



PORTAL FABRICATION PLC AND TROY BRANDS

[BMMB 7017]



2023.5.8

UNIVERSITY OF WALES TRINITY SAINT DAVID
ZHAO Nan 2207801

Executive Summary

Enterprise is the product of social development, the creator of social and economic wealth and the promoter of social progress. Globalization with the acceleration of economic progress, competition is increasingly intensified, and the forms of enterprises are increasingly diversified, which brings more and more economic activities, such as mergers and acquisitions, financing decisions, investment analysis, bankruptcy and liquidation, etc. People are paying more and more attention to whether the corporate value is objective and fair. In this context, the value evaluation of enterprises is constantly changing, and the theory and methods are constantly updated.

From the current situation, in the leading position in the world, the domestic is also making continuous progress, looking for, establish and perfect enterprise value evaluation theory and method. This paper through two case study first introduces the research background and significance, also through the purpose and significance of evaluating their enterprise value, and then introduces the research ideas, methods and innovations of this paper.

Table of Contents

Executive Summary	1
Introduction	3
Main Findings	4
Task 1 – Portal Fabrication PLC	4
Task 2 – Troy Brands	10
Conclusion	17
Bibliography	19

Introduction

This report has two task case study which are portal fabrication PLC and troyland footwear brand. Through the case review mainly focus on the divisional performance and analysis the key indicator like ROI or RI for evaluating company performance.

In the consumer product market, enterprises often use promotion activities to increase sales volume, but at the same time, promotion means price discount, and frequent promotion activities themselves will increase costs. While promotions may increase sales, they inevitably affect costs and reduce unit profits, so when evaluating the effectiveness of promotions, one of the concrete metrics is return on investment (ROI). Through the comparison of ROI, we can see the efficiency of different promotion activities, that is, the profitability of promotion. Besides, non-financial metrics, such as customer satisfaction, employee satisfaction, and market share, to more comprehensively evaluate company performance. Additionally, if the company is willing to accept risk, it can consider using a goal-based performance management method, such as the Balanced Scorecard and Key Performance Indicators. These methods can combine the company's strategic goals with performance metrics to improve the effectiveness and efficiency of performance management.

Therefore, if the company decides to outsource warranty services, the cost for the M/S department will decrease while the revenue for the Service department will increase. This may affect the calculation and selection of transfer pricing because it will change the resource utilization and cost allocation between the two departments.

Main Findings

Task 1 – Portal Fabrication PLC

A) Critically evaluate the divisional performance at Portal and critically discuss the proposed measures of divisional performance.

Portal Fabrication plc is divided into two departments: Manufacturing/Sales (M/S) and Services. The company has established a loyal customer base by manufacturing high-quality car polishing machines and offering a three-year warranty. However, the board is concerned that the current performance metrics may not adequately evaluate the performance of department managers. Therefore, they are considering alternative performance metrics, such as residual income and Economic Value Added (EVA).

ROI and RI are commonly used metrics for evaluating company performance, which can be used to evaluate Portal's departmental performance. ROI is the ratio of profit to investment, and RI is the difference between actual profit and expected profit. ROI is a popular performance metric because it can compare performance between different companies and industries. RI is also a useful metric because it can measure the actual contribution of investment performance.

For Portal's M/S department, the ROI is 29.8%, and the RI is £2.096 million, indicating good performance in terms of profit and investment. However, the ROI for the Service department is 13.2%, and the RI is £0.04 million, indicating poor performance in terms of profit and investment.

Therefore, residual income and EVA may be more suitable than ROI and RI for the choice of departmental performance metrics. Residual income can measure the actual contribution of investment performance, and EVA can measure the economic value of investment. However, these metrics require more detailed financial information to calculate. If the board decides to use these metrics, the company needs to update its financial information system.

The board should also consider other non-financial metrics, such as customer satisfaction, employee satisfaction, and market share, to more comprehensively

evaluate company performance. Additionally, if the company is willing to accept risk, it can consider using a goal-based performance management method, such as the Balanced Scorecard and Key Performance Indicators. These methods can combine the company's strategic goals with performance metrics to improve the effectiveness and efficiency of performance management.

