



Research on the Digital Transformation Mechanism of Accounting Firms from the Perspective of Business and Finance Integration

--Taking Ernst & Young as an Example

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Abstract. Under the new wave of technological revolution and the digital economy, digital transformation and business-finance integration are key pathways to improving operational efficiency and decision-making quality, and are also crucial means of maintaining industry competitiveness. Based on organizational change theory, this paper constructs a four-dimensional analytical framework: "strategic leadership - technology and platforms - talent development and transformation - organizational process integration." Using a case study approach, this paper analyzes Ernst & Young's (EY) global digital transformation and business-finance integration practices. The study finds that EY, driven by strategy and leadership, has extensively introduced artificial intelligence, automation, and data platforms. Furthermore, it leverages its badge program and unique talent development system to promote digital talent development. Ultimately, this approach achieves organizational and process integration and cross-functional collaboration, significantly improving efficiency, service quality, and value creation. This paper combines the four-dimensional framework with the firm's actual transformation practices, using key milestones from various periods to reveal the driving mechanisms of business-finance integration and digital transformation, providing a model and approach for other firms in the industry.

Keywords: Business-finance integration, Digital transformation, Accounting firm, EY

1 Introduction

Against the backdrop of a new wave of technological revolution, digital technologies such as blockchain, artificial intelligence, and big data are bringing about profound changes to the economy and society. The accounting industry has always relied heavily on information systems and data processing technologies, establishing a rudimentary operational model based on data sharing and interconnectedness. In the digital economy era, new business models such as financial robotics, intelligent accounting, and financial sharing have become widely adopted, improving accounting firms' accounting

efficiency and decision-making support capabilities while also fostering a deeper integration between finance and business. Consequently, firms need to restructure their organizational structures. At the same time, organizational change theory has become a valuable tool for analyzing how companies respond to external environmental changes, achieve strategic goals, and innovate processes. Exploring pathways for business-finance integration and digital transformation is essential for accounting firms to maintain sustainable development and competitiveness.

This study uses a case study approach to analyze Ernst & Young's digital transformation and business-finance integration. Based on organizational change theory, this article constructs a theoretical framework from four dimensions: digital technology and platform, organizational structure and process integration, talent capabilities and role transformation, and strategic value orientation and cultural change. It combines service quality, operational efficiency, industry competitiveness and core financial indicators for analysis to reveal the mechanism of EY's business and financial integration and digital transformation, aiming to provide inspiration for peer companies to better adapt to the digital economy era.

2 Literature Review

2.1 Integration Between Finance and Business Departments

In the integration of finance and business departments, "FBP" is a very important approach. The concept of "FBP" encourages finance department personnel to transform from traditional recorders and supervisors to partners in business decision-making, from the backstage to the front stage, fully cooperate with business departments, and further participate in the business decision-making process. By embedding the finance department into the business through the coordination mechanism, it can effectively achieve performance improvement, risk control and support the formulation of strategies [1]. By re-establishing goals and performance indicators after the integration of finance and business departments, conflicts in work directions between departments can be effectively avoided. After achieving business and finance integration, finance personnel can have a deeper understanding of the long-term value of lowering prices to gain market share, and the business and finance departments can collaborate to achieve the long-term financial benefits of the enterprise. On the other hand, business and finance integration faces certain limitations in terms of organizational change. When finance personnel are deeply involved in business departments, "organizational redundancy" and "resource slack" may occur. Additional resources that exceed the requirements of daily operations may lead to idleness and waste problems, and some overly loose performance targets will weaken the motivation of business departments to improve performance [2]. Business and finance integration is not achieved overnight, but a long-term process that takes time.

2.2 Value Creation from the Integration of Financial and Business Data

The traditional finance department is regarded as a back-end unit. Under the business-finance integration model, the finance department needs to cooperate with the business department to break the boundaries between business and finance. Building an integrated information system platform is a very popular way to achieve the integration of business data, financial data and management processes [3]. However, there are still many difficulties in breaking through the boundaries between departments, including insufficient digital investment and coordination, opposition from senior executives, and a shortage of compound talents. Only when the organizational structure, culture and technical foundation have the corresponding conditions can the circulation of business and financial data truly create value [4]. Another study found that there are various frictions in the information flow within the enterprise, and appropriate organizational structure and governance arrangements can alleviate these difficulties [5]. At the same time, in the future, the cultivation of soft skills needs to be taken seriously by management [6]. When the barriers between business and finance are broken down, the application of digital technology has a synergistic effect, and the formed "digital ecosystem" can further promote the deep integration of corporate financial data and business data [7]. The addition of alternative data related to business activities expands the original data set, making it more diverse and real-time, and adding value to decision-making information [8]. Multi-source data is the key to achieving digital transformation and maintaining the dynamic competitiveness of enterprises. Otherwise, enterprises will easily fall into the "information cocoon" and even fall behind their competitors [9].

