

A Better Pharmaceutical Organizational Culture for Better New Drug Performance in Thailand: Mediating Role of Organizational Sustainability Dimensions

¹ Boonsri Kittichottipanich; ²Ponpun Vorasiha, ³ Udomporn Yingpaiboonsuk, ⁴ Punyarat Lapvongwatana.

Abstract

In the past few decades, it can be seen that some organizations keen to take an effective organizational sustainability model to expand as well as to enhance the performance of their existing products through science and IT operations. However, the main purpose of this study is to enhance the performance of existing products and services through the development of positive organizational culture and environment. This research paper also aims to identify the mediating impact of organizational sustainability which future includes monitoring and evaluation, capital management, and customer-oriented management. For this intention, the analysts of this research collect data and information from about 315 respondents out of which 150 were female and 165 were male. For the purpose of data analysis and calculation of data, this research study uses structural equation modeling and the KMO technique. The results of this study revealed that positive organizational culture and environment can help an organization to enhance the performance of their existing products. The findings of this study also manifest that capital management positively effects the relationship of organizational culture with the new drug performance. Significant results of the study contribute to existing literature and also help many sectors to enhance the performance of existing products.

Keywords: Organizational cultural, Organizational Sustainability, Capital management, Customer-oriented management, Monitoring, Evaluation, Product performance, New Drug performance,

1 Introduction

To attain business success in today's competitive market place, the use of strategic tools and creativity has increased. These strategic tools enables the firms to meet the consumer demands and gain market success through continuous development of innovative products. Therefore to gain organizational sustainability (Bamgbade, Kamaruddeen, & Nawi, 2017; Felipe, Roldán, & Leal-Rodríguez, 2017; van de Wetering, Mikalef, & Helms, 2017), the best possible mechanism is to use the open innovation strategy. Through the use of open innovation mechanism, the capacity of a firm to have proper planning, to monitor the capacity of the firms and to efficiently perform open innovation (Dranev, Izosimova, & Meissner, 2018; Han, Arokiasamy, & Marn, 2019; H. Hassan & Daud, 2017; Journeault, Levant, & Picard, 2020). The embracement of open innovation by the organizations and industrial sector highly depends upon the cultural settings of the region.

The economic conditions, customer oriented management, capital management and the regular monitoring and evaluation are some of the factors that affect the innovative business opportunity for the manufacturing enterprises of Thailand (Guerra-Júnior et al., 2017; Rowe, Labadie, Jackson, Vivas-Torrealba, & Simon, 2018; Swann, 2017; Thakur-Wernz, Bruyaka, & Contractor, 2019). Companies making investments in the innovation sector are more susceptible to the market changes and at the same time they have a greater opportunity then the other companies that have not invested in the innovation. The overall organizational culture of any form get changed with the presence of leadership having innovative

mindset (Barrett, 2017; De-Pablos-Heredero, Montes-Botella, & García-Martínez, 2018; Hall, Matos, Gold, & Severino, 2018). Thus, the employees gets more involved in the idea generation and their engagement makes them more concerned about the company's performance.

