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INTEGRATION OF COST MANAGEMENT INTO THE BALANCED SCORECARD BASED ON FINANCIAL REPORTING

Анотація. У статті досліджено теоретичні та методичні аспекти інтеграції управління витратами у систему збалансованих показників підприємства. Предметом дослідження є процес формування стратегічно орієнтованої системи управління витратами на основі використання показників фінансової звітності та звітів з управління. Актуальність дослідження зумовлена необхідністю підвищення ефективності управління витратами в умовах обмеженості інформаційного забезпечення, нестабільності зовнішнього середовища та зростання ролі стратегічних інструментів управління діяльністю підприємств. Метою роботи є розробка методичного підходу до інтеграції управління витратами у систему збалансованих показників підприємства. Методологічною основою дослідження виступають системний підхід, методи економічного аналізу, узагальнення, порівняння, логічного моделювання та інтерпретації показників фінансової звітності. Інформаційну базу дослідження становлять дані фінансової звітності та звітів з управління АТ «Українські енергетичні машини». У результаті проведеного дослідження запропоновано методичний підхід до інтеграції управління витратами у систему *Balanced Scorecard*, що передбачає структурування витрат відповідно до фінансової, клієнтської перспективи, перспективи внутрішніх бізнес-процесів та навчання і розвитку персоналу. Розроблено модель інтеграції управління витратами у систему стратегічних показників діяльності підприємства, яка забезпечує встановлення причинно-наслідкових зв'язків між витратами, використанням ресурсів та результатами діяльності. Сферою застосування отриманих результатів є практична діяльність підприємств щодо формування системи стратегічного управління витратами на основі використання показників фінансової звітності та управлінської інформації. Обґрунтовано, що використання запропонованого підходу дозволяє трансформувати дані звітності у систему стратегічно орієнтованих індикаторів управління витратами та підвищити обґрунтованість управлінських рішень. Отримані результати сприяють узгодженню витратної політики підприємства зі стратегічними цілями його розвитку та підвищенню ефективності використання ресурсів.

Ключові слова: управління витратами, збалансована система показників, *Balanced Scorecard*, фінансова звітність, стратегічне управління, витратна політика підприємства, ефективність діяльності.

JEL Classification: M10, M41, M49



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Absztrakt. A tanulmány a költségkezelés vállalati kiegyensúlyozott mutatószámrendszerbe történő integrációjának elméleti és módszertani aspektusait vizsgálja. A kutatás tárgya egy stratégiaorientált költségkezelés-rendszer kialakításának folyamata a pénzügyi beszámolók és vezetőségi jelentések mutatóinak felhasználása alapján. A kutatás aktualitását a költségkezelés hatékonyságának növelése indokolja az információs háttér korlátozottsága, a külső környezet instabilitása, valamint a vállalati működés stratégiai irányítási eszközeinek növekvő jelentősége mellett. A tanulmány célja egy olyan módszertani megközelítés kidolgozása, amely lehetővé teszi a költségkezelés integrációját a vállalat kiegyensúlyozott mutatószámrendszerébe. A kutatás módszertani alapját a rendszerszemlélet, a gazdasági elemzés, az általánosítás, az összehasonlítás, a logikai modellezés, valamint a pénzügyi beszámolók mutatóinak interpretációjára szolgáló módszerek alkotják. A kutatás információs bázisát az „Ukrán Energiagépek” Rt. pénzügyi beszámolóinak és vezetőségi jelentéseinek adatai képezik. A kutatás eredményeként javaslat született a költségkezelés Balanced Scorecard rendszerbe történő integrációjának módszertani megközelítésére, amely a költségek strukturálását irányozza elő a pénzügyi perspektíva, az ügyfélperspektíva, a belső üzleti folyamatok perspektívája, valamint a tanulás és humán erőforrás-fejlesztés perspektívája szerint. Kidolgozásra került a költségkezelés vállalati stratégiai mutatórendszerbe történő integrációjának modellje, amely biztosítja az ok-okozati kapcsolatok meghatározását a költségek, az erőforrás-felhasználás és a vállalati teljesítmény eredményei között. Az eredmények alkalmazási területe a vállalatok gyakorlati tevékenysége a stratégiai költségkezelés-rendszer kialakítása során, a pénzügyi beszámolók mutatóinak és a vezetői információknak a felhasználása alapján. Megalapozásra került, hogy a javasolt megközelítés alkalmazása lehetővé teszi a beszámolási adatok stratégiaorientált költségkezelés-indikátorrendszerre történő transzformálását, valamint a vezetői döntések megalapozottságának növelését. Az elért eredmények hozzájárulnak a vállalat költségpolitikájának fejlesztési stratégiai céljaival való összehangolásához és az erőforrások felhasználásának hatékonyságnöveléséhez.