A 2019 study on Amazon's sales forecasting system proved that big data can effectively improve the forecasting and decision-making level of enterprises. The realization of the value of business and financial data depends on the integration of data and business, the optimization of machine learning models and the innovation of organizational management [10]. The integrated data enables enterprises to make budgets, performance analysis and investment decisions more scientifically, and optimize the scheduling and use of resource allocation as a whole [3]. Business and financial data integration can also effectively improve the enthusiasm, frequency and quality of performance forecasts of listed companies' management, thereby optimizing the enterprise's information environment and improving the transparency of the capital market [11]. By integrating business and financial data and introducing big data analysis, artificial intelligence, business intelligence and other enterprises can improve their own systems.

However, the advancement of data may prompt enterprises to over-direct resources to areas with high returns but limited social benefits, which will not actually create productivity [12]. When promoting business and financial integration and digital transformation, enterprises should strengthen relevant governance and review measures.

2.3 Summary

From the perspectives of departmental integration and data convergence, business-finance integration can significantly aid enterprises in furthering their digital

transformation. Finance departments can shift from a supportive role to one of value creation, engaging in frontline activities within business departments. Existing research has three key shortcomings: The performance impact mechanisms of business-finance integration require empirical research; the applicable models of business-finance integration may vary across industries, preventing a unified, universal solution; and the risks associated with digital transformation and business-finance integration enabled by new technologies require further study.

3 Construction of the Theoretical Framework

This study refers to the McKinsey 7S model [13] and constructs an analytical framework from four dimensions: platform and digital technology, organization and process integration, talent development and role transformation, and strategy. Digital transformation involves resource allocation, capability development, process change, institutional change, etc. The starting point is to propose clear strategic goals. Successful digital transformation serves the overall strategy of the enterprise, rather than being limited to the promotion of IT or technology departments alone [14]. Senior leaders need to formulate a clear vision and development goals for digital transformation, make corresponding plans for the funds, technology and human resources required for digital transformation, and ensure the implementation of digital transformation through corresponding strategic measures. After clarifying the strategic goals, enterprises need to introduce technology and platforms to promote change. With digital technology innovation, the digital transformation and business-finance integration of enterprises can be promoted [15]. Under the guidance of the established strategy, the introduction of digital technologies such as artificial intelligence, process automation, and data platforms will help break down barriers between different departments, realize data circulation, continuously improve and develop dynamic capabilities, and cope with the rapidly developing and changing external environment. The effective implementation of technology is inseparable from human resources support. As digital technology is integrated into business and information platforms, companies need to retrain their employees to adapt to digital technology requirements [16]. In addition to technical talents, companies also need business management teams to have high digital literacy and promote the transformation of human resources roles. By encouraging financial personnel to transform into business partners, talents can be trained to have cross-functional collaboration and strategic thinking capabilities.

Under the coordinated promotion of strategy, talent, and technology, organizational structure will also undergo changes. By reducing hierarchical structures and formalizing rules, companies can improve the efficiency and agility of decision-making. The ability to integrate across departments within the organization is an important condition for the integration of business and finance departments [17]. By setting up cross-departmental teams, finance can be transformed from a support department to a part of the business community, allowing financial analysis to more directly serve business decisions, achieving efficiency improvement and consistency with strategic goals. In terms of processes, by reorganizing existing business and financial processes,

eliminating redundant links, and achieving end-to-end digital connection, decisions can be based on real-time and accurate information, and business operation efficiency and financial management effectiveness will be improved.

4 Case Analysis

As a global consulting service provider, EY was early in promoting digital transformation, enhancing the value of business-finance integration, and achieving certain results. The transformation process is divided into three stages.

The first stage is strategy setting, planning, and technology introduction. After realizing that digital technology will have a disruptive impact on the service industry, EY's leadership set a vision of becoming a global leading AI-enabled professional service organization in response to customer needs. To achieve this goal, management approved the company to carry out a disruptive transformation project and invested US\$1.4 billion in the initial stage [18] to promote digital transformation within the company. EY also introduced risk management and ethical considerations to ensure that the introduction of technology is consistent with the company's core values. At the same time, in order to promote strategic implementation globally, EY formulated six key transformation areas (strategy, people, technology, governance, customers, and society) to avoid the waste of resources caused by the fragmented investment of various departments during the transformation.

