

# THE INFLUENCES OF BUSINESS ENVIRONMENT, BUSINESS STRATEGIES AND BUSINESS INNOVATION ON THE BUSINESS PERFORMANCE OF ELDERLY SERVICE IN THAILAND

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## Abstract

Elderly care service businesses are in high demand due to various reasons. The primary reasons that families of elderly members often lack the time or knowledge to provide adequate care. Additionally, the prevalence of chronic diseases among the elderly has made them more dependent and in need of care, both at home and in care facilities. This research aims to 1) Study the level of the business environment, business strategy, business innovation, and performance of elderly services business in Thailand, 2) Study the influence of the business environment business strategy, and business innovation that affects the performance of the elderly service business in Thailand 3) create a model to increase the performance of the elderly service business in Thailand. This research uses a combination of methods between quantitative and qualitative research. In quantitative research, the sample consisted of 360 elderly care service entrepreneurs. The sample was determined by using the 20 times the observation variable criterion. A multi-stage random sampling method was used to collect data using a questionnaire. Data were analyzed by structural equation modeling, and the qualitative research method is the in-depth interview. The main informants were 17 experts or experienced elderly care providers. The research results found that 1) business environment, business strategy, business innovation, and the performance of the elderly services business in Thailand are at a high level. 2) business environment, business strategy, and business innovation affect the performance of the elderly service business in Thailand. Furthermore, 3) a model to increase the performance of the elderly care service business in Thailand. The researcher developed the BP-ESIA model (BP: Business Performance, E: Environment Business, S : Strategic Business, I : Innovation Business, A: Adding the Value Enhancement). In addition, the qualitative research results also found that entrepreneurs should use management innovations and new technologies to build customer loyalty in Thailand service businesses., Medical and health that meet customers' needs use digital marketing strategies to promote information to effectively reach consumers of the service establishment to create a competitive advantage with competitors. The results of this research can be applied as a guideline for setting up corporate policies to support entrepreneurs providing sustainable elderly care services in Thailand.

**Keywords:** Age Society, Business Performance, Business Strategy, Business Innovation.

## INTRODUCTION

The transformation into a global elderly society is considered a great opportunity for the service industry in Thailand. It leads to the increased value of goods and services production. Business owners are developing high-quality service systems, utilizing advanced technology in production, and expanding opportunities for new entrepreneurs to enter the market, forming a large-scale industry (Department of Business Development, 2019). There is continuous growth potential based on the relationship with the increasing population, the

income of elderly families, and the challenges faced by business owners in developing elderly care services. This allows them to compete with international elderly service industries. The situation reflects the importance and interest from both the public and private sectors (Doyle & Capon, 2016).

Thailand stands out with its rich cultural heritage and natural beauty. Thai people are known for their politeness, gentleness, knowledge, and skills, widely recognized both domestically and internationally. Additionally, Thailand possesses modern medical tools, catering to the diverse needs of the elderly in terms of healthcare and pharmacy services, easy access to services, a focus on excellence, and the potential for short-term and long-term elderly care service business operations.

The limitations of the elderly care service business lie in the confidence regarding quality and standards. The perspective of service users towards elderly care has been affected by the economic downturn caused by the COVID-19 situation. This has led families and the elderly to cut down on expenses. Moreover, the number of expert personnel in this field is not substantial. The elderly healthcare service industry in Thailand is promoting business development for elderly care, but the progress is not significant, and the business identity is not clearly defined. Building international confidence in this sector remains a challenge.

The operation of the elderly care service business poses significant challenges and the customer base is expanded, necessitating preparedness for the increasingly intense competitive environment (Juntrapirom, 2017). Due to these reasons, researchers are interested in studying the influences of business environment, business strategies, and business innovations on business performance for providing elderly care services in Thailand. This study is beneficial for business owners and elderly care facilities as it serves as a guide for business development and strategy formulation. New entrepreneurs interested in the elderly care business can use the findings to make the decision, creating opportunities for Thailand's elderly care service industry.

