The Seybold REPORT

ISSN 1533-9211

DOI: 10.5281/zenodo.12698501

THE INFLUENCE OF HIGH-PERFORMANCE ORGANIZATIONS CREATIVITY DIGITAL TECHNOLOGY AND COMPETITIVE ADVANTAGES THAT EFFECT THE OPERATIONAL EFFECTIVENESS OF THE FISH MARKETING ORGANIZATION, MINISTRY OF AGRICULTURE AND COOPERATIVES

SUTAK JIRARATTANAWONG [1], TANAPOL KORTANA [2], BUNDIT PUNGNIRUND [3], CHOMPOO SAISAMA [4] and SOMRAT KAMOLWEKIN [5]

[1,2,3,4] Suan Sunadha Rajabhat University, Thailand.
E-Mail: [1]s63484945014@ssru.ac.th, [2]tanapol.ko@ssru.ac.th, [3]bundit.pu@ssru.ac.th, [4]chompoo.sa@ssru.ac.th,

Abstract

The Saphan Pla Organization is a state enterprise that aims to promote the growth and prosperity of the region's aquatic animal market and fishing industry. With the advent of newer technologies and globalization, the government sector has had to reengineer its operations to introduce new and efficient processes, which can help increase competitiveness and efficiency. The research aims to achieve the following objectives: 1) To investigate the levels of high-performance organizations, creativity, digital technology, competitive advantages, and operational effectiveness of the Saphan Pla Organization under the Ministry of Agriculture and Cooperatives. 2) To analyze the impact of high-performance organizations, creativity, digital technology, and competitive advantages on the operational effectiveness of the Saphan Pla Organization, under the Ministry of Agriculture and Cooperatives. 3) To develop a model for enhancing the operational effectiveness of the Saphan Pla Organization under the Ministry of Agriculture and Cooperatives. This research involves a combination of quantitative and qualitative research methods. The quantitative research involved a sample group of 460 personnel who work for the Bangkok Fish Bridge Organization, the Samut Prakan Fish Bridge Organization, the Samut Sakhon Fish Bridge Organization, and the Nakhon Si Thammarat Bridge Organization. The sample size was determined using the criterion of 20 times the observed variable, and a systematic sampling method was used. Data was collected using questionnaires and analyzed using structural Equations. For qualitative research, in-depth interviews were conducted with 20 executives and senior employees under the Saphan Pla Organization. The research results found that 1) the Saphan Pla Organization, Ministry of Agriculture and Cooperatives, shows a high level of high-performance organizations, creativity, digital technology adoption, competitive advantage, and operational effectiveness 2) high-performance organizations, creativity, digital technology, and competitive advantage positively influence the organization's operational effectiveness. These factors are statistically significant at the .05 level. 3) The researcher developed an effective operational model for the Saphan Pla Organization, called the HDBC Model (H =High-performance organization, D = Digital technology, B = Behavior Creativity, C = competitive advantage.) In addition, the qualitative research results have shown that the Saphan Pla Organization can improve its operational effectiveness by transforming it into an innovative organization. This can be achieved by providing employees in all sectors with knowledge of innovation management and by incorporating modern digital technology to develop service and operational systems that can better meet the needs and expectations of stakeholders and customers. The findings of this study can serve as a basis for formulating strategies to improve the operational efficiency of the Saphan Pla Organization under the Ministry of Agriculture and Cooperatives. This will help to elevate the standard of work, resulting in higher quality and increased efficiency in the future.

Keywords: High-Performance Organization /Operational Effectiveness / Saphan Pla Organization / Ministry of Agriculture and Cooperatives.

The Seybold REPORT
ISSN 1533-9211
DOI: 10.5281/zenodo.12698501

INTRODUCTION

In today's current circumstances, it is found that organizations receive impacts from rapid changes both from internal and external factors deriving from the development of technology and development policies of the country.

This affects in organizations and government units having to adapt themselves all the time to increase their competitive competencies including organizational development to extend coherent sustainability for future changes.

Therefore, modern organizations need to develop advanced information technology, develop working systems, personnel, tools, and resources management, to utmost efficiency and benefits so that the organizations would reach customers and manufacturing factors more conveniently.