Kulcsszavak: költségkezelés, kiegyensúlyozott teljesítménymutató-rendszer, Balanced Scorecard, pénzügyi beszámolók, stratégiai menedzsment, vállalati költségpolitika, működési hatékonyság.

Abstract. The article examines theoretical and methodological foundations of integrating cost management into the enterprise Balanced Scorecard system. The subject of the research is the development of a strategically oriented cost management system based on the use of financial statements and management reporting indicators. The study addresses the need to improve the effectiveness of cost management under conditions of limited information support, instability of the external environment, and the increasing role of strategic management tools in ensuring enterprise performance. The purpose of the study is to develop a methodological approach to integrating cost management into the Balanced Scorecard of an enterprise. The methodology includes a systemic approach, methods of economic analysis, comparison, generalization, and logical modeling. The analysis is based on financial statements and management reports of JSC “Ukrainian Energy Machines”. The study proposes a methodological approach to integrating cost management into the Balanced Scorecard system. This approach involves structuring cost indicators according to four perspectives: financial, customer, internal business processes, and learning and growth. A model of integrating cost management into the system of strategic performance indicators of the enterprise has been developed, which makes it possible to establish cause-and-effect relationships between resource use, costs and performance outcomes. The findings can be applied in the practical activities of enterprises in forming a strategically oriented cost management system based on financial and managerial data. The study shows that the proposed approach allows transforming financial reporting data into a system of strategic cost management indicators and improving decision-making quality. The results contribute to aligning the enterprise cost policy with its strategic development objectives and improving the efficiency of resource utilization.



Keywords: *cost management, Balanced Scorecard, financial reporting, strategic management, enterprise cost policy, performance efficiency, strategic indicators.*

Problem description. One of the primary issues in implementing a cost management system is that its description and systematization require building a corresponding management system within the company. When defining requirements for the volume of information regarding costs and prime costs, it often becomes clear that management decision-making methods are not formalized, and management lacks a clear understanding of these methods. In this case, a project to establish a cost management system risks turning into a project for developing and describing company management methods. Quite often, when implementing a cost management system, owners and managers demand that management accounting contains the maximum amount of information about the company's activities. At the same time, this requirement is not supported by any justification; it simply implies “just in case, it might come in handy.” A large volume of information – both necessary and unnecessary – makes the management accounting system complex and prevents its effective use, as important data, including cost data, is frequently lost (Horngren [3]; Drury [4]). Therefore, it must be considered that cost information should be provided promptly and in the volume necessary for management. Its relevance is reduced to zero if it does not contain information regarding the appropriate classification of costs and methods for calculating the prime cost of products (works, services).

Literature review. The concept of the Balanced Scorecard, originally developed by Kaplan and Norton [1; 5]. Foreign studies are focused on studying the issues of integrating cost management into the strategic management system through the application of a Balanced Scorecard. For instance, a group of researchers Leite J., Fernandes J., and Fernandes A. [6] proposed using the Balanced Scorecard as a strategic cost management tool, which, in their opinion, will facilitate the combination of financial and non-financial indicators within a single performance evaluation system of the enterprise. In his study, Dang L. [7] also combined cost management methods with the BSC to improve the performance of logistics companies. The researcher justified the feasibility of integrating cost indicators into financial, process, and customer perspectives. Madsen D. [8] viewed the Balanced Scorecard as an evolutionary strategic management tool transforming from a performance measurement system into a platform for the strategic coordination of resources, particularly costs. Tawse A. and Tabesh P. [9] summarized thirty years of experience in applying the Balanced Scorecard and showed its evolution from a performance measurement tool to a comprehensive strategic management platform combining financial and non-financial aspects of enterprise activity. Hamdan N., Naif A., Bishara M., and Farhan B. [10] justified the need to use the Balanced Scorecard as a model for forming cost management tools that integrate economic, environmental, and social goals into the strategic control system of the enterprise's financial and economic activities.



