International Journal of Religion
2024
Volume: 5| Number 10 | pp. 4632 – 4638
ISSN: 2633-352X (Print) | ISSN: 2633-3538 (Online)
ijor.co.uk
DOI: https://doi.org/10.61707/bgk6b232

Internal Social Capital and Product Innovation of Food Firms

Tran Thi Thu Thuy[1], Vu Thi The[2] and Pham Van Huy[3]

Abstract

Internal social capital helps create a friendly work environment through trust and mutual understanding among employees (Yang et al., 2011). Besides, internal social capital fosters strong internal cohesion (Tsai, 2000) that facilitates cooperation between employees and different departments within the enterprise (Adler and Kwon, 2002). This study was conducted with the aim of assessing the influence of internal social capital on the product innovation of plastic and food firms in Hanoi and neighboring provinces through survey results. The survey subjects are employees of food firms in Hanoi and neighboring provinces. We use both qualitative and quantitative research methods. Quantitative research methods were carried out to analyze the reliability of the scales through the Cronbach alpha coefficient, EFA analysis, and correlation analysis. Research results show that internal social capital has a positive effect on the product innovation of plastic and food firms in Hanoi and neighboring provinces. Based on this result, the study proposes some recommendations for food firms and employees.

Keywords: *Economics, Internal Social Capital, Food Firms, Product Innovation, Business Administration*.

INTRODUCTION

Product innovation gives manufacturers the opportunity to keep their product portfolio at a competitive advantage (Ottenbacher & Harrington, 2009). However, product innovation remains risky and costly, as results show low success rates and many projects end the mid-product development cycle (Cormican and O'Sullivan, 2004).

These days, a company's ability to innovate its products is essential since it gives businesses—SMEs in particular—a competitive edge (Falahat et al., 2020). Product innovation not only fosters competitiveness but also a positive atmosphere for growth, providing fresh impetus for the economy to advance to the next level (Phung & Le, 2013).

Innovation-related activities are crucial to the growth of businesses as well as the nation and industry, particularly in light of the revolution taking place in the information economy and throughout society. Economic growth is fueled by creativity and innovation (Aghion & Howitt, 1992).

According to Fukuyama (2002), social capital consists of a reasonably strong social network, members' interactions with one another, and their degree of sympathy.

The number of Vietnamese firms operating in the food industry currently reaches about 5,083 firms, an increase of 83.8% compared to 2019 (Kim Dung, 2023). The increase in the number of food firms also partly contributes to meeting people's growing demand for production to serve food consumption.

The food industry is also one of the key industries prioritized by the Vietnamese government for development until 2025 and vision to 2035, playing an important role in socio-economic development. Vietnam's food industry is showing strong growth and potential in the region thanks to people's increasingly improving income and consumption trends, and the market is gradually supplying many highly competitive products, dominating the domestic market and increasing exports (Kim Dung, 2023).

The food industry is one of the industries in which many firms participate. However, the scale of the establishments is small, odd, and scattered. Unfocused distribution will not bring high production efficiency. In addition, food firms are often located in large, densely populated city areas, causing serious urban

[1] University of Labour and Social Affairs, Vietnam

[2] University of Labour and Social Affairs, Vietnam
[3] Hanoi University of Business and Technology, Vietnam, Email: huypg.pham@gmail.com, (Corresponding Author)

environmental pollution. In addition, the number of workers will not be enough to supply production facilities when consumer prices in inner-city districts are quite high and worker wages are low. This reduces the labor attractiveness of the food industry. Therefore, food firms have solutions to overcome the above situation, and one of those solutions is product innovation. However, product innovation in food firms is also influenced by a number of factors, including internal social capital factors.

LITERATURE REVIEW

Internal Social Capital

Employee trust and understanding are the foundation of a positive work environment created by internal social capital (Yang et al., 2016).

An organization's internal network structure is the web of connections among its personnel, internal departments, and divisions (Dai et al., 2015). Both a horizontal and vertical presentation of the relationship network is made.

The caliber of internal relationships demonstrates the need for mutual trust, knowledge sharing, and goal and vision sharing among all members of the organization (Nguyen & Huynh, 2012; Prieto-Pastor et al., 2018). Each department makes an effort to prevent negatively affecting the interests of other departments by routinely fulfilling agreements, upholding close connections, and sharing expertise and information (Mikovic et al., 2019).