After having a clear strategic blueprint, EY began to introduce relevant technologies and platforms to provide the foundation for the transformation. In 2017, EY partnered with Yops to deploy the world's largest-scale assisted manual robot. In just 1.5 years, it went from proof of concept to full implementation. As of the first quarter of 2020, EY has deployed more than 100,000 assisted manual robots worldwide [19]. In 2020, EY launched the EY Digital Audit platform, which includes the global audit platform EY Canavas, the analytics platform EY Helix, and the research platform EY Atlas. By deploying a unified version globally, it ensures consistency in audit methods and quality across regions. Clients can also track audit progress in real time through the EY Canavas platform, making the audit process more transparent and improving the quality of audit services. In order to comprehensively enhance digital capabilities, EY has invested 1.4 billion in the field of AI to develop an internal customized generative AI platform EY.ai and a language model EYQ. Currently, the model has been adopted by 96.4% of EY employees [20]. In addition to independent research and development, EY also cooperated with Microsoft to introduce Microsoft 365 Copilot to assist in daily office work. By 2025, Copilot had been deployed to 100,000 employees and planned to be expanded to all 400,000 employees. Thanks to the empowerment of digital tools, the overall productivity of the company's employees increased by about 15% [21].

After completing the technology embedding and platform construction, EY focused the second phase of transformation on talent training. In the recruitment market, EY targeted the introduction of compound talents with mastery of science, technology, engineering, and mathematics. The company officially launched the EY Badge Program in 2018 to provide employees with digital skills badge certification. In 2020, EY

reached a cooperation with a British university to help employees pursue a master's degree in technology management and improve their digital capabilities. As of fiscal year 2022, EY employees have obtained more than 280,000 EY badges [22]. Since EY launched the AI badge in 2023, more than 20,000 employees have participated in the learning, and more than half of them have completed at least one AI badge [23]. The Ernst & Young Talent Assessment and Development Center has also built a set of algorithmic models for real-time assessment and positioning of employees' digital awareness, so as to better allocate employees' positions and improve work efficiency. In 2024 alone, Ernst & Young invested \$354 million in employee training, with an average training time of 60 hours per employee [24].

After the first two phases of transformation, Ernst & Young is committed to the third phase of organizational process integration. In terms of processes, Ernst & Young integrated the global ERP and CRM systems through the "Mercury" project, integrating the internal business systems of more than 150 countries around the world into the SAP platform, and realizing the integrated management of customer relationships and financial systems [25]. In 2025, the company upgraded its ERP system to further improve the intelligence and flexibility of the system, optimize the business and financial integration process, and avoid data duplication and cross-system reconciliation and other redundant work. In addition, the company formed cross-functional teams, each of which includes IT, finance and business backbones. The company also established an Automation Excellence Center to develop governance models and standards to enhance collaboration between departments, and set up leadership roles such as Chief Innovation and Global Data and AI Director to manage it. Digital transformation simplifies intermediate levels such as manual approval and verbal reporting, promoting flatter and more agile organizational management.

5 Conclusions & Recommendations

EY has collaboratively promoted digital transformation and business-finance integration through four key areas: strategic leadership and technology integration at the top, digital platform empowerment, digital talent development, and organizational process reengineering. This transformation has significantly improved end-to-end automation across financial operations, freeing finance personnel from traditionally tedious tasks and enabling them to focus on higher-value-added work.

All accounting firms can consider these areas. First, establishing a top-down strategic leadership mechanism based on their development needs is crucial. The investment required for digital transformation is substantial, which creates additional trade-offs for smaller accounting firms. Only after developing a strategy that aligns with their needs should they consider the type of platforms and technologies they will adopt to enable them. Furthermore, talent development methods must be tailored to the company's development and cost perspectives. Finally, the integration of organizational structure and processes should be gradual, promoting the long-term transformation of business-finance integration and digital transformation. However, since different industries have distinct business characteristics, internal and external environments, and degrees of

technological adaptability, future research can further analyze the impact of digital transformation in different industries on business-finance integration.