Under the international standards control framework acceptable at country and regional levels, near future organizations have a tendency to develop to high performance organizations through adaptation to new type of working procedure, in which there is assignment of responsibilities to individual personnel to corporate in each work piece from the beginning until the end of the procedure. Moreover, such development needs to emphasize the development of the personnel of the organizations as well.

From the mentioned factors, organization leaders or policy makers need to increase personnel's capability to support competitiveness and development to excellence in both efficiency and effectiveness.

(Yosthong, 2018) Tosurvive firmly and sustainably, organizations have to increase their capability level. Management framework needs to contain new paradigm in management and development of human resources to adapt quickly and timely respond to erupting changes appropriately.

(Putsorn, 2018) The management has to look for ways in getting efficiency for the organization to be able to stay competitive. One of the ways is the development of the organization to become High Performance Organization: HPO.

LITERATURE REVIEW

Operation Effectiveness

This effectiveness is considered in 3 levels: corporate, departmental, and managerial levels. Corporate effectiveness is related to benefits, interests, and position in competition, growth and expansion of the organization, productivity, flexibility, interpersonal relationship between personnel, public responsibility, and government units interrelationship.

Departmental effectiveness concerns lower units of the organization which can benefit the organization as a whole. Managerial effectiveness is about the performance of personnel in various positions in the organization.

The Seybold REPORT
ISSN 1533-9211
DOI: 10.5281/zenodo.12698501

(Saraphat, 2019) The performance includes the work that results best in both quantity and quality, achieves objectives and goals set by each organization. The organizations adapt and develop regularly to be able to prevail in the changing situations of the world to achieve the organization's ultimate goals which is the best operation effectiveness since the judgment of how successful an organization is, depends on its operation effectiveness. (Uengpaiboonkit, 2017; Bondarouk & Brewster, 2016).

High Performance Organization Competitive condition in present market is very high in either private or government organizations. They all have to improve their capability and services to bear with pressures both from internal and external of the organization including pressures from within and outside of the country, i.e. For liberal economy system of the world of borderless trade, the Thai Government has developed potential to adapt to competitive situations of modern society and provide convenient public services for the people.

The government has assigned its offices according to types of public services, such as, administrative agencies, state enterprises, public organizations, and new government offices for better efficiency and customers' satisfaction. Moreover, the Government has adapted to high competitive marketing and continuously changing situations. (Putsorn, 2018) The organization with apparently clear operation plan, and with situational analysis of environmental impacts on working condition from all directions, is able to complete the mission set by objectives effectively, timely, and with excellent quality acceptable by the general public.

In addition, the high performance organization, consisted of good internal governance, capable and knowledgeable employees, with loyalty to the organization, committed to the success of the organization's objectives, will be a high potential organization instituting a High Performance Organization: HPO, which is sustainable in the long run. (Yosthong, 2018)

Hypothesis 1: High Performance of Organization Affects Organization's Operation Effectiveness

Hypothesis 2: High Performance of Organization Affects Creativity

Hypothesis 3: High Performance of Organization Affects Competition Advantage

Creativity: Creativity is the beginning of innovation. Organization cannot stop creativity which is deemed to be important for creation of innovation and application to achieve the competitive advantage effectively and sustainably. Innovation is deemed to be most efficient, for example, an organization introduces a new product which is a new product in the industry. For the last three years, the organization has been interested in getting product requirements through product research and development which is much needed.

The customers of the organization give specific information on the new product. When the new product/service is introduced, it results in the increase of the organization's sales, for example. Innovative organization, thus, is flexible and adaptable both in market competition and having good technology when compare to other organization. By emphasizing on competition that brings in strategy of building competitive advantage for business operation,

The Seybold REPORT
ISSN 1533-9211
DOI: 10.5281/zenodo.12698501

the organization can build its trademark to be well known and accepted as market leader. The result is that the organization can operate firmly and for a long time as the business of innovation that can grow continuously creating jobs, creating earnings, and increasing the country's economic strength in the future. (Thongarsa, Cheungsuvadee, & Sukserm, 2022; Theerapattanavong, Tiasuthikul, & Dockthaisong, 2018).

