

THE DIGITAL TRANSFORMATION OF THE FINANCIAL FUNCTION AND ITS IMPLICATIONS FOR ECONOMIC AND FINANCIAL ANALYSIS

CĂRUNTU GENU ALEXANDRU

ASSOC. PHD CONSTANTIN BRÂNCUȘI UNIVERSITY TÂRGU-JIU

e-mail: cgenuc@gmail.com

Abstract

Digital transformation has become a strategic priority for modern organizations, especially those in the financial sector, where the demands for operational efficiency, regulatory compliance, predictive analytics, and data valorization are increasing. This article analyzes how the digitalization of financial processes — through the implementation of ERP (Enterprise Resource Planning) systems, migration to cloud solutions, the use of advanced analytics, and technologies such as RPA (Robotic Process Automation) — is redefining the role and functions of the finance department. At the same time, concepts of financial management and economic-financial analysis (performance, flexibility, risk) are integrated, highlighting the main benefits, challenges, and strategic implications that these transformations generate for organizations.

Keywords: digital, financial, innovation, systems, transformation

JEL classification: G32, O33,

1. Introduction

In the context of a digital economy marked by the accelerated pace of change, globalization and automation, the finance function is increasingly required to move from a predominantly operational role (focused on control and costs) to a strategic one, focused on supporting decisions and generating valuable insights. This paradigm shift involves not only streamlining existing processes, but also adopting digital technologies that facilitate automation, transparency and data-driven decision-making. Thus, the digitized finance function becomes a central element of contemporary financial management and the organization's economic and financial analysis.

From the perspective of financial management, digitization significantly changes the way working capital, liquidity, capital structure and financial risk are managed, as well as the processes of reporting and evaluating economic performance. In the field of economic and financial analysis, digital transformation offers new opportunities for real-time data integration, more accurate forecasts and more efficient risk assessment.

In conclusion, the digitalization of the financial function is an essential factor for increasing the performance and competitiveness of organizations, allowing for more efficient resource management, more accurate data analysis, and an increased ability to adapt to changes in the economic environment.

2. The evolution of financial digitalization

ERP systems are the basis for the digitalization of the financial function, by integrating accounting, management, budgeting, cash-flow and reconciliation modules into a single platform. This integrated approach provides increased visibility over financial data and facilitates the consolidation of processes and reporting [4].

This trend reflects not only the need for operational efficiency, but also the strategic orientation of organizations towards data-based financial governance and advanced analytics. The integration of digital technologies allows for more precise monitoring of economic and financial performance and supports decision-making processes by providing real-time information. In the

future, the digitalization of the financial function becomes a critical factor of competitiveness, capable of transforming the financial department into a strategic partner of executive management.

The main functionalities of an ERP system dedicated to finance include:

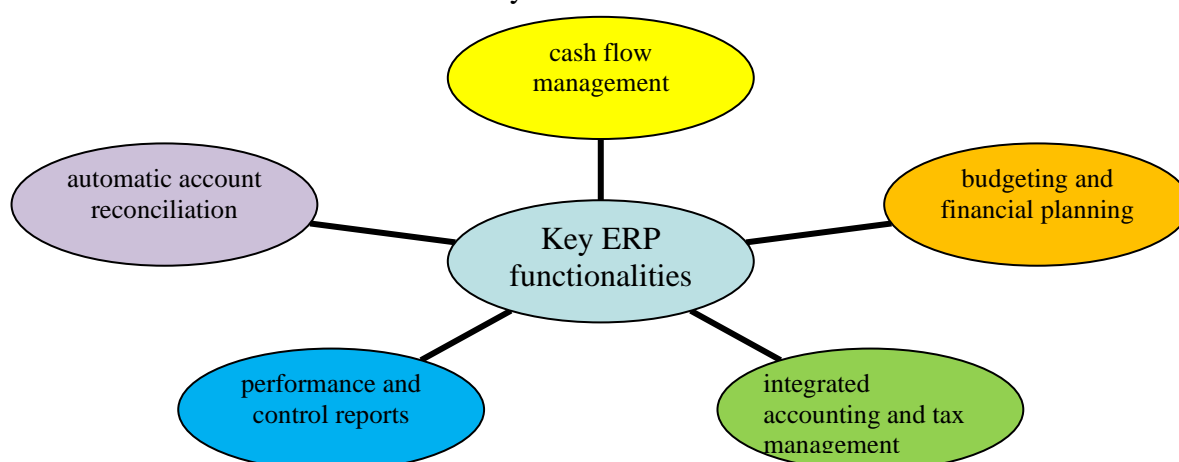


Figure 1 ERP functionalities [1]

However, implementing ERP systems also brings a number of challenges, such as high initial costs, low configuration flexibility, dependence on technological infrastructure and the need for rigorous data governance.