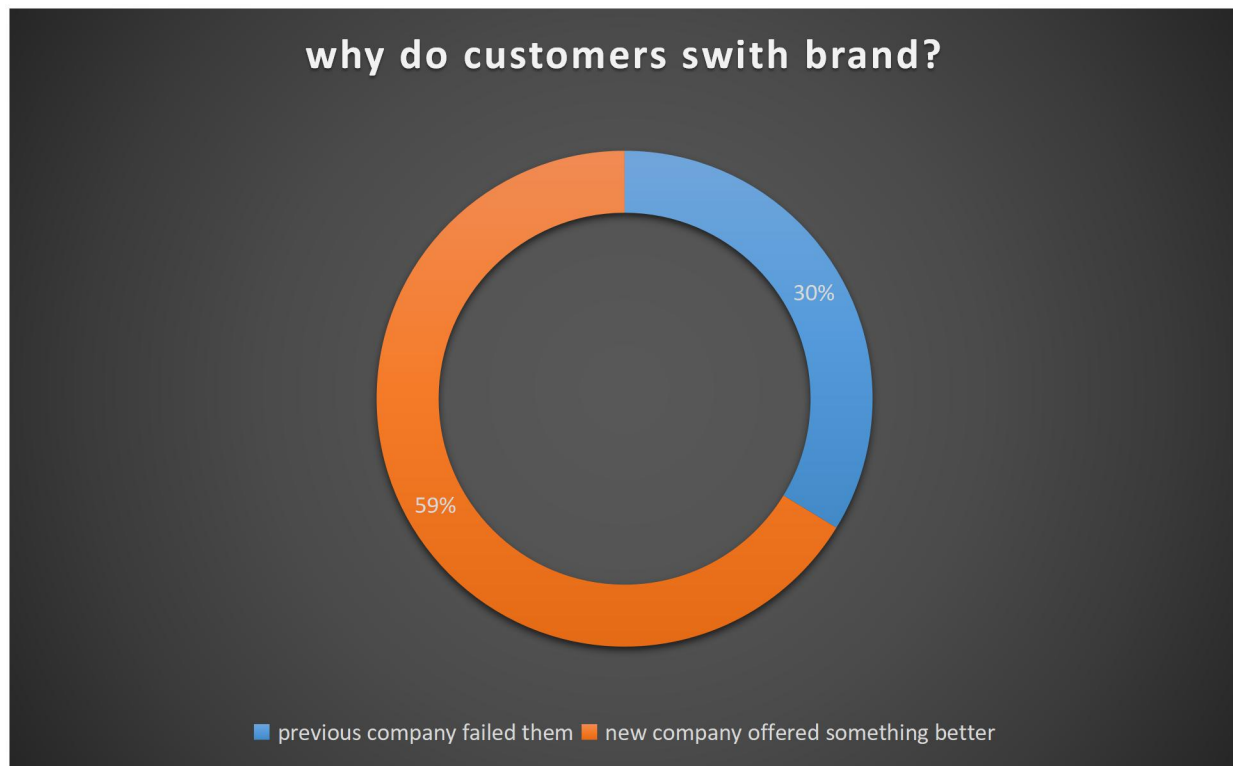


Figure 1: Why do customers switch brand?

Source: (Satalytics)

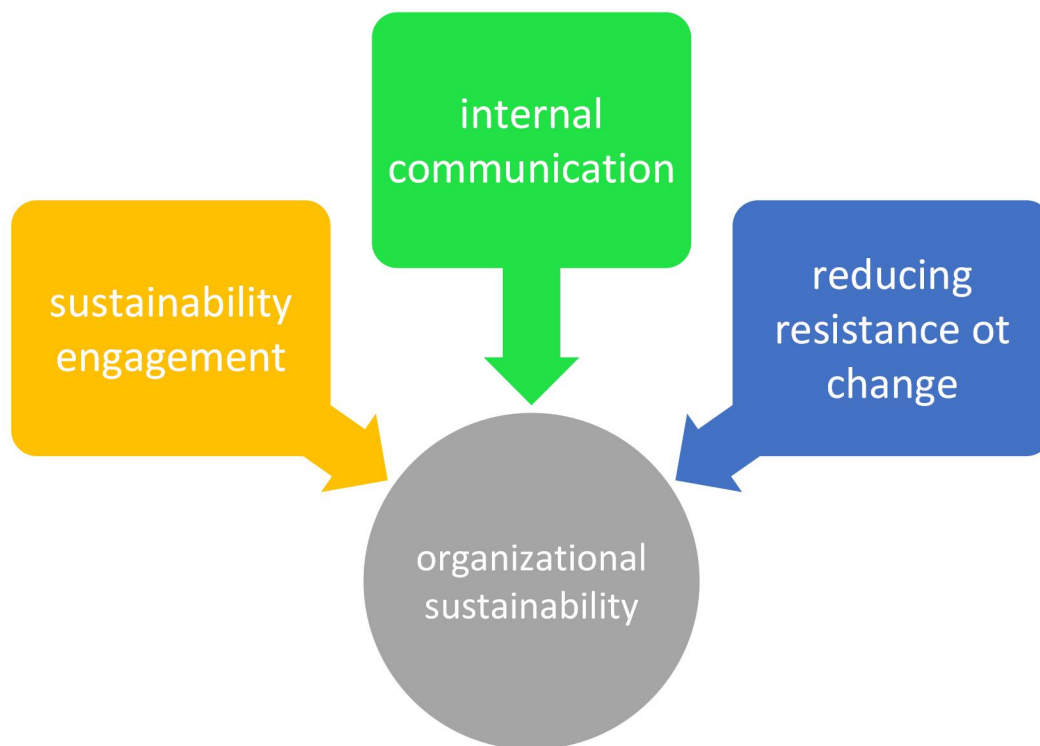


Figure 2: Organizational Sustainability

Sources: (MDPI)

Following are the research objectives determined for the study:

1. To determine the impact of organizational culture on the capital management
2. To determine the impact of organizational culture on the customer oriented management
3. To determine the impact of organizational culture on the monitoring and evaluation
4. To determine the impact of the capital management on the new drug performance
5. To determine the impact of the customer oriented management on the new drug performance
6. To determine the impact of monitoring and evaluation on the new drug performance

The role of organizational culture on the innovation performance of the firms has not been focused in the past research studies. Therefore, there exists a literature gap in the research sector and the present study will focus on this aspect of business development. There are still some research studies that support the influence the impact of business environment on the business performance, but the practical examples are not much efficient (Barrett, 2017; De-Pablos-Heredero et al., 2018; Hall et al., 2018). That is why the study will also work on the practical implementation of the results. The already present literature studies also does not provide the empirical evidence for the depiction of the effects of organizational cultural settings on the outcomes related to the innovative performance of the organization. That is why the present study will also focus on this aspect of business organization.

2 Review of literature

2.1 Theoretical background

Schein's model helps in the understanding of the norms and values of the organizations, their artifacts and cultural layers and how all of these effects the innovative behavior of the organization (Asefa, 2017; Huang, Chen, Mei, & Mo, 2019; Journeault, 2016; Manyazewal, 2017). Moreover, the theoretical model also helps in the understanding of sustaining the performance of the firm through providing information about the capital and customer oriented management. This makes the employees more engaged in the organizational activities and also provide the monitoring and evaluation help to the organization and how they can improve their performance (Muthuveloo, Shanmugam, & Teoh, 2017; Odor, 2018; Pekovic & Delmas, 2018; Ranängen, Cöster, Isaksson, & Garvare, 2018).