Hypothesis 7: Creativity Affects Organization's Operation Effectiveness

Digital Technology: Digital technology/media means a form of usage of product or service deriving from digital media, entertainment, data including operation systems, i.e. website, application, text in digital form, such as, voice message, video and picture, and various services, such as, entertainment data, retrievable communication, and consumable through various digital equipment; and measurable including environmental force, meaning follow up, analyze, organization's external environment that affect business operation)digital disruptive); usage form of digital technology/media of customer, competitor, and partner; social trend including laws and regulations, and risk assessment; opportunity of change for digital technology/media happening rapidly and affect business operation in analog form or traditional form of business operation; digital organization readiness meaning the organization has adapted its paradigm, culture, type and methodology of business operation, coordinate working procedure, technology readiness, digital equipment suited for used in working procedure, and accession of target customers, skill increment, digital readiness and digital mindset so that the organization is ready to be digital organization.(Sriyothin, & Pogard, 2021; Thongarsa, Cheungsuvadee, & Sukserm, 2022).

Hypothesis 4: Digital Technology Affects Creativity

Hypothesis 5: Digital Technology Affects Organization's Operation Effectiveness

Hypothesis 6: Digital Technology Affects Competitive Advantage

Competitive Advantage Competitive advantage is the creation of the organization's potential in presentation of business to customers in which the organization can create the following strategies: 1) Differentiation meaning creation of differentiation which is over the service of business competitor when compare with the competitor in response to customers' satisfaction to the service which is different from other general services; 2) Cost leadership meaning the strategy used by the management to manufacture product and service to the most efficiency and having manufacturing standard under lowest cost per unit, so the business can yield the highest profit as expected, in which the strategy used is the creation of relationship with manufacturing and servicing operators or in our network to get good product at inexpensive price, and specify order of steps of the manufacturing or servicing before, then, when rending the services, the work can achieve highest efficiency; 3) Quick response meaning the rapidness and flexibility in improving strategy or decision in the management to respond to the needs of consumer in shorter time than the competitor will meet up with customers and the market better; and 4) Market focus meaning the specific strategy used for specific product and service focusing to specific group of customer, focusing specific product and service in specific skill under limited resource so that business is competitive with competitor without disadvantage,

The Seybold REPORT
ISSN 1533-9211
DOI: 10.5281/zenodo.12698501

and with rather low cost since the focusing at one point. When business gains enough skills, it should respond to the customers' needs and making highest satisfaction. (Jaroenchai, 2017; Kiratipong, 2016; Ritthaisong, Johri & Speece, 2014).

Hypothesis 8: Competitive Advantage Affects Organization's Operation Effectiveness

METHODOLOGY

This research is using a mixed method, between qualitative research and qualitative research. The research population consisted of 817 employees working in Bangkok Fish Marketing Organization, Samutprakarn Fish Marketing Organization, Samutsakorn Fish Marketing Organization, and Nakornsrithammarat Fish Marketing Organization. Sample groups are divided into employees of Bangkok Fish Marketing Organization, Samutprakarn Fish Marketing Organization, Samutsakorn Fish Marketing Organization, and Nakornsrithammarat Fish Marketing Organization.

The size of sample groups derived by the analytical techniques of Structural Equation Model: SEM, using multiple variables method. The criteria of specifying sample size was 20 times of the observed variables used to specify sample size in this program. (Schumacher & Lomax, 1996; Hair et al., 1998) In this research, the sample size ration was 1 to 20 and there were 23 observed variables so the sample size was (23 x 20) = 460 samples.

The researcher gathered data using a questionnaire on high performance organization, digital technology, creativity, advantage in petition and operation effectiveness of Fish Marketing Organization, Ministry of Agriculture and Cooperatives; utilized the gathered data for the analysis of Structural Equation Modeling: SEM; and analyzed data using statistical program package.

For the qualitative research, the researcher gathered data by using in-depth interviews; specified target population and sample groups; visited sites to do in-depth interviews; specified sample groups using purposive sampling in order to apply the results of visiting sites for analysis and development of models of causal factors affecting high performance organization, digital technology, creativity, advantage in competition, and operation effectiveness of an organization to confirm how existing variables and factors were appropriate and agreeable.