RPA marks an important stage in the digitalization of the finance function, allowing the automation of repetitive and rule-based activities without requiring substantial changes to existing systems. In the financial sphere, RPA technology is used for automatic invoice processing, bank account reconciliation, report generation and data validation between different platforms [22].

At the same time, recent studies confirm an accelerated growth in the adoption of digital technologies — such as RPA, cloud solutions and artificial intelligence — within finance departments, with over 80% of chief financial officers (CFOs) of large companies carrying out extensive projects to digitally transform financial operations. [12]

3. The benefits of digitalizing financial processes and the challenges in implementing financial digitalization

Automating financial processes significantly reduces the time and costs associated with repetitive administrative activities. By digitizing these processes, organizations can achieve major benefits, such as 2–3 times more time dedicated to analysis and decision-making, automating over 70% of financial processes and reports, and increasing forecast accuracy by over 60%. [12]

Automating financial processes through ERP and RPA significantly reduces manual interventions, minimizing the risk of errors and improving the quality of financial data, an essential aspect for control, audit and compliance. A digitized finance department provides integrated data, dashboards and analyses, thus facilitating faster and better-founded decision-making.

Digital solutions allow organizations to quickly adapt to changes in the business environment, including legislative changes, ESG requirements and operational variability. Digitization, data management and new technologies are considered the main challenges for the finance function [6].

Digital transformation directly influences financial analysis and financial management, bringing benefits such as [3]:

- Increased speed and quality of financial reporting, which improves the monitoring of key indicators (liquidity, profitability, return on investment);

- Better management of working capital and capital structure, thanks to real-time visibility and automation of financial flows;
- Use of predictive data for financial forecasts, “what-if” scenarios and strategic planning;
- Improved financial flexibility, although some studies suggest a reduction in flexibility reserves as a result of digitalization.

One of the biggest obstacles remains resistance to change from employees and management. Therefore, the success of transformation depends to a large extent on digital competencies and soft skills, such as collaboration and partnerships between finance departments and other areas of the business [24].

Digital adoption often involves integrating legacy systems, migrating to cloud solutions, and making RPA compatible with existing ERPs, which can add significant costs and complexity. The lack of digital skills within the finance department is also a critical factor; BearingPoint’s study indicates that only 9% of organizations have reached an advanced stage of digital transformation within their business. [8]

Automation involves managing large volumes of sensitive data, making security, data integrity, and decision-making transparency essential. At the same time, excessive digitalization, if not properly managed, can lead to reduced financial flexibility reserves (liquidity, debt). Digital transformation of the finance function requires a well-defined strategy, a clear business case, prioritization of investments, and alignment between IT, finance, and senior management. It is essential to focus on communicating the benefits and measuring the impact of these transformations. [9]

4. Implications for financial management and economic-financial analysis

The digitalized finance function plays an important role as a strategic partner to the business, supporting investment decisions, capital optimization, risk assessment and supporting organizational growth. According to a PwC study, 73% of CFOs consider the digitalization of the finance function a strategic priority. [14]

Digitalization offers significant opportunities to improve key financial indicators, such as liquidity, return on assets, return on equity, efficiency of financial close cycles and forecasting capacity.

From the perspective of economic and financial analysis, digital transformation brings benefits such as [4]:

- Access to real-time data and predictive analytics, which increases the accuracy of financial reports and decisions;
- A more detailed assessment of financial and operational risks through digital scenarios;
- Optimization of capital structure and cash flow management, using automation to reduce financial costs;
- Continuous performance monitoring and real-time comparability between units or regions (benchmarking).

Finance managers should consider [7]:

- Creating a digitalized finance operating model (finance target operating model), including platforms, talents, processes and governance;
- Establishing KPIs for digital transformation (e.g. automated processes, processing time, cost per activity, forecast accuracy) and correlating them with traditional financial indicators;
- Ensuring that investments in digitalization are aligned with organizational strategy, providing a clear ROI and the possibility of reinvestment;
- Adapting the structure of the finance department, preparing employees for analytical and business partnering roles, as well as working closely with the IT department.