2.2 The impact of organizational culture on the capital management

In context to the capital management, organizational culture helps the employees to learn about the methods for problem solving with the external adaptations and the use of internal integration. According to the research study (Asefa, 2017; Huang et al., 2019; Ifeoma, 2019; Journeault, 2016; Manyazewal, 2017), this organizational culture could be used as a criteria to determine the innovative tendency of the organization. Using innovative strategies and having innovativeness in the processes and functioning of the organization, the capital management is easily maintained with a profitable market performance. Therefore, the following hypothesis has been generated from the studied literature:

H1: There is a significant relationship between the organizational culture and the capital management of an organization.

2.3 The impact of organizational culture on the customer oriented management

With a positive organizational culture, the employees feel more engaged in the activities related to product sale and its marketing and this result in the production of more innovative ideas. According to the research studies (Muthuveloo et al., 2017; Odor, 2018; Pekovic & Delmas, 2018; Ranängen et al., 2018; Kamasak & Cansever, 2019), the organizational culture determines the attitude of the employees and especially the ones that have to deal with the public. If the organizational culture focuses on the effective management of the customers and their responses, the customer oriented management will be easy to handle. Therefore, the following hypothesis has been generated from the studied literature:

H2: There is a significant relationship between the organizational culture and the customer oriented management of an organization.

2.4 The impact of organizational culture on the monitoring and evaluation

Through organizational culture, the values of the organizations and their underlying assumptions are shared among the employees from the ones that have used these to solve the problems in past. Thus, the researchers (Carayannis, Grigoroudis, Del Giudice, Della Peruta, & Sindakis, 2017; Gillespie, Privitera, & Gaspero, 2019; Yang, Bento, & Akbar, 2019) emphasize on the better organizational culture has better results on the various functions and processes of an organization and similar is the case with the monitoring and evaluation (Kehoe, Lepak, & Bentley, 2018; Pekovic & Delmas, 2018; Yusoff, 2019; Basiouni, 2020). Therefore, the following hypothesis has been generated from the studied literature:

H3: There is a significant relationship between the organizational culture and the monitoring and evaluation of an organization.

2.5 The impact of the capital management on the new drug performance

One of the best management practices that an organization can use include the efficient use of its available resources. This ensures that the available resources are efficiently used and also include the performance analysis of the new products and in case of pharmaceutical industries, the new drugs. Therefore, the following hypothesis has been generated from the studied literature:

H4: There is a significant relationship between the capital management of an organization and the new drug performance in the market.

2.6 The impact of the customer oriented management on the new drug performance

The organizations that takes care the view point of its customers are more focused on the needs of its customers (Manyazewal, 2017; Muthuveloo et al., 2017; Odor, 2018; Ranängen et al., 2018). Such pharmaceutical companies produce new drugs that are according to the needs of its customers which shows better market performance (Asefa, 2017; Hall et al., 2018; Huang et al., 2019; Journeault, 2016). Therefore, the following hypothesis has been generated from the studied literature:

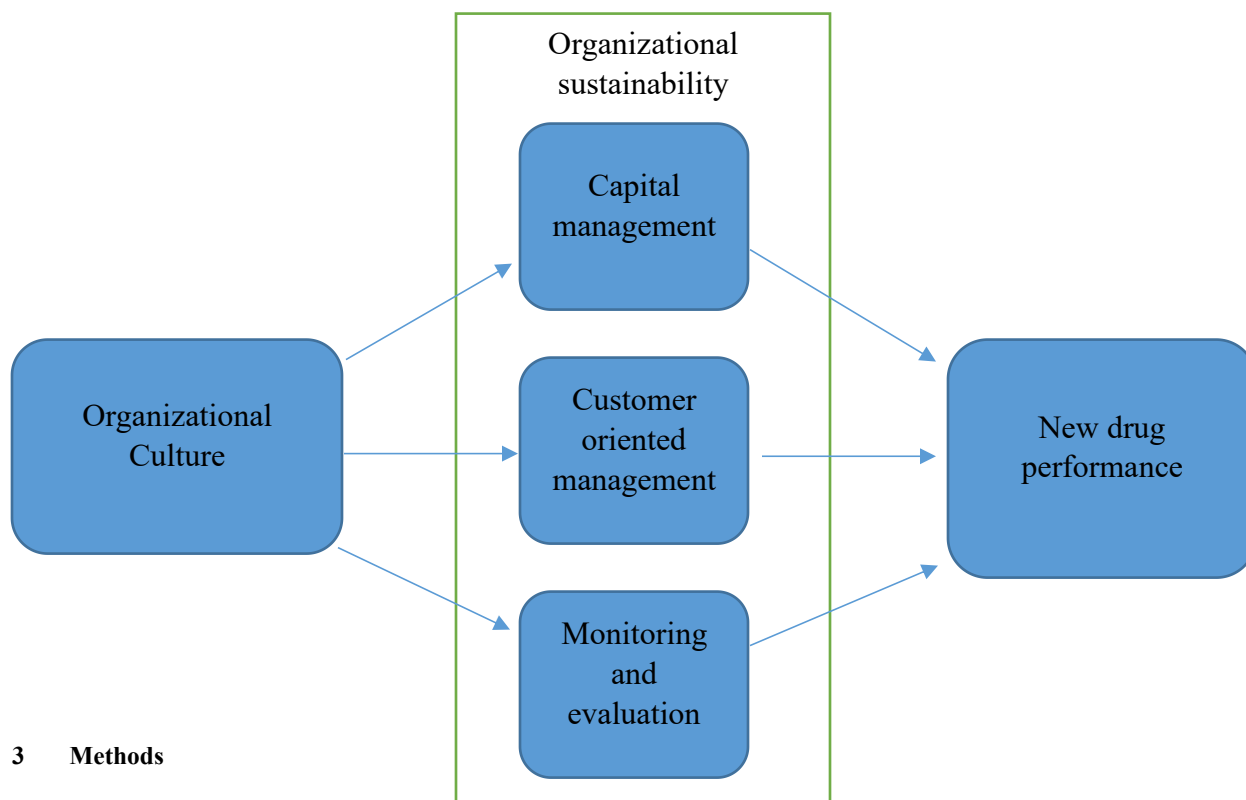
H5: There is a significant relationship between the customer oriented management of an organization and the new drug performance in the market.