Product Innovations

Since knowledge creation requires demonstration through the introduction of innovations, one of the observable outcomes of knowledge creation is product innovation (Nonaka, 1994).

Product innovations may involve design modifications that have a significant impact on the functionality or characteristics of the product (OECD, 2005). Enhancing the value that a product offers and achieving greater performance for the business are the primary objectives of product innovation in an organization (Polder et al. 2010). Furthermore, new technologies and information, as well as novel combinations of already-existing technologies and knowledge, can be used to accomplish product innovation (Gunday et al., 2011).

Internal Social Capital and Product Innovation

Internal social capital helps create a friendly work environment through trust and mutual understanding among employees (Yang et al., 2011). Besides, internal social capital fosters strong internal cohesion (Tsai, 2000) that facilitates cooperation between employees and different departments within the enterprise (Adler and Kwon, 2002). The mutual understanding and trust of employees allows knowledge or information to be regularly exchanged through informal conversations, leading to improved product innovation efficiency (Cuevas-Rodríguez, 2014). Through internal social capital, employees and units cooperate and coordinate closely, sharing knowledge and information (Dai et al., 2015) in many areas of firm operations in general, especially improving and innovating current products or researching and introducing new products to the market.

METHODOLOGY

Qualitative Research Methods and Quantitative Research Methods

Research methodologies included surveys, in-depth interviews, desk research, and other methods. For online surveys and interviews, five department-level managers of food businesses in Hanoi as well as five professors of economics and social work were chosen.

We use SPSS software for quantitative research methods. In this study, we analyzed the reliability of the scales through the Cronbach alpha coefficient, EFA analysis, and correlation analysis.

Scale for Measuring Observed Variables and Samples

Two hundred employees of food companies answered the questionnaire that was emailed to them. 180 valid replies were left over after cleaning and were used for analysis.

Research Models

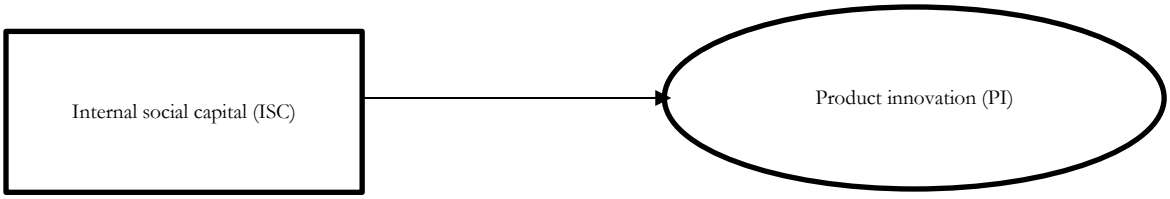

Figure 1: Research model

Six observed variables of the internal social capital (ISC) of food firms are inherited from the research of Nguyen et al. (2023) and previous studies. Internal social capital (ISC): Includes 6 observed variables (ISC1, ISC2, ISC3, ISC4, ISC5 and ISC6).

Product innovation (PI): Includes 4 observed variables (PI1, PI2, PI3, and PI4) inherited from the research results of Dao et al. (2023).

RESULTS

Cronbach Alpha

We use the Cronbach alpha coefficient to assess the scales' internal reliability. The reliability of the scale utilized in the study is confirmed by the statistical results in Table 1, which demonstrate that Cronbach alpha values in the range of 0.862 to 0.907 are greater than the significance level of 0.7 (Nunnally & Bernstein, 1994). The item-total correlation for every observable variable on the scales is more than 0.3. Thus, all of the scales are eligible for exploratory factor analysis since they satisfy the necessary conditions (Hoang & Chu, 2008; Hair et al., 2009; Hair et al., 2014).

Table 1. Results of Cronbach's alpha testing of attributes and item-total statistics

PI				
Cronbach's Alpha	N of Items			
.898	4			
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
PI1	12.08	5.055	0.778	0.867
PI2	12.06	5.041	0.788	0.863
PI3	12.14	5.320	0.735	0.882
PI4	12.02	5.123	0.791	0.862
ISC				
Cronbach's Alpha	N of Items			
.916	6			
	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
ISC1	20.05	11.120	0.770	0.899
ISC2	20.12	11.482	0.712	0.907
ISC3	20.07	11.207	0.750	0.902
ISC4	20.11	10.911	0.748	0.903
ISC5	20.04	10.948	0.777	0.898
ISC6	19.97	10.893	0.817	0.893

Source: Prepared by the authors (2024) and SPSS software.