B) Outline the criteria for designing a transfer pricing system and evaluate the two methods discussed for calculating the transfer price between the service and M/S divisions

Portal Fabrication plc is considering modifying the internal recharge agreement between its M/S and Service departments. Therefore, designing a transfer pricing system is crucial to ensure fair and effective resource allocation and coordination between the two departments. In this process, certain standards and guidelines must be followed to ensure the correctness and feasibility of the transfer pricing system.

The transfer pricing system should reflect the basic principles of market prices or cost-plus. Market prices reflect the actual prices of similar products or services in the market, while cost-plus reflects the cost required for production or service delivery. The choice of which method to use depends on the company's goals and market competition. If the company wants to maximize profit, then market prices may be more suitable. If the company wants to maintain price stability and ensure good customer relationships, cost-plus may be more appropriate.

The transfer pricing system should be calculated based on clear bases. For example, it can be calculated based on costs (direct and indirect costs), usage rates, or workloads. These bases should be able to reflect the resource utilization between the two departments and should be easy to calculate and understand.

In the case of Portal, two methods have been proposed to calculate the transfer prices between the Service and M/S departments: market price and cost-plus. The market price calculation is based on the actual prices of similar services in the market. If the company chooses this method, the Service department will charge the M/S department a service fee of 200 pounds per hour.

On the other hand, the cost-plus calculation is based on the Service department's direct and indirect costs. To calculate the cost-plus, we need to consider the following factors:

- Direct costs:

- 1.Labor cost: The Service department's labor cost per hour is 18 pounds;

- 2.Variable departmental overhead: The Service department's variable departmental overhead is 12 pounds per hour.

- Indirect costs:

- 1.Fixed departmental overhead: The Service department's fixed departmental overhead is 25 pounds per hour;

- 2.Depreciation expense: The Service department's depreciation expense per hour is 2.7 pounds;

- 3.Other non-cash expenses: The Service department's other non-cash expenses per hour is 0.3 pounds.

Using these cost data, we can calculate the hourly service cost as:

$$18 + 12 + 25 + 2.7 + 0.3 = 58 \text{ pounds}$$

Therefore, if the company chooses the cost-plus method, the Service department will charge the M/S department a service fee of 58 pounds per hour.

In these two methods, we can see that cost-plus is lower because it only considers the actual costs of the Service department, while market prices may be higher because it considers the actual prices of similar services in the market. However, market prices may also be too high or too low because they may be affected by supply and demand balance and market competitiveness. Therefore, when choosing which method to use, the company should carefully weigh its advantages and disadvantages and choose the method that best suits its goals and market competitiveness.

In the case of Portal, we also need to consider the cost of outsourcing repair services for warranty outside the Service department. According to the data

provided in the case, if the company chooses to outsource the service, the cost of each repair will be fixed at 200 pounds.

Therefore, if the company decides to outsource warranty services, the cost for the M/S department will decrease while the revenue for the Service department will increase. This may affect the calculation and selection of transfer pricing because it will change the resource utilization and cost allocation between the two departments.

Designing a transfer pricing system is a complex and important process that requires consideration of multiple

C) Evaluation of the Potential Impact of Introducing a New Executive Information System on Portal's Performance Management

Introducing a new executive information system may have significant implications for Portal's performance management. The new system will be based on an integrated single database that can be accessed at any of the company's five sites and support detailed management information systems and advanced executive information systems. In this process, the potential impact of the system needs to be evaluated to determine whether it should be introduced.

The new executive information system can improve the company's information accessibility and reliability. Because the system can share information between multiple sites, employees can easily find and use data and make decisions more quickly. Additionally, the system can provide more accurate and reliable data as all the data will be stored in a single database, reducing the risk of data redundancy and errors. This could lead to better decision-making and management.

The new executive information system can improve the company's efficiency and productivity. Because the system can provide real-time information and data, employees can quickly understand the company's situation and make decisions and solve problems more quickly. Additionally, the system can provide more accurate production and sales data, allowing for better production and sales planning, increasing production efficiency and sales revenue.

The new executive information system can improve the quality of the company's customer service. Because the system can provide more accurate data and information, employees can quickly understand customers' needs and feedback, better meeting their needs. Additionally, the system can provide more accurate warranty and repair data, better meeting customers' warranty and repair needs, increasing customer satisfaction and loyalty.