2.7 The impact of monitoring and evaluation on the new drug performance

Regular monitoring and evaluation of the performance of any organizations ensures that all of the functions are acting properly and because of the habit of regular evaluation, the performance of the new drug can easily be accessed (Manyazewal, 2017; Muthuveloo et al., 2017; Odor, 2018; Ranängen et al., 2018). Therefore, the following hypothesis has been generated from the studied literature:

H6: There is a significant relationship between the monitoring and evaluation of an organization and the new drug performance in the market.

Theoretical model



3 Methods

3.1 Sample Characteristics

This study uses primary data collection and analysis procedures. The data was collected from the pharmaceutical organizations of Thailand. A questionnaire based survey was used to complete the study. The data collection procedure involved two steps, first phone calls were made to all pharmaceutical firms of the country and then detailed emails explaining the purpose of the study were sent to all respective heads of the firms. After attaining permissions questionnaires were distributed via online networks. The online networks were Survey monkey and Google forms. A total of 350 questionnaires were distributed among senior and middle level managers. From these 350, 15 weren't received back and 20 were discarded due to missing values. Thus the remaining 315 were used for analysis.

3.2 Measures

The scales were adapted from previous studies. The validity of the scale was asserted by two individual academicians. The questionnaire was also pretested on 25 MBA final year students and 5 middle level managers of similar organizations. The feedbacks from these individuals was used to make some adjustments in the questionnaire. A five point Likert scale is used to measure the responses.

3.2.1 Organizational Culture

Organizational culture, the latent exogenous variable was measured indirectly on the basis of its multidimensional constructs, these include organizational climate, teamwork, and leadership and employee empowerment. These items were adapted from the studies of Çakar and Ertürk (2010), Salas and Cannon-Bowers (2001), Laforet (2008) and Naqshbandi and Tabche (2018). Sample items include “during the process of open innovation, the individuals are often consulted on the strategic decisions and provide positive feedback about the climate”, “During the task performance, the members of the team encourage each other”, moreover, “Social gatherings are also carried out so that the employees could work together” and “Individuals are provided with efficient authority so that they can take appropriate decisions regarding their task”.

3.2.2 New Drug Performance

The performance of new drugs was measured on the basis of the new product performance scale by Cooper (1998).

3.2.3 Capital management

Capital management is a construct of the latent variable organizational sustainability. It refers to the level of financial, social capital and human resources managed by an organization. Three items were included in the measurement scale and it was modified and adapted from the studies of Maack and Davidsdottir (2015), Gannon and Roberts (2018) and Fili, Berggren, and Silver (2013). A sample item is “For the innovation projects, the diverse sources of the funds are managed accurately”.

3.2.4 Customer-oriented management

It is a construct of the latent variable organizational sustainability. Customer-oriented management was measured on the basis of the scale developed by Jeong, Pae, and Zhou (2006). Three items were adapted and modified according to the requirements of this study. A sample item is “the needs and behaviors of the customers are considered and understood so that a competitive advantage strategy could be developed”.

3.2.5 Mentoring and evaluation

It is a construct of the latent variable organizational sustainability. Monitoring and evaluation was measured on the basis of a three item scale developed from the studies of Nitkin and Brooks (1998) and Nah, Zuckweiler, and Lee-Shang Lau (2003). A sample item is “Relevant progress and information about the performance is often collected and analyzed on a regular basis”.

4 Results

4.1 Demographics

The control variables included in this study were gender, education and age. A total of 315 respondents were used to collect data, from these 52.4 percent respondents were male and 47.6 were female. 76.5 percent of the sample had an educational background equivalent to masters. And the age of 60.3 percent of the sample lies between 31 and 50. The disparity in gender division is because more men are employed in the pharmaceutical industry and the age and education figures represent the maturity and seniority of the sample.