EFA Analysis

Subsequently, component analysis and variance were used to perform exploratory factor analysis (EFA), as indicated by tables 2, 3, and 4.

The KMO index is 0.831 and 0.915, respectively, greater than 0.5 (>0.5), according to the results of Bartlett's test used to investigate the hypothesis of correlation between observed variables. The extracted variance is

76.573% and 70.453%, respectively (>50%), meaning that these four and six observed variables account for 70.453% and 76.573% of the variation in the data. There is statistical significance (Sig.<0.05) in Bartlett's test. Consequently, it can be said that the study's indicators satisfy the requirements of the EFA analysis (Hoang & Chu, 2008; Hair et al., 2009; Hair et al., 2014).

These statistics demonstrate that research data analysis for factor discovery is appropriate. Through the quality assurance of the scale and the test of the EFA model, we have identified four components of product innovation and six components of the internal social capital of food firms (Hoang & Chu, 2008; Hair et al., 2014).

Table 2: KMO and Bartlett's Test

PI	**KMO and Bartlett's Test**	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.831
Bartlett's Test of Sphericity	Approx. Chi-Square	430.170
	Df	6
	Sig.	.000
ISC	**KMO and Bartlett's Test**	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.915
Bartlett's Test of Sphericity	Approx. Chi-Square	680.456
	Df	15
	Sig.	.000

Source: Prepared by the authors (2024) and SPSS software.

Table 3: Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
PI						
1	3.063	76.573	76.573	3.063	76.573	76.573
2	0.391	9.768	86.341			
3	0.309	7.716	94.057			
4	0.238	5.943	100.000			
ISC						
1	4.227	70.453	70.453	4.227	70.453	70.453
2	0.457	7.610	78.063			
3	0.432	7.198	85.261			
4	0.333	5.549	90.811			
5	0.293	4.878	95.688			
6	0.259	4.312	100.000			

Extraction Method: Principal Component Analysis.

Source: Prepared by the authors (2024) and SPSS software.

Table 4: Component Matrix[a]

	Component
PI	1
PI4	0.887
PI2	0.885
PI1	0.878
PI3	0.849
ISC	Component
	1
ISC6	0.880
ISC5	0.851
ISC1	0.845
ISC3	0.830

ISC4	0.828
ISC2	0.800

Source: Prepared by the authors (2024) and SPSS software.

Correlation Analysis

The results of the correlation matrix are indicated in Table 5. The correlation coefficients of the internal social capital with the product innovation of food firms are larger than 0.0, reflecting a favorable direction. In addition, the values of sig. are smaller than 0.05, which means that all variables are interrelated (Hair, Black, Babin, & Anderson, 2009).

Table 5: Correlations

		Product innovation	Internal social capital
Product innovation	Pearson Correlation	1	0.698**
	Sig. (2-tailed)		0.000
	N	180	180
Internal social capital	Pearson Correlation	0.698**	1
	Sig. (2-tailed)	0.000	
	N	180	180

Source: Prepared by the authors (2024) and SPSS software.

Consequently, inferences about the impact of internal social capital on food companies' capacity to develop novel products can be made. Subsequent research, however, should delve further into the other independent variables outside internal social capital that affect food firms' product innovation. More studies with bigger sample numbers and broader geographic scopes should be conducted in the future to further increase the reliability of the research findings.

DISCUSSION AND IMPLICATIONS

When employees inside a firm have the same goals and vision, regularly keep their promises, maintain relationships, and share with each other when solving tasks, they will contribute to helping the firm increase product innovation (Dai et al., 2015). In addition, food firms that focus on creating close coordination mechanisms between units or departments to solve tasks will promote increased product innovation.

In business activities, firms that keep their promises, build good relationship policies with partners, and avoid harming mutual benefits will be more likely to innovate their products. Furthermore, firms often keep their promises, creating policies aimed at maintaining cooperation with business partners and often receiving introductions of new business opportunities from business partners (Dai et al., 2015).

In the food sector, firms should promptly detect changes in the business environment, regularly survey customer opinions, and promptly discover new trends in clean, convenient, and safe food. In particular, you should do a lot of internal research on new products. That is one of the useful solutions to help food firms quickly improve and innovate their products.