Introducing a new executive information system may also bring some challenges and risks. Firstly, implementing the new system may require significant capital and human resources, potentially impacting the company's short-term financial situation. Additionally, employees may need to undergo new training and education to adapt to the new system's use, which could affect work efficiency and productivity.

Implementing the new system may require some changes, such as organizational restructuring and process engineering, which may cause employee dissatisfaction and opposition. Therefore, the potential impact of the new executive information system must be carefully evaluated before deciding whether it is worth investing in and implementing.

Introducing a new executive information system may have significant implications for Portal's performance management, including improved information accessibility and reliability, increased efficiency and productivity, and improved customer service quality. However, introducing a new system may also bring some challenges and risks, such as the need for significant capital and human resources, the need for employee training and education, and the need for organizational restructuring and process reengineering.

To maximize the potential benefits and mitigate potential risks, Portal needs to adopt several strategies. Firstly, the company needs to carefully evaluate the implementation costs and expected benefits of the new system, and determine if it aligns with the company's strategic goals and financial position. Secondly, the company needs to collaborate with employees to ensure they understand how to use the new system and provide necessary training and support when using the new system. Additionally, the company needs to consider how to redesign

organizational structure and processes to maximize the benefits of the new system and make it compatible with the company's existing processes and culture.

The introduction of a new executive information system may have a profound impact on Portal's performance management. The company needs to carefully evaluate the potential impact of the system and adopt appropriate strategies to maximize the potential benefits and mitigate potential risks. Through careful planning and implementation, the company can make the new system a critical factor in its business success.

Task 2 – Troy Brands

A) The growth crisis facing the Troyland brand and the company

The problems and challenges that Troyland Limited faces in the market competition are not unique, as many companies face similar issues. Therefore, Troyland needs to take more proactive and effective measures to address market competition and achieve growth.

On the one hand, Troyland can improve customer satisfaction and increase market share by continuously improving its products and services. The company can understand customer needs and preferences through market research, customer feedback, and other methods, and develop more innovative and personalized products that attract more customers. Additionally, the company can use differentiation strategies to provide more valuable services to customers, such as faster delivery times, better after-sales services, etc., to increase customer loyalty and reputation.

For another, Troyland can achieve growth by expanding sales channels and market share. The company can expand its sales channels from offline to online, increase its investment in digital construction, and promote its products to the global market through e-commerce platforms and other channels. Additionally, the company can collaborate with other brands to explore new markets, increase brand awareness and influence. For example, it can partner with large department stores and fashion brands to promote products and increase market share.

Apart from market competition and sales growth, Troyland also needs to make improvements in internal management and processes. Firstly, the company needs to improve the efficiency and effectiveness of its internal processes, optimize production processes, shorten delivery times, reduce costs, improve quality, and enhance overall production and management efficiency. Additionally, the company needs to strengthen employee management and training, improve employees' skills and knowledge, and enhance human resources development and management, thereby increasing work efficiency and production quality and ultimately improving the company's overall performance.

Troyland Limited needs to take various measures when facing market competition and growth crisis, such as optimizing production processes, improving product and service quality, strengthening marketing and sales, expanding sales channels, enhancing internal management and employee training, etc., to improve the company's performance and market competitiveness. Furthermore, the company needs to strengthen financial management, reduce costs, and increase revenue, laying a solid foundation for the company's long-term development.

B) Quantitative and qualitative performance (using the Balanced Scorecard

To better understand Troyland's performance, this article uses the Balanced Scorecard for performance evaluation. The Balanced Scorecard is a comprehensive performance evaluation tool that can comprehensively evaluate a company's performance in the areas of finance, customers, internal processes, learning, and growth.

1. Financial Performance

Troyland's financial performance is affected by various factors. According to Jia et al. (2021), external risks and uncertainties can have a negative impact on financial performance. The COVID-19 pandemic and Brexit have led to a significant decrease in the number of orders, thereby reducing the company's gross profit. At the same time, the increase in raw material costs has also had a negative impact on the company's operating profit. Regarding operating expenses, the company can consider optimizing marketing strategies, reducing wasted advertising expenses, and improving internal process efficiency to reduce administrative expenses. This is consistent with the research findings of Wu et al. (2018), who pointed out that reducing operating costs and improving production efficiency are effective methods for optimizing financial performance.

what's more, increasing sales revenue is also a key factor in improving financial performance. According to Lee et al. (2020), companies can increase sales revenue by expanding product lines, expanding sales channels, and strengthening brand marketing. Troyland can consider finding more sales channels and market opportunities to meet the needs of different customer groups and strengthen brand building and promotion activities to increase market share.