4.2 Descriptive

The results of the descriptive analysis are represented in table 1. The mean values of most variables are centered on 3.5 and are approaching 4, which is an indication of the agreeableness of most respondents with the statements of the scale items. The skewness values are within the threshold range of -1+1, thus a normality distribution is followed by the sample. The presence of outliers is detected by evaluating the maximum and minimum values of the statistics and matching them with the end points of Likert scale, as a variation is observed thus outliers are present.

Table 1: Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation	Skewness	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error
NewDurgPrf	315	1.00	4.90	3.5667	1.09262	-.841	.137
MonEval	315	1.00	5.00	3.5003	1.15106	-.679	.137
CustMang	315	1.00	5.00	3.5600	1.10323	-.787	.137
CapMang	315	1.00	5.00	3.5657	1.07708	-.842	.137
OrgCulture	315	1.00	5.00	3.4447	1.10560	-.621	.137
Valid N (listwise)	315						

4.3 KMO

KMO values are an indication of the adequacy of the sample and whether or not it can be used for factor analysis. As table 2 depicts the sample is adequate i.e. KMO value is greater than 0.6 and is almost 1 thus the sample data can be used for factor analysis.

Table 2: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	.939
Bartlett's Test of Sphericity	Approx. Chi-Square
	9745.724
	df
	351
	Sig.
	.000

4.4 Factor analysis

The results of factor analysis are presented in table 3. The values of all scale items are greater than 0.7 and the issue of the loading of factors against one another is not observed. Therefore the factors contribute effectively in the construct variance.

Table 3: Rotated Component Matrix^a

	Component				
	1	2	3	4	5
DP1		.719			
DP2		.780			
DP3		.843			
DP4		.854			
DP5		.834			
DP6		.826			
ME1				.790	
ME2				.836	
ME3				.819	
CO1			.824		
CO2			.849		
CO3			.877		
CM1					.804
CM2					.851
CM3					.799
OC1	.849				
OC2	.867				
OC3	.874				
OC4	.899				
OC5	.894				
OC6	.887				
OC7	.869				
OC8	.841				
OC9	.853				
OC10	.855				
OC11	.824				
OC12	.848				

4.5 Convergent and discriminant validity

Convergent and discriminant validity is determined on the basis of AVE CR MSV and high self-correlation values. The table demonstrates CR and AVE values greater than 0.7 and 0.5. The correlation values are not related with other construct items and high self-correlation values are observed thus convergent and discriminant validity are present.

Table 4: Convergent and Discriminant Validity

	CR	AVE	MSV	CM	DP	ME	CO	OC
CM	0.904	0.758	0.336	0.871				
DP	0.943	0.735	0.366	0.540	0.857			
ME	0.928	0.812	0.366	0.580	0.605	0.901		
CO	0.928	0.811	0.342	0.477	0.513	0.585	0.900	
OC	0.927	0.782	0.239	0.466	0.489	0.370	0.420	0.884

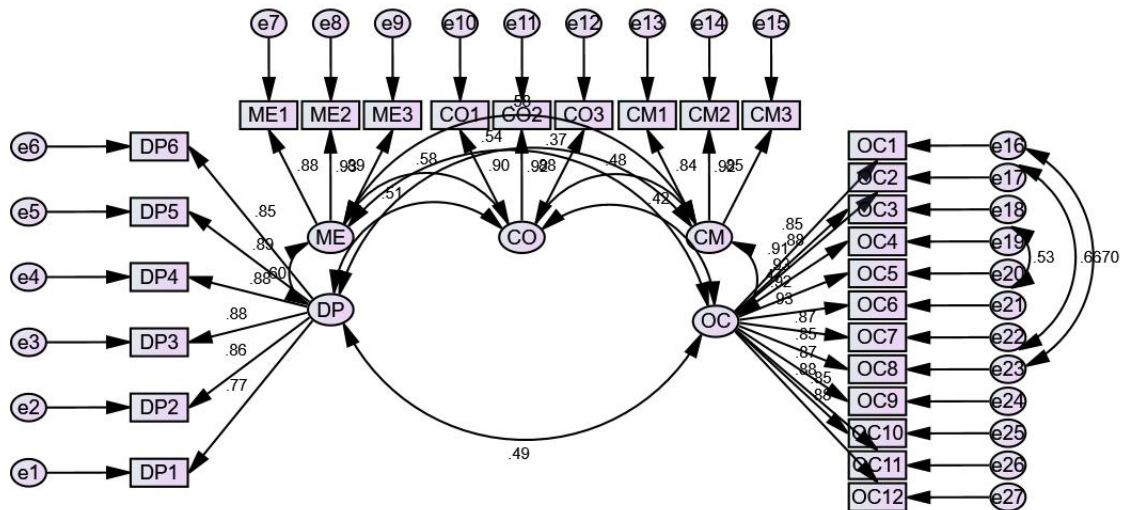
4.6 Model Fitness

The confirmatory factor analysis test is used to determine the fitness of the measurement model (S. G. Hassan, Hameed, Basheer, & Ali, 2020; Iqbal & Hameed, 2020), Fig 1 represents the measurement model. The model is fit as all the values of the indicators are according to the threshold ranges.