Firm product innovation requires significant interaction within the organization as well as with customers and suppliers (Gunday et al., 2011). Therefore, product innovation needs to differentiate the product from competitors, which is especially important in the food sector.

Through social relationships, food businesses should proactively improve and innovate products, pioneer in bringing new products to the market, and create differences with current products to satisfy the market's consumer tastes, strengthening their position in the marketplace.

Before deciding to buy goods or services, customers often compare product quality between firms (Hoonsopon and Ruenrom, 2012). Therefore, to be successful in product innovation, when launching new products to the market, food firms should compare the quality of their new products with those of their competitors.

Mr. Vu Ba Phu, Director of the Trade Promotion Department (Ministry of Industry and Trade), said: With a population of nearly 100 million people, of which the proportion of the population under 35 years old accounts for about 50%, key products play a significant role in the structure and value of industrial products in Vietnam, including wine, beer, soft drinks, processing milk and dairy products, vegetable oil, flour and starch processing, tobacco production, etc. (Kim Dung, 2023). Therefore, product innovation in food firms is necessary.

Food firms should simultaneously address issues such as modernizing equipment, technology, and modern processing methods; increasing the quantity, type, and quality of raw materials; improving product quality; improving the management skills and skills of managers and workers; improving the packaging of goods; modernizing transportation equipment infrastructure; etc. To do that, food firms need to have a stable source of capital. However, in reality, the ability of food firms to meet capital needs is still low, in addition to ineffective use and management, leading to capital shortages. Some food firms still lack dynamism, rely heavily on budget capital, and do not have effective and attractive measures to exploit foreign investment capital. Many firms use capital with low efficiency, causing losses that reduce the financial capacity of the firm. Therefore, food firms should stabilize capital and have more effective measures to attract and use capital.

Processed food firms should grasp new trends and technologies in production and business, increasingly diversifying products and production technology; focus on building solutions to attract investment, orient sustainable development, and increase capacity to exploit favorable conditions such as economic centers, geographical locations, trade hubs, etc.

The production value of the food processing industry accounts for 19.1% of Vietnam's processing and manufacturing industries. This is the industry with the highest proportion among processing and manufacturing industries, demonstrating the importance of the industry in ensuring people's food needs as well as meeting export requirements. In addition, the high proportion of production value shows that the food manufacturing and processing industry has many strengths, including many large, reputable brands, a stable market, and being highly competitive compared to other firms abroad, and there is still much room for development (Chi Mai, 2023).

In addition to its negative effects, COVID-19 offers the Vietnamese food industry new avenues for growth by spurring innovation and digitalization, growing the size of production and consumption markets worldwide, catering to a favorable food segment, and raising awareness among the general public of the health benefits of food. But in order to make opportunities a reality, every company needs to be able to change fast, have plans that are suited for every stage of development, and meet ever-increasing standards for packaging quality and design. Clear traceability, ease of use, intelligence, and good preservation.

REFERENCES

Adler, P. S., & Kwon, S., 2002. Social Capital: Prospects for a New Concept. The Academy of Management Review, 27(1), 17–40.

Aghion, P., & Howitt. P. (1992). A Model of Growth through Creative Destruction. Econometrica, 60 (2), 323–351.

Chi Mai (2023). Vietnam's processed food industry has much development potential. Accessed in June 2023, from https://dangcongsan.vn/kinh-te/nganh-thuc-pham-che-bien-cua-viet-nam-co-nhieu-tiem-nang-phat-trien-639003.html.

Cormican, K., & O'Sullivan, D., 2004. Auditing best practice for effective product innovation management. Technovation, 24 (2004): 819–829.

Cuevas-Rodríguez, G., Cabello-Medina, C., & Carmona-Lavado, A., 2014. Internal and External Social Capital for Radical Product Innovation: Do They Always Work Well Together? British Journal of Management, 25: 266–284.

Dai, W., Mao, Z., Zhao, X., & Mattila, A. (2015). How does social capital influence the hospitality firm's financialperformance? The moderating role of entrepreneurial activities. International Journal of Hospitality Management, 51, 42–55.