In conclusion, the implementation of a modern ERP and the integration of digital technologies significantly contribute to reducing processing time, better visibility and increased operational efficiency [7]. These translate into improved financial analyses, with higher margins, better liquidity and increases in ROA/ROE indicators. Romanian companies are actively investing in digitalization and training of finance departments, which suggests a significant potential for financial impact. However, success depends on several factors, such as strategy, available talent and internal cultural changes. In the context of digitalization, financial management is becoming increasingly complex and dynamic, requiring financial leaders to adopt technological solutions that allow rapid adaptation to external and internal changes in the organization. The implementation of an integrated ERP system and emerging technologies, such as artificial intelligence and predictive analytics, not only optimizes financial processes, but also contributes to strengthening a more rigorous control over economic performance. Also, the transition to a digitalized financial model requires a profound transformation of employee skills and organizational culture, so as to support both operational efficiency and the ability to face future challenges in the global economic environment.

5. Study on the digital transformation of financial departments in a company

Romstal, a leader in the Romanian market in the field of distribution of installation equipment, chose to implement the SAP S/4HANA platform (a state-of-the-art ERP) in partnership with the supplier NTT DATA Romania. The main goal of this implementation was to optimize employee working time, integrate financial, logistics and sales processes, as well as create real-time visibility and efficient automation [17].

Romstal is identified by CUI 5990324, has been a VAT payer since 1994, does not have VAT on receipt and operates in the field of selling sanitary and heating installations.

The financial data and the determined rates are highlighted individually in table no. 1.

The evolution of the net margin rate ((Net profit/Turnover)x100 – see table no. 1) reflects the ability of the Romstal enterprise to transform operating income into actual profit. During the period 2013–2021, the company recorded a constant increase in commercial profitability, reaching a maximum of approximately 7.9% in 2021, which signifies high operational efficiency and effective cost control. After this point, however, the net margin deteriorated visibly, reaching 3.08% in 2024. This contraction in profitability is probably correlated with the increase in material costs, increasing wage pressure and a possible rigidity in adapting selling prices to the new economic conditions. Thus, it can be concluded that the company is going through a phase of erosion of marginal profitability, typical of mature companies in an inflationary or intensely competitive context. An erosion of operational efficiency is observed, specific to a period of increased costs (raw materials, energy, salaries).

Return on assets ((Net profit/Total assets)x100 – see table no. 1) expresses the efficiency of using the total capital invested in the company. In 2020–2022, ROA was at a higher level (between 5.8% and 7.4%), reflecting efficient resource utilization and favorable asset turnover. In contrast, the sharp decline in 2023–2024 (to 2.7%) denotes a decrease in the company's ability to generate profit from its asset base, although its total value continued to grow. This gap between asset growth and profit decline suggests relative overinvestment or low efficiency of recent investments, possibly due to low capacity utilization or a strategic orientation towards expansion rather than optimization.

The debt ratio ((Debts/Turnover)x100 – see table no. 1) has been consistently below 35%, reflecting a prudent financing policy and a low level of financial risk. After a slight peak in the period 2016–2019, the company managed to strengthen its financial autonomy, reducing its dependence on borrowed capital. In 2024, the debt ratio stands at 28.27%, which places the company in a safe position from the perspective of overall solvency. However, the increase in absolute debt by 39% compared to the previous year shows a trend of financing expansion through

loans, which can be strategically justified, but must be monitored to avoid increasing financial risk in the medium term.

Table No. 1 Financial data

Year	Turnover - lei	Net Profit - lei	Debts - lei	Fixed Assets - lei	Current Assets - lei	Total Assets - lei	Net Margin Rate	Economic Profitability	Degree of Indebtedness	Current Liquidity
2013	495,058,904	20,231,035	306,181,667	557,707,453	281,723,768	839,431,221	4.09%	2.41%	36.46%	92.0%
2014	494,280,922	33,260,250	280,841,514	545,424,405	293,007,863	838,432,268	6.73%	3.97%	33.49%	104.3%
2015	580,544,153	35,276,473	254,286,791	501,095,729	304,663,878	805,759,607	6.08%	4.38%	31.56%	119.8%
2016	612,368,064	44,603,979	244,704,448	473,654,280	281,813,065	755,467,345	7.28%	5.90%	32.39%	115.2%
2017	659,217,381	36,845,723	258,416,353	476,070,806	326,014,391	802,085,197	5.59%	4.59%	32.21%	126.1%
2018	676,241,159	24,492,484	231,291,117	485,767,094	317,985,139	803,752,233	3.62%	3.05%	28.78%	137.5%
2019	780,829,272	55,010,952	277,204,973	487,367,705	409,315,218	896,682,923	7.04%	6.13%	30.92%	147.6%
2020	827,964,718	54,467,768	281,656,516	503,216,776	426,992,715	930,209,491	6.58%	5.85%	30.28%	151.6%
2021	1,021,060,286	80,277,589	290,111,386	579,522,535	419,512,347	999,034,882	7.86%	8.04%	29.04%	144.6%
2022	1,176,980,078	78,689,816	271,988,894	595,131,876	467,664,216	1,062,796,092	6.69%	7.40%	25.60%	171.9%
2023	1,078,611,367	52,054,871	263,948,869	607,632,364	493,260,934	1,100,893,298	4.82%	4.73%	23.97%	186.9%
2024	1,142,231,193	35,178,318	367,472,652	694,827,254	604,909,425	1,299,736,679	3.08%	2.71%	28.27%	164.6%