Reference

1. Tillema, S., Trapp, R., & van Veen-Dirks, P. (2022). Business partnering in risk management: a resilience perspective on management accountants' responses to a role change. *Contemporary Accounting Research*, 39(3), 2058-2089.
2. Wiersma, E. (2017). How and when do firms translate slack into better performance?. *The British Accounting Review*, 49(5), 445-459.
3. Gao, J. (2022). Research on financial informatization construction of business and finance integration. *International Journal of Science and Research (IJSR)*, 11(7), 354-358.
4. Fassnacht, M., Benz, C., Leimstoll, J., & Satzger, G. (2023). Is your organization ready to share? A framework of beneficial conditions for data sharing. In 44th International Conference on Information Systems (ICIS 2023), Hyderabad, Indien, 10.12. 2023-13.12.
5. Malenko, N. (2024). Information flows, organizational structure, and corporate governance. In *Handbook of corporate finance* (pp. 511-546). Edward Elgar Publishing.
6. Law, K. K., & Shen, M. (2025). How does artificial intelligence shape audit firms?. *Management Science*, 71(5), 3641-3666.
7. Tiron-Tudor, A., Donțu, A. N., & Bresfelean, V. P. (2022). Emerging technologies' contribution to the digital transformation in accountancy firms. *Electronics*, 11(22), 3818.
8. Dessaint, O., Foucault, T., & Frésard, L. (2024). Does alternative data improve financial forecasting? the horizon effect. *The Journal of Finance*, 79(3), 2237-2287.
9. Pedota, M. (2023). Big data and dynamic capabilities in the digital revolution: The hidden role of source variety. *Research Policy*, 52(7), 104812.
10. Bajari, P., Chernozhukov, V., Hortaçsu, A., & Suzuki, J. (2019, May). The impact of big data on firm performance: An empirical investigation. In *AEA papers and proceedings* (Vol. 109, pp. 33-37). 2014 Broadway, Suite 305, Nashville, TN 37203: American Economic Association.
11. Huang, J., Mei, Z., & Li, Z. (2020). Business and financial information integration and voluntary management earnings forecasts. *China Journal of Accounting Research*, 13(3), 291-307.
12. Glode, V., & Ordonez, G. (2025). Technological progress and rent seeking. *The Review of Financial Studies*, 38(4), 1259-1289.
13. Waterman Jr, R. H., Peters, T. J., & Phillips, J. R. (1980). Structure is not organization. *Business horizons*, 23(3), 14-26.
14. Kringelum, L. B., Holm, C. G., Holmgren, J., Friis, O., & Jensen, K. F. (2024). Digital transformation: strategy comes first to lay the groundwork. *Journal of Business Strategy*, (ahead-of-print).
15. Nwoke, J. (2024). Digital transformation in financial services and FinTech: Trends, innovations and emerging technologies. *International Journal of Finance*, 9(6), 1-24.
16. Bouwmans, M., Lub, X., Orłowski, M., & Nguyen, T. V. (2024). Developing the digital transformation skills framework: A systematic literature review approach. *Plos one*, 19(7), e0304127.
17. Shahzad, K., Imran, F., & Butt, A. (2025). Digital Transformation and Changes in Organizational Structure: Empirical Evidence from Industrial Organizations. *Research-Technology Management*, 68(3), 25-40.

18. Ernst & Young. (n.d.). Case study: How EY transformed with AI. https://www.ey.com/en_gl/insights/ai/case-study-how-ey-transformed-with-ai.
19. Ernst & Young. (n.d.). Efficiency Without Limits: UiPath and EY's Ambitious RPA Implementation. <https://www.uipath.com/resources/automation-case-studies/ey>.
20. Soper, S. (2020, September 4). How Ernst & Young's AI platform is radically reshaping operations. <https://www.computerworld.com/article/3560355/how-ernst-youngs-ai-platform-is-radically-reshaping-operations.html>.
21. Raghavan, S. (2025, July 15). How to scale AI: A look inside EY's journey with Microsoft 365 Copilot and agents. <https://techcommunity.microsoft.com/blog/microsoft365copilot-blog/how-to-scale-ai-a-look-inside-ey%E2%80%99s-journey-with-microsoft-365-copilot-and-agents/4432087>.
22. Ernst & Young. (n.d.). Innovation-driven careers. https://www.ey.com/en_au/careers/innovation-driven-careers.
23. Ernst & Young. (2024, April 5). The AI moment is now: How businesses can ready their workforce. https://www.ey.com/en_us/insights/workforce/the-ai-moment-is-now-but-are-businesses-ready.
24. Ernst & Young Global Limited. (2024, October). EY facts and figures 2024. <https://www.ey.com/content/dam/ey-unified-site/ey-com/en-gl/campaigns/value-realized/documents/ey-gl-facts-and-figures-10-2024.pdf>.
25. Ernst & Young. (n.d.). EY Deploying Enterprise Automation on a Global Scale with UiPath Automation. <https://www.uipath.com/resources/automation-case-studies/ey-scales-to-150k>.

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