, O. D., & Popescu, M. (2018). O prezentare generală privind serviciile de software și IT din România. *Review of Management & Economic Engineering*, 17(1).
- [7] Sfetcu, N. (2024). Resurse tehnologice în România-Provocări și oportunități.
- [8] Petrescu, S. (2010). Analiză economico-financiară. Editura CECCAR, București
- [9] Robert K. Yin, (2005), Studiul de caz: designul și metodele cercetării, Editura Polirom.

Legislation

**** Legea nr. 31/1990 privind societățile comerciale, cu completările și republicările ulterioare;

**** Legea nr. 82/1991 privind contabilitatea, cu completările și republicările ulterioare;

**** Ordinul nr. 2634 din 5 noiembrie 2015 privind documentele financiar-contabile;

**** OMFP nr. 1802/2014 pentru aprobarea reglementărilor contabile privind situațiile financiare anuale individuale și situațiile financiare anuale consolidate;

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<https://mfinante.gov.ro/ro/web/site>