Dao, M. P., Dang, Q. T., Vu, H. P., To, X. D., & Vu, V. T. (2023). Product innovation among furniture firms: the case of the private economy area. Journal of Law and Sustainable Development, 11(11), 01-17. https://doi.org/10.55908/sdgs.v11i11.1648

Falahat, M., Ramayah, T., Soto-Acosta, P., & Lee, Y. Y. (2020). SMEs internationalization: The role of product innovation, market intelligence, pricing and marketing communication capabilities as drivers of SMEs' international performance. Technological Forecasting and Social Change, 152, 119908.

Fukuyama, F. (2002). Social capital and development: The coming Agenda. SAIS Review, 22(1), 23-37. John Hopkin University Press, 2002.

Gunday, G., Ulusoy, G., Kilic, K., & Alpkan, L. (2011). Effects of innovation types on firm performance. Int. J. Production Economics, 9: 662-676.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2009). Multivariate Data Analysis (7th ed.). Upper Saddle River, NJ: Prentice Hall International.

Hair, J. F., Henseler, J., Dijkstra, T., Sarstedt, M., Ringle, C., Diamantopoulos, A., Straub, D., Ketchen, D., GTM, H., & Calantone, R. (2014). Common beliefs and reality about partial least squares: comments on Rönkkö and Evermann. Organizational Research Methods, 17(2), 182-209.

Hoang, T., & Chu, N. M. N. (2008). Analyzing researched data with SPSS (2nd ed.). Ho Chi Minh City, Vietnam: Hong Duc Publishing House.

Hoonsopon, D., & Ruenrom, G., 2012. The Impact of Organizational Capabilities on the Development of Radical and Incremental Product Innovation and Product Innovation Performance. Journal of Managerial Issues, 3: 250–276.

Kim Dung (2023). Promote the development of the food industry. Accessed in April 2023, from https://dangcongsan.vn/kinh-te/day-manh-phat-trien-nganh-cong-nghiep-thuc-pham-635567.html.

Mikovic, R., Petrovic, D., Mihic, M., Obradovic, V., & Todorovic, M., (2019). Examining the relationship between social capital and knowledge usage in the nonprofit industry. Journal knowledge management research & practice, [online] Available at: https://doi.org/10.1080/14778238.2019.1638740 [Accessed 10 June 2020].

Nguyen, H. T., & Huynh D. T., 2012. The contribution of social capital into the activities of real estate companies in Viet Nam. Journal of International Business Research, 3, 53-69.

Nguyen, T. H., Le, T. T., Nguyen, X. H., & Nguyen, T. H. P. (2023). Internal Social Capital: The Case of Plastic and Packaging Firms. International Journal of Advanced Multidisciplinary Research and Studies, 3(4):1180-1183

Nonaka, I. (1994). A dynamic theory of organizational knowledge creation. Organization Science, 5, 14–37.

Nunnally, J.C. and Bernstein, I.H. (1994) The Assessment of Reliability. Psychometric Theory, 3, 248-292.

OECD (2005), Growth in Services; Meeting of the OECD Council at Ministerial Level, 2005, Organization for Economic Co-operation and Development.

Ottenbacher, M. C., & Harrington, R. J., 2009. International Journal of Contemporary Hospitality Management Emerald Article: The product innovation process of quick-service restaurant chains. International Journal of Contemporary Hospitality Management, 5: 523-541.

Phung, X. N., & Le. Q. (2013). Innovation in Vietnamese enterprises. VNU Journal of Science, 29, 1-11.

Polder, M., Leeuwen, G., Mohnen, P., & Raymond, W. (2010). Product, Process and Organizational Innovation: Drivers, Complementarity and Productivity Effects (June 18, 2010). CIRANO - Scientific Publications 2010s-28 [online] Available at < http://dx.doi.org/10.2139/ssrn.1626805> [Accessed 15 May 2015].

Prieto-Pastor, I., Martín-Pérez, V., & Martín-Cruz, N. (2018). Social capital, knowledge integration and learning in project-based organizations: a CEO-based study. Journal of Knowledge Management, 8, 1803-1825.

Tsai, W.P., 2000. Social capital, strategic relatedness and the formation of intraorganizational linkages. Strateg. Manag. J, 21: 925–939.

Yang, S., Liu, Y., & Wei, J. et al. (2016). Social capital on mobile SNS addiction: A perspective from online and offline channel integrations. Internet Research, ISSN: 1066-2243, Article publication on August 1, 2016.