Source: data taken from the company[15]

Current liquidity ((Current assets/Liabilities)x100 – see table no. 1) has improved substantially over the analyzed period, increasing from a critical level (92% in 2013) to over 160% in 2024. This indicator denotes a very good capacity to cover current obligations and an efficient current assets management policy. Values above 150% suggest comfortable short-term solvency and low liquidity risk. On the other hand, too high liquidity may also signal a temporary inefficiency in the use of available funds, if they are immobilized in inventories or receivables without immediate return. Thus, management must find a balance between safety and efficiency.

Overall, between 2013 and 2024, the company went through a stage of structural consolidation, characterized by:

- Significant increase in turnover;
- Improvement of liquidity and financial stability;
- Increase in labor productivity;
- Reduction of financial risk.

However, after 2021, a trend of decreasing profitability and investment efficiency is highlighted, a sign that the company has entered a phase of economic maturity, in which the expansion of the volume of activity no longer brings proportional increases in profit. In academic terms, it can be said that the company presents a balanced financial profile, but with a declining marginal profitability and a decreasing efficiency of production factors, which requires a strategic reorientation towards innovation, cost optimization and restructuring of the investment portfolio. The simultaneous decrease in ROS and ROA shows a degradation of relative financial performance. The company remains profitable, but with increasingly thin margins, risking entering a zone of minimal profitability if the trend continues.

In 2024, the company presents a balanced financial evolution, characterized by moderate growth in turnover by about 6% and maintaining a solid liquidity position and reduced debt below 30%, but with a significant decrease in profitability, which indicates good structural stability, but also increased vulnerability to pressures on operating costs. It is recommended to control fixed and variable costs, through ABC analysis and flexible budgets; increase asset profitability by optimizing investments and reducing non-productive assets; accelerate digitalization to improve labor productivity; monitor liquidity risk and maintain an optimal level of debt; diversify income sources to reduce dependence on the main activity segment. The complex analysis of financial indicators reveals that the company has evolved from a position of post-crisis stabilization to one of

economic and financial consolidation, maintaining a satisfactory level of solvency and liquidity. At the same time, the downward dynamics of profitability and net profit in recent years indicates a discrepancy between the growth of activity volume and the related profitability, a phenomenon specific to companies with a high degree of operational maturity. From a theoretical perspective, it can be concluded that the enterprise is in a stage of structural optimization, requiring a strategic reconfiguration of the business model to restore the balance between growth, costs and efficiency.

From a financial management and economic-financial analysis perspective, the implementation of the SAP S/4HANA platform brings the following essential benefits to Romstal:

- Increased visibility over assets, inventories, receivables and payables: Through ERP integration, the finance department benefits from real-time (or near-real-time) access to information regarding working capital, providing a solid basis for making financial decisions.

- Reduced financial close time: Integrating data from various processes allows for faster financial close, which reduces the volatility of financial reports and improves the accuracy of forecasts and operational responses.

- More accurate financial forecasts: The ability to make more accurate forecasts, based on integrated data from logistics, sales and procurement, contributes to a more complete and well-founded economic-financial analysis.

Although Romstal has not published detailed information regarding the costs or savings generated by the ERP implementation, we can make a hypothesis based on the potential impact on financial indicators:

- Complete digital integration of key processes - the implementation of SAP S/4HANA allowed the interconnection of the finance, logistics, sales and inventory management departments in a single platform, which led to the elimination of data duplication and increased information accuracy. This significantly reduces reporting time and increases the ability to react to market changes.

- Increased operational efficiency through automation - the automation of repetitive processes (invoicing, document registration, bank reconciliation) contributed to reducing execution times and decreasing human errors. This efficiency is also indirectly reflected in the improvement of liquidity and labor productivity indicators, even if profit margins have been compressed in recent years. If ERP implementation led to a decrease in administrative costs (e.g., fast invoice processing, increased staff efficiency, and process automation), estimating a 5-10% reduction in general and administrative expenses, this would have a positive impact on profitability.