## LITERATURE REVIEW

### Business Environment

The business environment encompasses both external and internal factors. External factors include societal aspects such as cultural norms, technology, economics, beneficiary groups, political regulations, while internal factors involve shareholders, suppliers, customers, employees, competitors, creditors, and communities. These factors collectively impact the operations of service businesses (Tyagi & Gupta, 2013; Joseph & Granot, 2011). The business environment comprises economic regulations, technology, social values, demographics, and the competitive landscape involving suppliers, substitute products, key competitors, buyers, and new entrants (Nusem et al., 2017; Wisedsin et al., 2020). It is subject to changes in environmental dynamism and competitive conditions (Joseph & Granot, 2011). The marketing environment includes employees, suppliers, shareholders, and customers, while the general environment incorporates social and cultural aspects, technology, economics, political and

legal factors, and international relations, all of which influence business operations (Joseph & Granot, 2011; Matiku et al., 2021; Kotler & Keller, 2012).

### **Business strategies**

Business strategies have a significant impact on the operations of service businesses (Kotler & Keller, 2012). Competition involves cost reduction based on product or service characteristics, pricing lower than competitors, or strategically choosing suitable locations (Kotler & Keller, 2012). Providing convenience to customers by expanding distribution channels or service channels, offering supplementary services, providing off-site services, and offering services outside regular business hours are essential strategies (VanVactor, 2021). If production exceeds market demand, price reduction becomes necessary to attract customers, leading to increased competition (VanVactor, 2021; Helfert, 2009).

Business transformation through differentiation and customer satisfaction is fundamental for gaining a competitive edge and satisfying stakeholders. Stakeholders, including supporting customers, employees, supporting resources from suppliers, material and service support for the community, legal penalties, environmental considerations, financial penalties for shareholders, play a vital role in business operations. Strategies encompass creating unique products and services that customers perceive as distinctive, involving innovation in product development, and marketing activities (Srivastava & Prakash, 2019). The emphasis is on building a brand identity that resonates with customers, containing innovative product development and marketing activities (Kotler & Keller, 2012; Marshall et al., 2009).

### **Business innovation**

Business innovation in service operations focuses on service quality, holistic quality of life (Rodriguez et al., 2019; Kotler & Keller, 2012), and institutional care services (Block et al., 2010). The domestic service quality management in terms of technical information, interpersonal relationships and referral systems influences organizational performance (Edge & Barnard, 2012; Kotler & Keller, 2012). The effectiveness of service cooperation, service delivery patterns, quality improvement processes, and various dimensions of client satisfaction and quality of life are influenced. This includes professional quality, service quality, equal and timely service, efficiency, readiness, and continuous improvement using modern technology (Kotler & Keller, 2012; Kerdpitak et al., 2021; Kerdpitak et al., 2023).

### **Business Performance**

The business performance, following the Balanced Scorecard (BSC) approach, consists of four main components: cost reduction, the ability to access consumers, diverse service needs, and employee growth and learning. The effective operation of hospitals focusing on operational excellence, as conceptualized by Ballou (2004) comprises five dimensions: leadership and organizational governance outcomes, customer-focused outcomes, workforce-focused outcomes, process outcomes, and financial outcomes. Consistently, Barry & Evans (2004) and Kotler & Keller (2012) emphasize that continuous growth and business-driven sustainability are crucial.

Financial performance covers returns on investment and assets, while product performance encompasses market share, sales, and shareholder return (Barry & Evans, 2004; Ballou, 2004). These factors contribute to the growth of service businesses (Ballou (2004)). Success in adding value to the organization in the future reflects in sustainable revenue growth and creating pathways for customers, suppliers, employees, technology, processes, and new innovations. This leads to increased sales and profits (Rahman & Fatima, 2011; Barry & Evans, 2004).

From the literature review above, the following hypotheses are proposed:

H1: Business environment positively influence business performance of elderly care services in Thailand.

H2: Business environment positively influence business strategies of elderly care services in Thailand.

H3: Business environment positively influence business innovation of elderly care services in Thailand.