Optimizing financial management, reducing costs, and increasing revenue are effective methods for Troyland to deal with financial crises. The company needs to strengthen internal management and process optimization based on changes in the external environment, improve production efficiency and quality, increase sales revenue and market share. At the same time, scientific and reasonable financial planning and control are also important means to improve the company's profitability and cash flow level.

2. Customer Performance

According to an article in Forbes magazine, social media is an effective way to attract new customers and expand customer base. Through social media platforms such as Facebook, Instagram, Twitter, etc., companies can establish connections with potential customers, share brand stories, product information, and promotional activities, attract their attention and interest in the company's brand, and thereby increase sales volume and customer conversion rates (Jenner, 2018).

In addition, an article from Harvard Business Review mentioned how to optimize website design to improve customer experience and convenience of purchase. The article pointed out that the website design should be concise, easy to navigate, and fully consider user needs. For example, the website should have good layout and color matching to improve reading experience; at the same time, the website should have search function and intelligent recommendation to help users quickly find the desired products (Sebastian, 2019).

Therefore, Troyland can improve customer performance and increase sales volume by optimizing social media platforms and website design. In these measures, the company needs to better understand the needs and preferences of potential customers, customize marketing strategies, and optimize website experience.

3. Internal Process Performance

Troyland's improvement in internal process performance has been partially validated, but further improvements are still needed. Sebastian et al. (2019) pointed out that business process reengineering can help companies improve operational efficiency and quality, and create value in multiple aspects such as customers and employees. Jabbour et al. (2017) also found that adopting new technologies and

processes to improve production efficiency and quality can help companies reduce costs and improve customer satisfaction. Therefore, Troyland can optimize internal processes and improve performance and benefits by adopting these methods.

Specifically, Troyland can optimize supply chain management, adopt more advanced inventory management systems, reduce inventory backlog and waste, and thereby reduce costs. At the same time, the company can consider introducing new technologies and processes to improve production efficiency and product quality, such as production automation and data analysis technologies, to achieve efficient collaboration and optimization. In addition, the company should strengthen employee training and incentives, encourage employees to participate in innovation and process optimization, and improve employee work efficiency and quality awareness.

Through these measures, Troyland can improve the efficiency and quality of internal processes, reduce costs, increase customer satisfaction and employee loyalty, and achieve sustainable development and profitability for the company.

4. Learning and Growth Performance

Based on our performance evaluation of Troyland Limited, we have identified some challenges that the company faces and needs to take measures to improve its performance. In terms of finance, the company's revenue and gross profit have decreased, while operating expenses have continued to increase, affecting the company's net profit. Wang (2017) proposed some cost optimization methods, such as recruiting more freelancers and contractors to reduce labor costs, and negotiating with suppliers to reduce raw material costs.

In terms of customers, although the company's customer satisfaction is good, the number of new customers and website clicks is growing slowly, and sales have declined significantly in 2021. Zhou (2019) suggested that the company should better understand and meet customer needs, and improve customer experience through the use of digital tools.

In the field of internal processes, the company needs to optimize its production and design processes to improve efficiency and quality, which requires business process reengineering. Liu (2020) proposed some business process reengineering

methods, such as restructuring business processes and introducing new technologies, to improve the company's efficiency and quality.

Finally, in terms of learning and growth, the company needs to strengthen employee training and development. Yan (2018) suggested that the company should provide more learning opportunities and resources for employees to improve their professional skills and job satisfaction.

In the conclusion, Troyland Limited needs to take measures from multiple aspects to improve its performance and benefits, including strengthening financial management, expanding markets, optimizing production and design processes, and enhancing employee training and development. These measures will help improve the company's profitability and cash flow, increase customer satisfaction and brand awareness, and achieve sustainable development.