- Support for data-driven strategic decisions (Business Intelligence) - SAP S/4HANA provides real-time access to financial and operational data, facilitating predictive analysis and simulation of economic scenarios. This analytical capacity helps Romstal management anticipate demand fluctuations, optimize inventories and manage working capital more efficiently, contributing to reducing liquidity risks.

- Digitalization of human capital and organizational culture - The ERP platform supports the transformation of employee skills, by digitizing tasks and creating a collaborative workflow. The medium-term effect is an increase in labor productivity, observable in maintaining a high level of turnover per employee (over 900,000 lei in 2024), even with the increase in the number of employees.

- Efficiency in supply chain management (Supply Chain Management) - The digitalization of logistics processes has allowed real-time monitoring of stocks and orders, reducing bottlenecks and associated costs. This contributes to maintaining high current liquidity (164.6% in 2024) and efficient use of current assets.

- Strategic impact on sustainability and competitiveness - By automating and digitizing flows, Romstal not only optimizes costs, but also reduces its administrative footprint and resource consumption, aligning with sustainable and responsible business trends. In addition, through access

to consolidated data, the company strengthens its competitive advantage in a market with inflationary pressures and strong competition.

Thus, in the context of digital transformation through ERP implementation, estimates regarding the impact on Romstal's financial indicators could be the following:

- The current ratio could register a slight increase in 2025-2028 due to improved visibility over inventories and receivables, which would allow for more efficient management of working capital and reduction of current assets.

- Operating margin could increase as a result of reducing administrative expenses through process automation and resource efficiency, thus reducing operational costs and contributing to better profitability.

- ROA (Return on Assets) and ROE (Return on Equity) could improve due to savings achieved through optimizing financial and logistical processes, as well as through more efficient use of assets and resources. In addition, ERP integration would facilitate more efficient allocation of financial resources and support strategic decisions based on accurate data.

These improvements are directly linked to the operational efficiency and financial performance resulting from the implementation of a state-of-the-art ERP system, such as SAP S/4HANA.

The implementation of the SAP S/4HANA platform represents an essential stage in Romstal's digital maturation, marking the transition from a traditional operating model, based on fragmented processes, to an integrated, automated and data-driven one. This digital transformation supports financial performance in the medium and long term by increasing process efficiency and reducing decision-making uncertainty. Overall, Romstal's digital performance can be characterized by an advanced level of technological integration and data governance, which supports financial stability and operational efficiency. Although profitability indicators (ROS and ROA) have experienced a downward trend after 2021, this decline seems to be more the result of the economic context and investment expansion, than a deficiency in digital management.

6. Conclusions

The digital transformation of finance departments — from implementing ERP systems to integrating RPA, data analytics, AI and cloud technologies — represents an essential evolution for the modern finance function [3]. By adopting these technologies, the finance department can become a strategic partner, capable of directly influencing the company's economic and financial results: greater efficiency, better accuracy, data-based decisions and better risk management. However, success is not guaranteed: a clear strategy, adequate technological infrastructure, digital skills, cultural change and strong governance are needed. Financial management must also include in its analysis the impact of digitalization on economic and financial indicators — both as a benefit and as a source of potential vulnerability (e.g. reduced financial flexibility). In conclusion, digitalization of the finance function is not just an option, but a condition for resilience, competitiveness and managerial excellence in the digital age. From the perspective of economic and financial analysis, the digitalization of the finance function offers tangible advantages in: cost control, working capital management, flexibility, speed of decisions — all translating into indicators such as liquidity, profitability, active efficiency, capital structure. The level of digital maturity in the finance function in Romania is still moderate; companies are in the process of transformation, which means that the maximum benefits may occur over time.

In conclusion, the implementation of a modern ERP, such as SAP S/4HANA, represents an essential step for the digital transformation of the finance function at Romstal, going beyond the simple optimization of logistics and sales operations. The integration and improved visibility of data between the finance, procurement, logistics and sales departments will constitute the basis for a more solid and accurate economic and financial analysis, thus supporting the company's strategic decisions. However, digital transformation is not limited to technological implementation alone; it

also involves a change in internal processes, an adaptation of the organizational culture and the continuous development of team skills. Although the benefits of digitalization are obvious, quantifying them through a clear ROI is essential. Therefore, Romstal needs to monitor relevant indicators before and after ERP implementation, in order to evaluate and demonstrate the financial impact of digital transformation on organizational performance.

Digital transformation through SAP S/4HANA provides solid premises for a resumption of profitability growth in the medium term, by reducing indirect costs, accelerating decisions and improving working capital management. In academic terms, it can be concluded that digital performance acts as a vector of financial resilience, contributing to the adaptability and long-term sustainability of the company.

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