Table 5: Confirmatory Factors Analysis

Indicators	Threshold range	Current values
CMIN/DF	Less or equal 3	2.054
GFI	Equal or greater .80	.854
CFI	Equal or greater .90	.966
IFI	Equal or greater .90	.966
RMSEA	Less or equal .08	.058

Figure 1: CFA



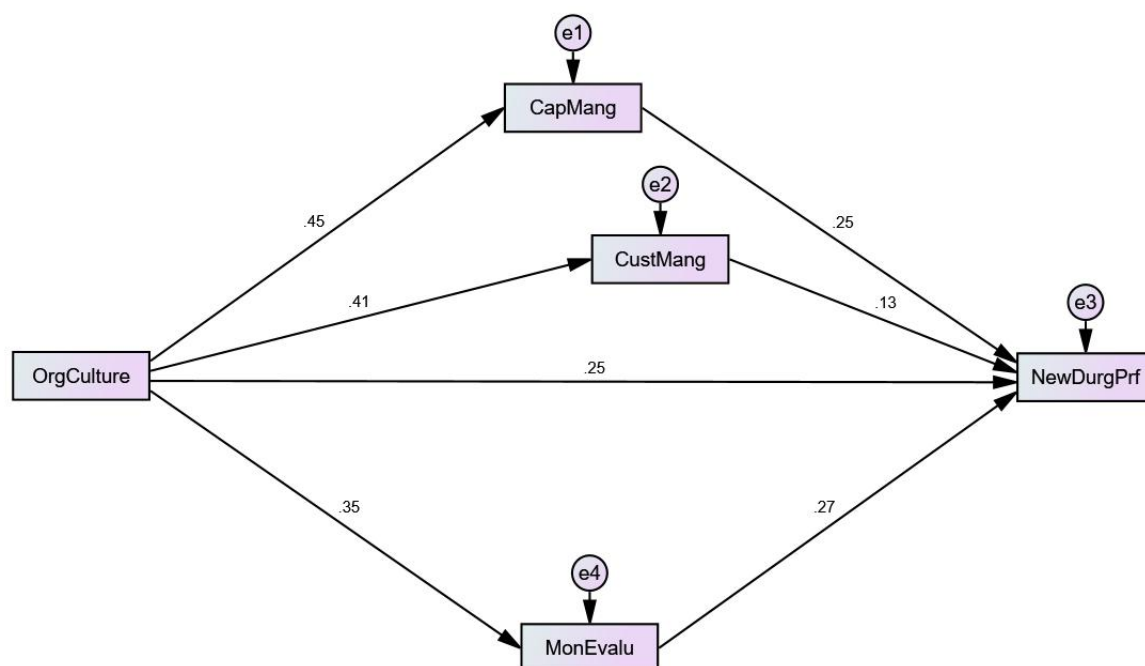
4.7 SEM

A unit increase in organizational culture, capital management, customer management, mentoring percent, percent, and evaluation produces a change and variation of 24.7 percent, 24.8 percent, 12.8 percent and 27.5 percent in the performance of a new drug in the market. The variations and relationships are significant therefore the hypotheses are accepted.

Table 6 Structural Equation Modeling

Total Effect	OrgCulture	CapMang	CustMang	MonEvalu
CapMang	.451***	.000	.000	.000
CustMang	.409***	.000	.000	.000
MonEvalu	.355***	.000	.000	.000
NewDurgPrf	.509***	.248**	.128	.275**
Direct Effect	OrgCulture	CapMang	CustMang	MonEvalu
CapMang	.451***	.000	.000	.000
CustMang	.409***	.000	.000	.000
MonEvalu	.355***	.000	.000	.000
NewDurgPrf	.247**	.248***	.128	.275**
Indirect Effect	OrgCulture	CapMang	CustMang	MonEvalu
CapMang	.000	.000	.000	.000
CustMang	.000	.000	.000	.000
MonEvalu	.000	.000	.000	.000
NewDurgPrf	.261**	.000	.000	.000

Figure 2: SEM



5 Discussion

In all aspects, the role of organizational culture has been significant in improving the overall performance of the sector because organizational culture mainly includes the firm's philosophy, expectations, and experiences (Naranjo-Valencia, Jiménez-Jiménez, & Sanz-Valle, 2019). Positive organizational culture helps sectors to enhance and improve the performance of their products because organizational culture promotes an effective innovation. According to the initial findings of the study, it is seen that organizational culture positively influences the performance of the new drugs and the hypotheses have been accepted. This is because of the positive contribution of organizational culture, it enhances the production process that helps to increase the performance of products. The results of the research also indicate that capital management significantly mediates the relationship between OC and new drug performance. Capital management is a fruitful financial strategy or technique that organizations used to enhance the overall performance of their products and services that ensures maximum efficacy in firm performance and its products (Secundo, Massaro, Dumay, & Bagnoli, 2018).

Furthermore, the results suggest that the impact of customer-oriented management COM insignificantly mediates the relationship between OC and new drug performance. That's why the hypotheses regarding the mediation role of COM have been rejected.