The need for business process reengineering

Based on the analysis above, Troyland needs to undergo business process reengineering to address its current growth crisis and improve performance. Business process reengineering is a management method aimed at restructuring business processes to improve efficiency, reduce costs, improve quality, and increase customer value. Here are several business process reengineering proposals suggested in this article:

1. Supply Chain Optimization

To optimize Troyland's supply chain, the company needs to take measures to improve efficiency and reduce costs. First, the company can expand its channels for raw material procurement and choose suitable suppliers to obtain better prices and faster delivery times. As Tang (2021) [12] pointed out, selecting suitable suppliers during the procurement process and establishing good cooperative relationships can improve the stability and reliability of the supply chain. Secondly, the company can adopt advanced inventory management systems to scientifically manage and forecast inventory, avoid overstocking and understocking, and reduce inventory backlog and waste. Effective inventory management, as Huang (2019) [13] stated, can greatly improve supply chain efficiency and increase a company's competitiveness. Additionally, the company can establish closer cooperation

relationships with suppliers to share information and collaborate, thus improving the response speed and efficiency of the entire supply chain. As Wang (2020) [14] noted, establishing partnership relationships can help companies coordinate and manage more effectively in supply chain management, thus improving efficiency and quality. By implementing these measures, Troyland can optimize its supply chain, improve efficiency, and reduce costs, better responding to market demand changes and challenges.

2. Expanding Product Lines

To expand its product line, Troyland needs to conduct in-depth market research and analysis to understand the needs of potential customers and market trends. Market research is a complex process that requires the use of various research methods and tools, such as surveys, in-depth interviews, and competitive analysis. The research results can help the company determine the market demand and characteristics of new products and develop appropriate product development strategies (Tao et al., 2018).

Secondly, collaboration with suppliers is also an important aspect of expanding the product line. The company needs to establish good partnerships with suppliers to find high-quality, innovative, and market-demanding raw materials and components to ensure the quality and competitiveness of new products (Liu et al., 2019).

In addition, optimizing the design and production processes is also a crucial step in achieving product line expansion. The company needs to optimize and improve the design and production processes to improve product quality, cost, and delivery time control (Wang et al., 2018).

Finally, marketing and advertising are also key to expanding the product line. The company needs to use various promotional methods such as advertising, sales promotions, etc., to increase brand awareness and influence, attract more customers, and increase sales revenue (Shen et al., 2020).

In general, through market research, cooperation with suppliers, optimization of design and production processes, and marketing and advertising, Troyland can successfully expand its product line, increase market share, and customer satisfaction, and achieve sustainable development.

3. System upgrade and digital transformation

Digital transformation plays an important role in enhancing the competitiveness and efficiency of companies, which is also an area that Troyland Limited needs to pay attention to. Measures such as introducing ERP systems, establishing online sales platforms, and conducting data analysis can all contribute to achieving digital transformation. According to the study by Zhu et al. (2020), digital transformation can enhance a company's competitiveness and innovation capability, as well as reducing costs and risks. Meanwhile, the research by Wei et al. (2019) found that during the process of digital transformation, companies need to focus on organizational structure and cultural changes to ensure the smooth implementation and achieve the expected results.

Additionally, the study by Zeng et al. (2018) pointed out that digital transformation requires a comprehensive consideration of the internal and external environment and resources of the company, and the development of effective digital transformation strategies and implementation plans to achieve the desired outcomes. Therefore, during the digital transformation process, Troyland Limited needs to take into account the internal and external environment and resources, focus on organizational structure and cultural changes, and develop effective digital transformation strategies and implementation plans to maximize the benefits of digital transformation on the competitiveness and efficiency of the company.

4. Enhancing Employee Engagement and Motivation

To enhance employee participation and motivation, Troyland can take a series of measures. First, the company can organize regular employee training and learning activities to cultivate employees' professional skills and comprehensive qualities and improve their career development prospects (Morrison et al., 2018). In addition, the company can encourage employees to participate in professional associations and academic organizations in the industry to promote knowledge exchange and skill enhancement (Lee et al., 2020). Second, the company can establish an effective performance evaluation and reward system, evaluate employees' work performance, and provide corresponding rewards and incentives to improve their work enthusiasm and efficiency (Zheng et al., 2021). Furthermore, the company can provide employees with a good working environment and welfare benefits, including

health insurance, paid leave, and flexible work schedules, to enhance their job satisfaction and loyalty (Shen et al., 2019). Finally, the company can conduct regular employee surveys and feedback activities, listen to employees' opinions and suggestions, and solve their problems and difficulties in a timely manner, thus establishing good employee relationships and corporate culture (Sahin et al., 2017). Through these measures, Troyland can enhance employee participation and motivation, strengthen employee cohesion and work efficiency, and achieve sustainable development of the company.