RESULTS

A test of distribution was run on 18 empirical variables to be studied in the structural model on Chi-Square (χ^2) statistical test. If the finding was statistically significant at the level of .05, the tested variable had abnormal distribution. On the opposite, if the finding was not statistically significant at the level of .05, (p-value > .05), the tested variable had normal distribution.

The Seybold REPORT
ISSN 1533-9211
DOI: 10.5281/zenodo.12698501

The detail is as follows:

Table 1: Average Value (M), Standard Deviation Value (SD), Percentage of Dispersion Coefficient Value (%CV), Minimum Value (Min), Maximum Value (Max), Skewness Value (Sk), Elevation Value (Ku), and P-Value of Chi-Square (χ^2) of the studied empirical variable (n=460)

Variable	$\bar{x}$	*SD*	%CV	sk	ku	χ^2	*p*-value
LDSP	4.09	.86	21.03	-2.922	-1.628	11.186	.004
VISG	4.06	.94	23.15	-3.465	-3.838	26.738	.000
KMNG	4.19	.88	21.00	-3.026	-1.682	11.985	.002
PRCM	4.00	1.01	25.25	-3.473	-3.745	26.081	.000
PRDV	3.99	1.01	25.31	-3.458	-3.983	27.823	.000
STKD	3.98	.96	24.12	-2.802	-2.117	12.333	.002
PMOT	4.30	.70	16.28	-3.392	-4.014	27.619	.000
ENVD	4.22	.75	17.77	-3.678	-3.862	28.445	.000
DIGRN	4.31	.66	15.31	-3.239	-2.862	18.681	.000
DGMDT	4.25	.66	15.53	-3.059	-2.811	17.259	.000
DGUSE	4.28	.70	16.36	-3.842	-3.110	24.430	.000
INTV	4.17	.82	19.66	-3.010	-1.828	12.402	.002
FLUT	4.10	.94	22.93	-2.938	-3.672	22.116	.000
FXBE	3.98	.97	24.37	-2.809	-2.999	16.885	.000
DETL	4.04	.94	23.27	-3.512	-3.380	23.759	.000
COST	3.86	1.00	25.91	-2.292	-2.832	13.272	.001
MDIF	4.13	.64	15.50	-1.799	-.294	3.323	.190
SPEC	4.15	.67	16.14	-2.208	-2.445	1.854	.004
QUIC	4.03	.75	18.61	-2.071	-1.233	5.808	.055
DGRSP	4.20	.60	14.29	-1.666	-.172	2.805	.246
CUEMP	4.27	.66	15.46	-3.239	-2.862	18.681	.000
INTP	4.22	.63	14.93	-2.298	-1.411	7.269	.026
LNDEV	4.23	.66	15.60	-2.949	-2.604	15.477	.000

Note: Statistical Chi-Square (χ^2) value at a statistically significant level of .05 (p-value < .05) shows that distribution is abnormal.

The researcher had run a test on quality of variables in study in the structural model by examining each latent variable for its construct validity using Confirm Factor Analysis.

Consideration was given to weighing the Standardize Factor Loading whether it exceeded the value of .30 or not. If the value exceeded, such empirical variable was a factor of good latent variable and consideration was also given to the value of R^2 to test for reliability of the studied empirical variable, including a test for reliability of the latent variable directly by considering it together with the latent variable's Construct Reliability, ρ_c, which should have the higher or equal value of .60 or up, and the value of Average Variable Extracted, ρ_v should have a value higher or equal value of .50 or up. The detail is as follows:

The Seybold REPORT
ISSN 1533-9211
DOI: 10.5281/zenodo.12698501

Table 2: Factor Loadings (n = 460)