6 Conclusion

The Given study evaluates the need for a much better organizational culture to promote organizational sustainability, Capital management, Customer _Oriental management, monitoring and evaluating the process of the industry. The study suggests that such structural steps provide a wide range of revolutionary ideas and implementations to achieve the goals. The Data was gathered by the total number of 315 employees, out of which were 150 male and 165 were female of the various firms of the Pharmaceutical sector.

6.1 Implications and Limitations

The given study benefits the pharmaceutical field in building a better organizational culture to promote the better performance of the drug makers. The study includes innovative ideas and strategies that help a lot in improving performance at the managerial level but also the customer's relations and the service quality too. The findings related to capital management provide significant materials for those organizations that practice the concept of CM.

Some limitations in this research that must be pointed out. First, this study only focused on the arena of organizational culture in Thailand, thus, it is recommended to future researches that they should focus on another arena of organizational related concepts. It is also proposed to future studies that they should focus on the OCB theory regarding the leadership. Another limitation of the study is that this research takes just one independent variable to find the performance of the product. So, future studies should add other independent variables for more accurate results.

References

- Asefa, S. (2017). *Effect Of Generic Positioning Strategy On Organizational Performance Of Pharmaceutical Firms*. Addis Ababa University.
- Bamgbade, J. A., Kamaruddeen, A. M., & Nawi, M. (2017). Malaysian construction firms' social sustainability via organizational innovativeness and government support: The mediating role of market culture. *Journal of Cleaner Production*, 154, 114-124.
- Barrett, R. (2017). *The values-driven organization: cultural health and employee well-being as a pathway to sustainable performance*: Taylor & Francis.
- Basiouni, A. (2020). Peer coaching: the emergence of unintended culture change in senior management. *International Journal of Business Tourism and Applied Sciences*. 8(1). 7-17.
- Çakar, N. D., & Ertürk, A. (2010). Comparing innovation capability of small and medium-sized enterprises: examining the effects of organizational culture and empowerment. *Journal of small business management*, 48(3), 325-359.
- Carayannis, E. G., Grigoroudis, E., Del Giudice, M., Della Peruta, M. R., & Sindakis, S. (2017). An exploration of contemporary organizational artifacts and routines in a sustainable excellence context. *Journal of Knowledge Management*.
- Cooper, R. (1998). Benchmarking new product performance:: Results of the best practices study. *European Management Journal*, 16(1), 1-17.
- De-Pablos-Heredero, C., Montes-Botella, J. L., & García-Martínez, A. (2018). Sustainability in smart farms: its impact on performance. *Sustainability*, 10(6), 1713.
- Dranev, Y., Izosimova, A., & Meissner, D. (2018). Organizational Ambidexterity, Performance and Knowledge Management: Empirical Evidence from the Energy and Pharmaceutical Sectors. *Higher School of Economics Research Paper No. WP BRP*, 83.
- Felipe, C. M., Roldán, J. L., & Leal-Rodríguez, A. L. (2017). Impact of organizational culture values on organizational agility. *Sustainability*, 9(12), 2354.
- Fili, A., Berggren, B., & Silver, L. (2013). The impact of financial capital, human capital and social capital on the evolution of Business Angel Networks. *International Journal of Corporate Governance*, 4(3), 209-228.
- Gannon, B., & Roberts, J. (2018). Social capital: exploring the theory and empirical divide. *Empirical Economics*, 1-21.
- Gillespie, J. J., Privitera, G. J., & Gaspero, J. (2019). Biopharmaceutical Entrepreneurship, Open Innovation, and the Knowledge Economy. *Journal of Innovation Management*, 7(2), 59-77.
- Guerra-Júnior, A. A., de Lemos, L. L. P., Godman, B., Bennie, M., Osorio-de-Castro, C. G. S., Alvares, J., . . . Benguria-Arrate, G. (2017). Health technology performance assessment: real-world evidence for public healthcare sustainability. *International journal of technology assessment in health care*, 33(2), 279-287.
- Hall, J., Matos, S., Gold, S., & Severino, L. S. (2018). The paradox of sustainable innovation: the 'Eroom' effect (Moore's law backwards). *Journal of Cleaner Production*, 172, 3487-3497.
- Han, L. Y., Arokiasamy, L., & Marn, J. T. K. (2019). The Association between Ethical Customer Management and Organizational Sustainability in Pharmaceutical Industry in Malaysia. *Global Business & Management Research*, 11(1).
- Hassan, H., & Daud, S. (2017). Fostering Corporate Sustainability Performance through Integrated Knowledge Management Strategy and Eco-Innovation in Halal Pharmaceutical Companies: A Malaysia Case. *World J. Islam. Hist. Civilization*. <https://www.researchgate.net/publication/319122947>, 23-29.
- Hassan, S. G., Hameed, W. U., Basheer, M. F., & Ali, J. (2020). ZAKAT COMPLIANCE INTENTION AMONG SELF-EMPLOYED PEOPLE: EVIDENCE FROM PUNJAB, PAKISTAN. *AL-ADWAH*, 34(2), 80-96.
- Huang, S., Chen, J., Mei, L., & Mo, W. (2019). The Effect of Heterogeneity and Leadership on Innovation Performance: Evidence from University Research Teams in China. *Sustainability*, 11(16), 4441.
- Ifeoma, D.A. (2019). Personal Characteristics and job satisfaction among business educators in public secondary schools in Imo state, Nigeria. *International Journal of Business Tourism and Applied Sciences*. 7(2). 90-98.