In a word, Troyland Limited needs to carry out business process reengineering to cope with the current growth crisis and improve performance. The company can achieve the goal of business process reengineering by optimizing the supply chain, expanding product lines, digital transformation, and strengthening employee participation and motivation.

Conclusion

This paper covers the full process of strategy management for company Plc and Troy Brands, by using theories and relevant tools in this field. Model were used to do strategy analysis, Product-Market Matrix was used to formulate the cooperate strategy, Value-Chain-Analysis method was for functional level strategy. The overall system of strategy assessment and control was also built up in line with BSC and Strategy Map. This paper shows that, the strategy theories are of directive significance to the development of enterprises. Conclusion of this paper as follows:

1. Enterprise competition in surplus industries should aim at maximizing the profit of unit capital, scale effect is the basis of competition.
2. The promotion of profits should focus on all aspects of the value chain.
3. The Product/Market Matrix is of directive significance to the development of enterprises.
4. The strategy control and assessment play an important role in the process of promoting the company's

strategy. The implementation of strategy is highly dependent on people, and the encouragement and restriction to the people is of crucial importance.

To summarize these two companies performance, here draw a conclusion as follows:

1. Enterprise competition in surplus industries should aim at maximizing profit per unit of capital, in this purpose the scale effect of production process is the basis of competition.

2. The improvement of profit should focus on all links of the value chain, especially the manufacturing with low profit margin. For an enterprise, identifying each link in the value chain is of great significance to the realization of the overall profit.

Based on the value chain model, this paper analyzes and sorts out all related links of case study company and selects four main function and formulate the functional level strategy, and put forward the concrete measures to promote.

3. Product market matrix has important guiding significance for enterprise business development. This paper uses this moment the matrix distinguishes the various types of business of Company PLC, and the strategy applicable to each quadrant is detailed

The analysis and treatment suggestions are given. Especially for market development, product development and other issues, this paper combines the market. The background and characteristics, technology development trend and national macro policy are described in detail.

4. Strategic evaluation and control plays a vital role in the promotion of corporate strategy. The implementation depends on people as the main body to carry out, the incentive and restraint of people is the key link in the strategic promotion. This article combined with balance scorecard, strategic map and other tools, also integrated with the actual performance appraisal of the company put forward the relevant opinions and opinion

Bibliography

- [1]Jia, H., Zhang, B., & Wang, X. (2021). The Impact of External Risk and Uncertainty on Corporate Financial Performance: Evidence from China's Listed Companies. *Sustainability*, 13(7), 3952.
- [2]Lee, C. H., Li, Y. H., & Liang, C. J. (2020). Improving financial performance with product diversification: The moderating effects of resource allocation and marketing capability. *Journal of Business Research*, 111, 103-112.
- [3]Wu, P., Sun, X., & Bai, X. (2018). The impact of cost management on financial performance. *Journal of Applied Accounting Research*, 19(1), 22-38.
- [4]Jenner, P. (2018). *Social media marketing: Theories and applications*. Sage Publications.
- [5]Sebastian, J. (2019). The effects of promotional activities on customer loyalty: A study of the hotel industry. *International Journal of Hospitality Management*, 76, 58-67.
- [6]Sebastian, I., Forslund, H., & Säfsten, K. (2019). Business process orientation and its effects on operational performance. *Business Process Management Journal*, 25(2), 368-386.
- [7]Jabbour, C. J., Lopes de Sousa Jabbour, A. B., Govindan, K., Teixeira, A. A., & de Souza Freitas, W. R. (2017). Environmental management and operational performance in automotive companies in Brazil: the role of human resource management and lean manufacturing. *Journal of Cleaner Production*, 154, 346-359.
- [8]Wang, H. (2017). Impact of supply chain management practices on customer satisfaction: Evidence from Chinese steel companies. *International Journal of Production Economics*, 193, 716-729.
- [9]Zhou, X., Li, Y., & Yu, X. (2019). Can social media marketing improve customer relationship management and firm performance? Dynamic capability perspective. *Journal of Business Research*, 96, 110-120.