Variables	factor loading (λ)	error (θ)	t	R^2
High Performance Organization (HGPOR)				
Leadership (LDSP)	.78	.38	19.76	.62
Vision and Strategy (VISG)	.89	.21	23.68	.79
Knowledge Mgmt. (KMNG)	.80	.36	20.39	.64
Procedure Mgmt. (PRCM)	.90	.20	23.95	.80
Personnel Dvmt. (PRDV)	.88	.23	23.40	.77
Steak Holder Recog. (STKD)	.81	.34	20.63	.66
Performance Recog. (PMOT)	.44	.81	9.69	.19
Digital Technology (DGTEC)				
Environment Force (ENVD)	.83	.32	21.07	.68
Digital Org. Readiness (DIGRN)	.85	.28	22.00	.72
Digital Media Tech. (DGMDT)	.84	.29	21.67	.71
Digital Data Use (DGUSE)	.88	.23	23.12	.77
Being Creative (BCRET)				
Initiative Thinking (INTV)	.77	.40	19.32	.60
Fluent Utilization (FLUT)	.84	.30	21.66	.70
Flexible Behavior (FXBE)	.92	.16	25.26	.84
Detail Thinking (DETL)	.90	.18	24.58	.82
Competitive Advantage (CPTA)				
Cost Leadership (COST)	.53	.42	8.69	.58
Making Difference (MDIF)	.46	.47	6.61	.53
Specific Focus (SPEC)	.40	.44	7.28	.56
Quick Response (QUIC)	.96	.07	11.29	.93
Organizational Operation Effectiveness (OGPEF)				
Budget and Resource (DGRSP)	.91	.18	24.27	.82
Customer and Employee (CUEMP)	.81	.34	20.41	.66
Internal Procedure (INTP)	.87	.25	22.63	.75
Learning and Devmt. (LNDEV)	.81	.34	20.46	.66
$\rho_c = .91$ $\rho_v = .72$				
chi-squre = 0.60, *df* = 1, *p*-value = 0.43743, RMSEA = 0.000				

Table 3: Results of Estimation of Parameter Coefficient Values of Direct Effect, Indirect Effect, and Total Effect) (n=460)

Dependent Variables	R^2	Effects	Initial Variable			
			Being Creative (BCRET)	Competitive Advantage (CPTA)	Organizational Operation Effectiveness (OGPEF)	Digital Technology (DGTEC)
Being Creative (BCRET)	.62	DE	-	-	.74*(15.80)	.59*(6.75)
		IE	-	-	-	-
		TE	-	-	.74*(15.80)	.59*(6.75)
Competitive Advantage (CPTA)	.81	DE		-	.79*(12.04)	.49*(4.95)
		IE	-	-	-	-
		TE	-	-	.79*(12.04)	.49*(4.95)
Organizational Operation Effectiveness (OGPEF)	.71	DE	.53*(4.58)	.45*(3.01)	.40*(4.77)	.75*(12.08)
		IE	-	-	.37*(4.67)	.21*(2.48)
		TE	.53*(4.58)	.45*(3.01)	.77*(5.76)	.96*(16.06)
χ^2= 404.93, *df* = 204, *p*-value = .00000, χ^2/df = 1.98, RMSEA = .048, RMR = .046, SRMR = .031, CFI = .97, GFI = .94, AGFI = .91, CN = 218.80						

*Statistically significant at the level of .05

Note: In parentheses are statistical tested values of t. If the value is not between -1.96 to 1.96, the value is

ISSN 1533-9211

DOI: 10.5281/zenodo.12698501

statistically significant at the level of .05.