Ukrainian scientists also consider the possibilities of using the BSC as a tool for enterprise cost management. Thus, Sakun L., Sukhomlyn L., and Shyshlova Yu. [11] viewed the BSC as a comprehensive tool for assessing the effectiveness of costs incurred by the enterprise, ensuring the alignment of cost policy with strategic development goals. Modern approaches to forming the structure of the Balanced Scorecard were studied by Dovbnya S. and Naidovska A. [12], who pointed out the need to adapt BSC perspectives to the industry specifics of enterprises. Nakonechna O. [13] justified the feasibility of using the BSC in the strategic management of non-formal adult education institutions, noting that the integration of financial and non-financial indicators allows for increasing the validity of management decisions. Travinska S., Derun I., and Mykhalska O. [14] consider the BSC as a tool for planning and minimizing overhead costs.

Identification of previously unresolved parts of the overall problem. However, in the analyzed works, the researchers pay insufficient attention to the issues of strategic interpretation of the cost structure (Porter [15]) based on aggregated financial reporting data and management reports, as well as the use of the “cost-value” matrix as a tool for prioritizing areas of managerial influence. This necessitates the further development of methodological approaches to integrating cost management into the system of balanced indicators, taking into account the limited information support and high uncertainty of the external environment.

Goals of the article. The purpose of the study is to justify methodological approaches to integrating cost management into the enterprise's Balanced Scorecard system using financial reporting information and management reports to form a strategically oriented system of performance indicators.

Methods and methodology. The methodological basis of the research includes a systemic approach, methods of economic analysis, comparison, generalization, and logical modeling. The information base of the study consists of financial statements and management reports of JSC “Ukrainian Energy Machines”.

Main research results. The methodological approach to integrating cost management into the Balanced Scorecard system of JSC Ukrainian Energy Machines is based on combining the enterprise's strategic priorities, defined in Management Reports, with financial reporting indicators showing the dynamics of costs and financial results. Among the key strategic goals of the studied enterprise are ensuring production stability, increasing resource efficiency, minimizing unproductive costs caused by external risks, and preserving sales markets.

Within the financial perspective of the Balanced Scorecard, cost management integration is carried out based on the analysis of the dynamics of revenue from sales, the cost of goods sold, and the financial results of JSC Ukrainian Energy Machines. For instance, in 2022, the enterprise received net income exceeding 1 billion UAH with a significant level of operating expenses caused by both production factors and costs associated with eliminating the consequences of military actions. In 2023, a significant reduction in sales volumes was observed, accompanied by a decrease in



prime costs; however, this did not lead to an increase in the financial result of the studied enterprise. In 2024, an increase in revenue and gross profit was recorded, indicating the enterprise's gradual adaptation to new operating conditions. Given this, in the financial perspective, it is advisable to use cost management indicators such as the level of cost of goods sold as a percentage of revenue, the dynamics of gross profit, and the ratio of operating expenses to the financial result. Their inclusion in the Balanced Scorecard will allow for evaluating cost efficiency not in isolation, but taking into account the overall performance of the enterprise.

In the customer perspective, costs can be integrated into the Balanced Scorecard through indicators of sales volumes and fulfillment of contractual obligations. The specifics of JSC Ukrainian Energy Machines activities lie in the production of unique products for specific orders, which causes a high dependence of costs on the individual characteristics of orders. Costs associated with product refinement, logistics, and warranty service affect the level of income and financial results and, therefore, should be reflected in the system of strategic indicators through indicators of order stability and preservation of sales markets.

The internal business processes perspective in the proposed methodological approach is interpreted through generalized financial indicators characterizing production activity. Although financial statements do not contain data on costs at individual stages of the technological process, they allow for identifying general trends in changes in prime costs and other operating expenses. Combined with information from the Management Report regarding damage to production facilities, power supply interruptions, and the relocation of some capacities, an information base is formed regarding the factors causing the growth of unproductive costs. Accordingly, within this perspective, cost management focuses on minimizing losses from downtime, emergency repairs, and logistical complications.