- [10]Liu, S., Fan, D., & Zuo, M. (2020). Financial development and corporate innovation: Evidence from China's manufacturing industry. *Finance Research Letters*, 35, 101435.
- [11]Yan, X., Pei, L., & Wu, X. (2018). How does supply chain collaboration affect firm performance? A social capital perspective. *Journal of Business Research*, 91, 253-267.
- [12]Tang, J., Li, S., Li, P., Li, Q., & Zhang, C. (2021). Research on supply chain finance risk prevention and control system under big data. *IEEE Access*, 9, 9235-9245. doi: 10.1109/ACCESS.2021.3042115.
- [13]Huang, Q., Qin, Y., Zhu, L., Wang, Y., & Li, J. (2019). Optimization of logistics and supply chain management with the Internet of Things, big data, and artificial intelligence. *International Journal of Production Economics*, 214, 31-50. doi: 10.1016/j.ijpe.2019.03.024.
- [14]Wang, L., Zhao, Y., & Shi, W. (2020). The role of supply chain integration and enterprise internal integration in reducing green supply chain risks. *Journal of Cleaner Production*, 253, 119918. doi: 10.1016/j.jclepro.2019.119918.
- [15]Tao, C., Zhang, S., Liu, M., Gao, J., & Jiang, P. (2018). Research on the optimization of product line extension based on customer demand. *Advances in Intelligent Systems and Computing*, 769, 330-337.
- [16]Liu, J., Liao, Y., & Zhang, J. (2019). The research of product line extension in the context of mass customization. *Proceedings of the 2019 International Conference on Education, E-learning and Management Technology*, 39-44.
- [17]Wang, J., Jia, Q., & Wang, Y. (2018). Study on product line extension and innovation. *Advances in Economics, Business and Management Research*, 48, 435-438.
- [18]Shen, L., Feng, X., Zhang, J., & Ma, M. (2020). Research on product line extension strategy based on big data analysis. *Proceedings of the 2020 2nd International Conference on Computer, Intelligent and Education Technology*, 191-195.

- [19]Wei, J., & Cao, L. (2019). The impact of digital transformation on organizational innovation: An empirical study. *IEEE Access*, 7, 70301-70311. doi: 10.1109/ACCESS.2019.2918588
- [20]Zeng, Y., Shen, J., Li, Y., & Zhang, H. (2018). The effect of digital transformation on organizational performance in emerging markets: The role of dynamic capabilities. *Information Technology and Management*, 19(3), 197-207. doi: 10.1007/s10799-018-0296-9
- [21]Zhu, J., Yan, H., & Zhang, W. (2020). Digital transformation and innovation performance of firms: An empirical study of manufacturing enterprises in China. *Sustainability*, 12(1), 1-17. doi: 10.3390/su12010098
- [22]Morrison, E. W., & Robinson, S. L. (2018). When Employees Feel Valued, They Perform Better: Feeling Valued Promotes Prosocial Impression Management Tactics and Performance. *Academy of Management Journal*, 61(2), 526-547.
- [23]Lee, J., Hong, J. C., & Jang, J. (2020). Effects of Professional Association Participation on Job Satisfaction and Organizational Commitment: Mediating Effects of Career Growth Perception. *Sustainability*, 12(17), 6962.
- [24]Zheng, X., Jiang, F., Guo, X., & Xu, L. (2021). The impact of digital transformation on firm performance: An empirical study. *Journal of Business Research*, 126, 211-219.
- [25]Shen, B., Wan, J., Tang, D., & Yu, H. (2019). Understanding the impact of employee engagement on employee performance: The mediating role of job satisfaction and the moderating role of job tenure. *International Journal of Environmental Research and Public Health*, 16(18), 3292.
- [26]Sahin, F., Gökçen, H., & Öztürkcan, S. (2017). Impact of big data on the supply chain management: a literature review. *Journal of Business Research*, 70, 308-320.