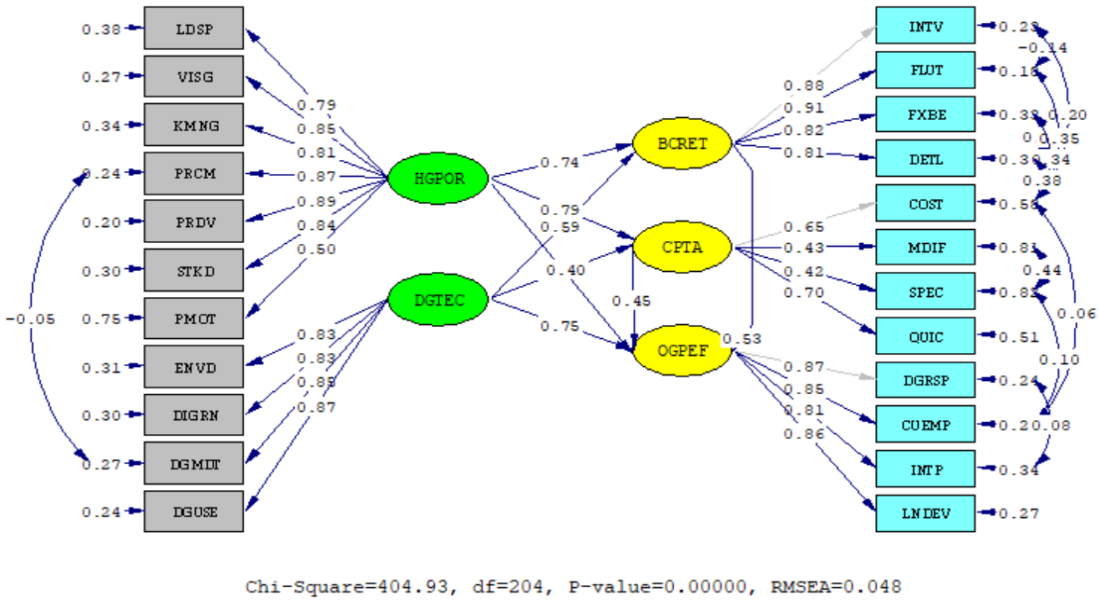

Figure 1: Analytical Model (n=460)

Adjustment was made on structural model before the analysis. The researcher adjusted the structural model according to the hypotheses to be harmonious with the empirical data, by letting the variant values of the standard inaccuracy (θ) of empirical variables (totaling 13 couples), to be related, (df before the correction was 121 and df after the correction was 108). Finally, the adjusted model was harmonious with the empirical data. The harmony was considered from fit indexes as follows: χ^2= 404.93, *df* = 204, *p*-value = .00000, χ^2/df = 1.98, RMSEA = .048, RMR = .046, SRMR = .031, CFI = .97, GFI = .94, AGFI = .91, CN = 218.80.

The results of fit index test were as follows: χ^2= 404.93, *df* = 204, *p*-value = .00000, which did not pass the criteria since it was not statistically significant (p-value > .05). However, since the test statistic value, χ^2 was sensitive to the size of sample groups, the researcher has considered from the value of χ^2/df together, which derived the value of 1.98, which was considered passed the set criteria since it was at a lower value than 2.00, RMSEA = 0.48, which was considered passed the set criteria since it was at a lower value than .05, RMR = .046, considered passed the set criteria since it was at a lower value than .05, SRMR = .031, considered passed the set criteria since it was at a lower value than .05 CFI = .97 considered passed the set criteria since it was at a lower value than .90, GFI = .94 considered passed the set criteria since it was at a higher value than.90 AGFI = .91 considered passed the set criteria since it was at a higher value than.90 and CN = 218.80 considered passed the set criteria since it was at a higher value than 200.00 From such fit index values, it was concluded that the corrected structural model was harmonious with the empirical data, and the estimation of parameter values in such model was acceptable.

The Seybold REPORT
ISSN 1533-9211
DOI: 10.5281/zenodo.12698501

CONCLUSION

The structural model on the effects of causal factors which affect high performance organizations, creativity, digital technology, and the competitive advantage affecting the operation of Fish Marketing Organization, Ministry of Agriculture and Co-operatives, which was adjusted, was harmonious with the empirical data at an acceptable level. Considering from the fit index, as follows: χ^2= 404.93, *df* = 204, *p*-value = .00000, χ^2/df = 1.98, RMSEA = .048, RMR = .046, SRMR = .031, CFI = .97, GFI = .94, AGFI = .91, CN = 218.80. There was an estimation of values in the structural model as follows:

1) High performance organization (HGPOR) directly affects organizational operation effectiveness (OGPEF) at an influential coefficient value equals to .40, which was statistically significant at the level of .05, representing feasibility of Hypothesis 1, which certifies that high performance organization affects organizational operation effectiveness.
2) High performance organization (HGPOR) directly affects creativity (BCRET) at an influential coefficient value equals to .74, which was statistically significant at the level of .05, representing feasibility of Hypothesis 2, which certifies that high performance organization affects creativity.
3) High performance organization (HGPOR) directly affects competitive advantage (CPTA) at an influential coefficient value equals to .79, which was statistically significant at the level of .05, representing feasibility of Hypothesis 3, which certifies that high performance organization affects competitive advantage.
4) Digital technology (DGTEC) directly affects creativity (BCRET) at an influential coefficient value equals to .59, which was statistically significant at the level of .05, representing feasibility of Hypothesis 4, which certifies that digital technology affects creativity.
5) Digital technology (DGTEC) directly affects organizational operation effectiveness (OGPEF) at an influential coefficient value equals to .75, which was statistically significant at the level of .05, representing feasibility of Hypothesis 5, which certifies that digital technology affects organizational operation effectiveness.
6) Digital technology (DGTEC) directly affects competitive advantage (CPTA) at an influential coefficient value equals to .49, which was statistically significant at the level of .05, representing feasibility of Hypothesis 6, which certifies that digital technology affects competitive advantage.
7) Creativity (BCRET) directly affects organizational operation effectiveness (OGPEF) at an influential coefficient value equals to .53, which was statistically significant at the level of .05, representing feasibility of Hypothesis 7, which certifies that creativity affects organizational operation effectiveness.
8) Competitive advantage (CPTA) directly affects organizational operation effectiveness (OGPEF) at an influential coefficient value equals to .45, which was statistically significant at the level of .05, representing feasibility of Hypothesis 8, which certifies that

The Seybold REPORT
ISSN 1533-9211
DOI: 10.5281/zenodo.12698501

competitive advantage affects organizational operation effectiveness.

9) Creativity (BCRET), Competitive advantage (CPTA), High performance organization (HGPOR), and Digital technology (DGTEC), together were able predict organizational operation effectiveness (OGPEF) at a percentage of 71.

References

1) Bondarouk, T., & Brewster, C. (2016). Conceptualising the future of HRM and technology research. **The International Journal of Human Resource Management, 27**(21), 2652- 2671.

2) Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. C. (1998). **Multivariate data analysis** (5th ed.) Printice-Hall.

3) Jaroenchai, K. (2017). **Logistics management model to create competitive advantage of the automotive and automotive parts industry in Thailand**. (Doctoral dissertation). Rajabhat Maha Sarakham University.

4) Kiratipong, P. (2016). **Strategies competitive advantage that affect the success of the operation base on The Balance Scorecard concept in Small and Medium Enterprises food processing in Supanburi Province.** (Doctoral dissertation). Silpakorn University

5) Putsorn, N. (2018). **Factors Affecting Management of High Performance Organizations of the Thailand Volleyball Association**. (Master of Public Administration).

6) Valaya Alongkorn Rajabhat University under the Royal Patronage.

7) Ritthaisong, Y., Johri, L. M., & Speece, M. (2014). Sources of sustainable competitive advantage: The case of rice-milling firms in Thailand. **British Food Journal, 116**(2), 272-291.

8) Saraphat, S., Sookrit, N., & Kansupkrirk, N., Sutthiprapa, N., Charthaisong, N., Bangsiri, P.

9) Sawangduan, S., & Keawphetplai, S. (2019). Principles and theories of organization performance measurement using balanced scorecard and its application. **Siam Academic Review, 20**(34), 35-48.

10) Schumacker, R. E., & Lomax, R. G. (1996). **A beginner's guide to structural equation modeling.** Lawrence Erlbaum Associates.

11) Sriyothin, S., & Pogard, P. (2021). Developing creative thinking in problem-solving decisions towards innovation in organization: The role of leaders in 21st century and the development of personnel competencies**. UMT-Poly Journal, 18**(1), 525-538.

12) Theerapattanavong, T., Tiasuthikul, P., & Dockthaisong, B. (2018). Problems of the Digital Technology Strategy for Public Administration. **Valaya Alongkorn Review (Humanities and Social Science), 8**(1), 91-102.

13) Thongarsa, N., Cheungsuvadee, K., & Sukserm, T. (2022). The Casual Relationship between Corporate Entrepreneurship, Organizational Creativity, Organizational Innovationand Financial Performance in Small and Medium Enterprises. **Journal of MCU Peace Studies,10**(4), 1625-1639.

14) Uengpaiboonkit, A. (2017). The development of causal model of competitive advantage that affects the performance of SMEs in three provinces,Thailand. **ASEAN Journal of Management & Innovation, 4**(2), 9-20.

15) Yosthong, D. (2018). **Quality management approach toward high performance nursing organization: A case study of Siriraj Hospital.** (Doctoral dissertation). Siam University