In the learning and growth perspective, the costs of JSC Ukrainian Energy Machines can be viewed as investments in the restoration and preservation of its production potential. Management reports indicate significant losses of fixed assets and the need for their restoration in 2022-2024, leading to increased costs for equipment repair and modernization. Simultaneously, costs for personnel training and development acquire strategic importance, considering the growing shortage of qualified personnel due to migration processes and mobilization. In the Balanced Scorecard, such costs should be viewed not as a short-term burden on financial results, but as factors for ensuring the long-term sustainability of the enterprise.

The developed methodological approach to integrating cost management into the balanced scorecard based on financial reporting data and management reports of JSC Ukrainian Energy Machines is presented in Table 1.

In the financial perspective of the BSC, the system of indicators is focused on the ratio of income, prime cost, and financial result. This combination makes it possible to evaluate cost efficiency in connection with achieving financial stability and the

profitability of the enterprise's activities. In this context, costs are considered as a factor of forming the financial result.

Within the customer perspective of the BSC, costs are interpreted through indicators of sales volumes and fulfillment of obligations under concluded contracts. For JSC Ukrainian Energy Machines, whose activities are project-based and oriented toward fulfilling individual orders, costs for product refinement, logistics, and warranty service directly affect the stability of income and the preservation of the enterprise's sales markets. Including such costs in the Balanced Scorecard allows considering their strategic impact on customer relationships.

Table 1

**Integration of Cost Management into the Balanced Scorecard System of JSC
 Ukrainian Energy Machines**

Enterprise Strategic Goal	BSC Perspective	Financial and Management Reporting Indicators	Cost Aspect	Managerial Interpretation
Ensuring financial stability	Financial	Revenue from sales; cost of goods sold; gross profit	Share of cost in revenue; dynamics of production costs	Assessment of cost efficiency in the context of financial result generation
Increasing operational profitability	Financial	Operating profit (loss); financial result before tax	Ratio of operating expenses to profit	Identifying the impact of cost structure on the enterprise's profitability
Preserving sales markets and contract fulfillment	Customer	Sales volume; dynamics of income by year	Costs for product refinement, logistics, and warranty obligations (per management report)	Alignment of costs with customer requirements and income stability
Ensuring production continuity	Internal Business Processes	Other operating expenses; information on asset damage and downtime	Unproductive costs related to accidents, shelling, and power supply interruptions	Control of resource losses due to external and internal factors
Optimizing resource utilization	Internal Business Processes	Cost of goods sold; other operating expenses	Costs of materials, energy, and equipment repairs	Management orientation toward reducing the resource intensity of production
Restoration and modernization of production potential	Learning and Growth	Data on damage and restoration of fixed assets; other operating expenses	Investment nature of costs for repair and equipment renewal	Interpretation of costs as long-term investments in competitiveness
Preserving human resource potential	Learning and Growth	Social and personnel indicators from the management report	Personnel costs; losses from staff turnover	Alignment of personnel costs with production stabilization tasks
Increasing adaptability to risks	All Perspectives	Data on risks and losses from the management report	Costs related to relocation, backup power supply, and asset recovery	Formation of cost policy as an element of anti-crisis management

Source: compiled by the author.



The internal business processes perspective links costs with the specifics of the enterprise's production activities, manifested in unproductive costs caused by downtime, damage to fixed assets, power supply interruptions, and logistical complications. Within this perspective, cost management focuses on increasing the efficiency of using production potential and reducing resource losses. In the learning and growth perspective, costs take on an investment meaning, as they are aimed at preserving human resource potential.

Under martial law, such costs are a necessary prerequisite for ensuring the long-term sustainability of the enterprise and forming the foundations for increasing its competitiveness in the post-war period. Thus, the proposed approach allows for transforming reporting indicators into a system of strategically oriented cost management indicators, ensuring the alignment of the cost policy of JSC Ukrainian Energy Machines with development goals within the Balanced Scorecard.

The model for integrating cost management into the balanced scorecard of JSC Ukrainian Energy Machines is shown in Figure 1.

The proposed model reflects the procedure for transforming the enterprise's strategic goals into a system of indicators characterizing the cost component of its activities and ensures the formation of management decisions based on establishing cause-and-effect relationships between the resources used and the results obtained by the studied enterprise.