- Iqbal, J., & Hameed, W. U. (2020). Open Innovation Challenges and Coopetition-Based Open-Innovation Empirical Evidence From Malaysia *Innovative Management and Business Practices in Asia* (pp. 144-166): IGI Global.
- Jeong, I., Pae, J. H., & Zhou, D. (2006). Antecedents and consequences of the strategic orientations in new product development: The case of Chinese manufacturers. *Industrial Marketing Management*, 35(3), 348-358.
- Journeault, M. (2016). The Integrated Scorecard in support of corporate sustainability strategies. *Journal of Environmental Management*, 182, 214-229.
- Journeault, M., Levant, Y., & Picard, C.-F. (2020). Sustainability performance reporting: A technocratic shadowing and silencing. *Critical Perspectives on Accounting*, 102145.
- Kamasak, R. & Cansever, C. (2019). The predictors of sustained competitive advantage: A study of Turkish leasing industry. *International Journal of Business Tourism and Applied Sciences*. 7(1), 39-43.
- Kehoe, R. R., Lepak, D. P., & Bentley, F. S. (2018). Let's call a star a star: Task performance, external status, and exceptional contributors in organizations. *Journal of Management*, 44(5), 1848-1872.
- Laforet, S. (2008). Size, strategic, and market orientation affects on innovation. *Journal of business Research*, 61(7), 753-764.
- Maack, M., & Davidsdottir, B. (2015). Five capital impact assessment: Appraisal framework based on theory of sustainable well-being. *Renewable and sustainable energy reviews*, 50, 1338-1351.
- Manyazewal, T. (2017). Using the World Health Organization health system building blocks through survey of healthcare professionals to determine the performance of public healthcare facilities. *Archives of Public Health*, 75(1), 50.
- Muthuveloo, R., Shanmugam, N., & Teoh, A. P. (2017). The impact of tacit knowledge management on organizational performance: Evidence from Malaysia. *Asia Pacific Management Review*, 22(4), 192-201.
- Nah, F. F.-H., Zuckweiler, K. M., & Lee-Shang Lau, J. (2003). ERP implementation: chief information officers' perceptions of critical success factors. *International journal of Human-computer Interaction*, 16(1), 5-22.
- Naqshbandi, M. M., & Tabche, I. (2018). The interplay of leadership, absorptive capacity, and organizational learning culture in open innovation: Testing a moderated mediation model. *Technological Forecasting and Social Change*, 133, 156-167.
- Naranjo-Valencia, J. C., Jiménez-Jiménez, D., & Sanz-Valle, R. (2019). Organizational culture effect on innovative orientation. *Management Decision*, 49(1), 55-72.
- Nitkin, D., & Brooks, L. J. (1998). Sustainability auditing and reporting: The Canadian experience. *Journal of business ethics*, 17(13), 1499-1507.
- Odor, H. O. (2018). Organisational culture and dynamics. *Global Journal of Management and Business Research*.
- Pekovic, S., & Delmas, M. A. (2018). Organizational Configurations for Sustainability and Employee Productivity: A Qualitative Comparative Analysis Approach.
- Ranängen, H., Cöster, M., Isaksson, R., & Garvare, R. (2018). From Global Goals and Planetary Boundaries to Public Governance—A Framework for Prioritizing Organizational Sustainability Activities. *Sustainability*, 10(8), 2741.
- Rowe, A. K., Labadie, G., Jackson, D., Vivas-Torrealba, C., & Simon, J. (2018). Improving health worker performance: an ongoing challenge for meeting the sustainable development goals. *Bmj*, 362, k2813.
- Salas, E., & Cannon-Bowers, J. (2001). Teamwork and team training.
- Secundo, G., Massaro, M., Dumay, J., & Bagnoli, C. (2018). Intellectual capital management in the fourth stage of IC research. *Journal of Intellectual Capital*.
- Swann, W. L. (2017). Modelling the relationship between entrepreneurial orientation, organizational integration, and programme performance in local sustainability. *Public management review*, 19(4), 542-565.
- Thakur-Wernz, P., Bruyaka, O., & Contractor, F. (2019). Antecedents and relative performance of sourcing choices for new product development projects. *Technovation*, 102097.
- van de Wetering, R., Mikalef, P., & Helms, R. (2017). Driving organizational sustainability-oriented innovation capabilities: a complex adaptive systems perspective. *Current opinion in environmental sustainability*, 28, 71-79.
- Yang, M., Bento, P., & Akbar, A. (2019). Does CSR Influence Firm Performance Indicators? Evidence from Chinese Pharmaceutical Enterprises. *Sustainability*, 11(20), 5656.
- Yusoff, Y. (2019). Linking Green Human Resource Management Bundle to Environmental Performance in Malaysia's Hotel Industry: The Mediating Role of Organizational Citizenship Behaviour Towards Environment. *International Journal of Innovative Technology and Exploring Engineering (IJITEE)*, 8 (9S3), 1625, 1630.

<https://www.mdpi.com/2071-1050/8/3/232>

<https://www.satalytics.com/why-do-customers-switch-brands/>