The important component of the model developed for JSC Ukrainian Energy Machines are such strategic goals as ensuring production stability, preserving sales markets, increasing financial stability, and restoring production potential. The listed goals can be structured according to the perspectives of the Balanced Scorecard: financial, customer, internal business processes, and learning and growth. Within each of the four perspectives, indicators are defined that reflect the corresponding aspects of the formation and utilization of the studied enterprise's costs.

The financial perspective of the model is based on indicators of revenue from product sales, the cost of goods sold, and the financial result, allowing for the assessment of cost efficiency in relation to the enterprise's performance results and the cost-profit relationships within managerial decision-making (Horngren et al. [3]).

The customer perspective integrates costs through indicators of sales volumes and the fulfillment of contractual obligations. The internal business processes perspective links costs with the dynamics of production indicators such as prime cost and other operating expenses, as well as with factors of unproductive losses caused by external and internal risks. In the learning and growth perspective, costs are viewed as investments in preserving the enterprise's human resource potential.

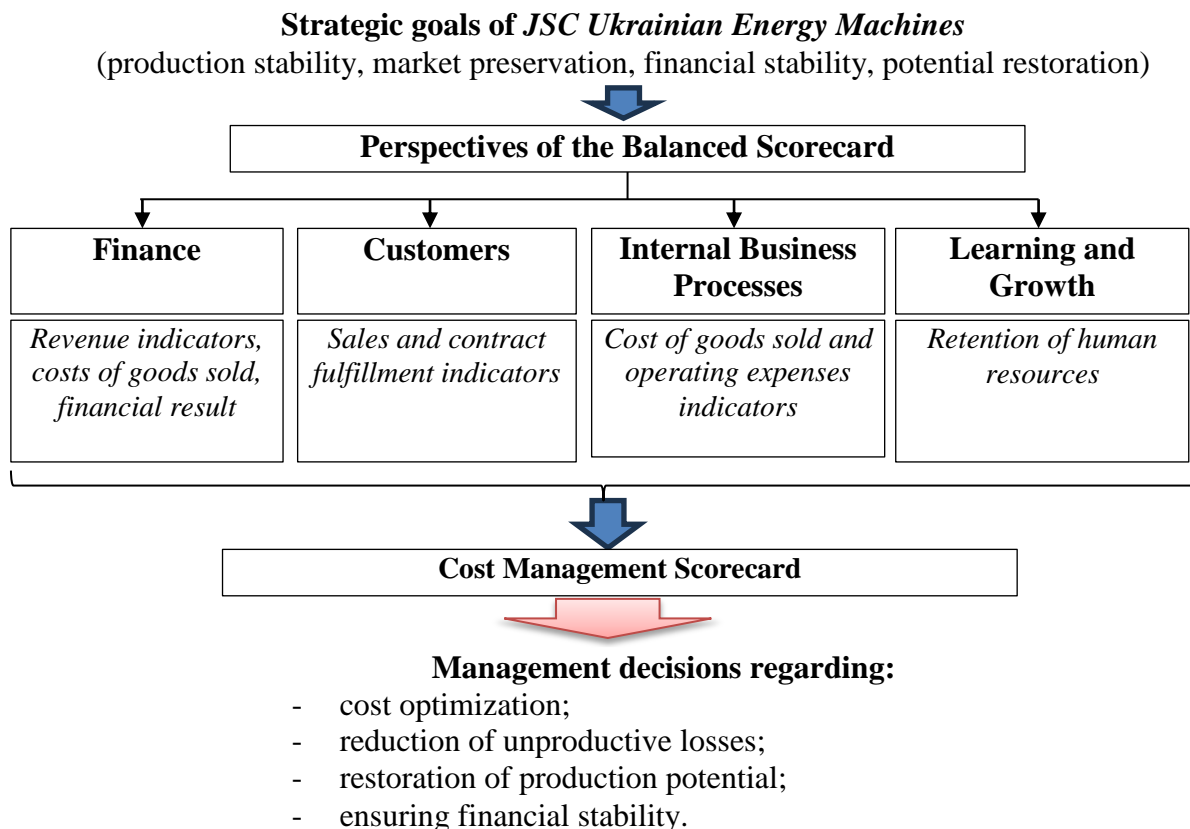


Fig. 1. Model of Cost Management Integration into the Balanced Scorecard System of JSC Ukrainian Energy Machines

Source: compiled by the author.

Conclusions and prospects for further research. The conducted study showed that using aggregated company reporting indicators allows for the interpretation of cost structure from a strategic viewpoint and the formation of a system of indicators reflecting the relationship between costs, resource utilization, and enterprise performance. The proposed model for integrating cost management into the Balanced Scorecard involves structuring costs across four perspectives: financial, customer, internal business processes, and learning and growth.

This approach allows costs to be viewed not only as a component of financial reporting but also as a strategic factor in building financial stability, ensuring production continuity, preserving sales markets, and restoring the enterprise's production potential. Prospects for further research lie in improving the tools for the strategic interpretation of costs within the Balanced Scorecard (Porter [15]), particularly through the use of a “cost-value” matrix to determine priority areas for cost optimization, as well as expanding the information base of the analysis by utilizing the enterprise's management accounting data.



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References

1. Kaplan, R.S., & Norton, D.P. (2004). *Strategy Maps: Converting Intangible Assets into Tangible Outcomes*. Harvard Business School Press.
2. Cooper, R., & Kaplan, R.S. (1988). Measure Costs Right: Make the Right Decisions. *Harvard Business Review*, 66(5), 96–103.
3. Horngren, C.T., Datar, S.M., & Rajan, M. (2018). *Cost Accounting: A Managerial Emphasis*. Pearson.
4. Drury, C. (2019). *Management and Cost Accounting*. Cengage Learning.
5. Kaplan, R.S., & Norton, D.P. (1996). *The Balanced Scorecard: Translating Strategy into Action*. Harvard Business School Press.
6. Leite, J., Fernandes, J., & Fernandes, A. (2025). The Balanced Scorecard as a strategic cost management tool: Insights from a Portuguese small and medium enterprise. *Journal of Innovation Management in Small & Medium Enterprises*, (2025), Article 599488 <https://doi.org/10.5171/2025.599488>
7. Dang, L. (2024). The impact of cost management accounting techniques on supply chain performance using the balanced scorecard approach: A case of logistics companies in Vietnam. *Uncertain Supply Chain Management*, 12(3), 1493–1510. <https://doi.org/10.5267/j.uscm.2024.4.002>
8. Madsen, D.Ø. (2025). Balanced Scorecard: History, implementation, and impact. *Encyclopedia*, 5(39). <https://doi.org/10.3390/encyclopedia5010039>
9. Tawse, A., & Tabesh, P. (2023). Thirty years with the balanced scorecard: What we have learned. *Business Horizons*, 66(1), 123–132. <https://doi.org/10.1016/j.bushor.2022.03.005>
10. Hamdan, N.F., Naif, A.M., Bishara, M.K., & Farhan, B.A. (2024). Using the sustainable balanced scorecard as a model for cost management tools. *World Economics and Finance Bulletin*, (34), 63–74. <https://scholarexpress.net/index.php/wefb/article/view/4200>
11. Sakun, L.M., Sukhomlyn, L.V., & Shyshlova, Yu.V. (2024). Balanced scorecard in strategy formation amid transformational processes. *Economic Scope*, (196), 97–104. <https://doi.org/10.30838/EP.196.97-104> [in Ukrainian].
12. Dovbnia, S.B., & Naidovska, A.O. (2025). Modern approach to the BSC: functional structure and complex consideration of stakeholder interests. *Academy Review*, 2(63), 204–218. <https://doi.org/10.32342/3041-2137-2025-2-63-13> [in Ukrainian].
13. Nakonechna, O.A. (2025). Features of the application of a balanced scorecard in the strategic management of private institutions of non-formal adult education. *Kyiv Economic Scientific Journal*, (8), 88-96. <https://doi.org/10.32782/2786-765X/2025-8-12> [in Ukrainian].
14. Travinska, S., Derun, I., & Mykhalska, O. (2023). The use of balanced scorecard in strategic management and analysis: the industrial company's case. *Financial and Credit Activity Problems of Theory and Practice*, 4(51), 103–117. <https://doi.org/10.55643/fcaptop.4.51.2023.4103> [in Ukrainian].
15. Porter, M.E. (1985). *Competitive Advantage: Creating and Sustaining Superior Performance*. Free Press.

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