H4: Business strategies positively influence business Innovation of elderly care services in Thailand.

H5: Business innovation positively influence business performance of elderly care services in Thailand.

H6: Business strategies positively influence business of elderly care services in Thailand.

## **METHODOLOGY**

This research employs an explanatory sequential mixed methods research design, combining quantitative and qualitative research methods to enhance the overall quality of the study. The quantitative research was the primary approach. The population consisted of 6,154 businesses providing elderly care services certified by the Department of Health Service Support, Ministry of Public Health (Department of Business Development, 2021). The unit of analysis for was the organizational level. The quantitative sample size was determined based on the rule of thumb, using 15-20 times greater than the number of observed variables (Hair, 2009). Literature and related research was review based on the variables influencing the performance of elderly care service businesses in Thailand, including business environment, business strategies, and business innovation. The data were summarized into research terminology. The cause and effect relationship was analyzed to test hypotheses and confirm theories. The researchers initiated the study by reviewing data from literature, theories, and academic articles related to the research topic. This process aimed to establish a conceptual framework and research hypotheses. The indicators for variable measurement according to the research framework were outlined.

Afterwards, a questionnaire was developed using 5-point Likert scale Likert (1932). The measurement instrument's validity and reliability were tested before using it for data collection and then structural equation model (SEM) analysis was employed. For qualitative, in-depth interviews were conducted with 17 experts with experience in elderly care services.

Stratified random sampling was used based on the types of elderly care businesses in proportion to the population. The qualitative data were analyzed, interpreted, and summarized for describing the quantitative analysis in more details.

## RESULTS

The normal distribution of the 18 observed variables studied in the structural equation model (n=360) was examined, using the chi-square test ( $\chi^2$ ). The statistical significance at the .05 level represented non-normally distribution of such variables. On the other hand, if it was found to be not statistically significant (P-value > .50), it revealed normal distribution of such variables, as shown in Table 1.

**Table 1: Descriptive statistics observed variables (n = 360)**

Variable	M	S.D.	%CV	sk	ku	$\chi^2$	P-value
SE	4.18	.80	19.14	-3.484	-3.311	23.105	.000
TE	4.21	.80	19.00	-3.605	-3.949	28.590	.000
CE	3.87	.79	20.41	-1.485	-.752	2.769	.250
CSE	3.80	1.02	26.84	-2.263	-3.157	15.087	.001
AE	4.02	.90	22.39	-2.927	-2.769	16.233	.000
CA	3.97	.92	23.17	-2.691	-2.936	15.863	.000
IS	4.00	.83	20.75	-2.241	-2.131	9.563	.008
CS	4.13	.79	19.13	-2.950	-2.515	15.027	.001
DM	3.97	.86	21.66	-2.309	-1.974	9.229	.010
SQ	4.05	.91	22.47	-3.279	-3.242	21.257	.000
KTC	4.42	.82	18.55	-6.430	-.906	42.167	.000
RC	4.23	.81	19.15	-3.960	-2.755	23.275	.000
SIC	4.25	.81	19.06	-4.092	-2.559	23.297	.000
NC	4.27	.85	19.91	-4.839	-2.667	3.532	.000
FP	3.98	.99	24.87	-3.122	-3.277	2.487	.000
CP	4.21	.82	19.48	-3.727	-2.743	21.412	.000
IP	4.03	.87	21.59	-2.702	-3.246	17.836	.000
LG	4.28	.80	18.69	-4.278	-2.831	26.317	.000

Note: chi-square ( $\chi^2$ ) with statistical significance (P-value <.05) indicates a non-normal distribution

The researchers have checked the quality of the variables studied in the model by testing construct validity of each latent variable using the Confirm Factor Analysis technique by considering the greater than .30 factor loadings to confirm a good observed variable. It is considered from the  $R^2$  to check reliability of the empirical variables as well as directly examining the Construct Reliability ( $\rho_c > .60$ ) of the latent variables and Average Variable Extracted,  $\rho_v > 0.50$ ) (Diamantopoulos and Sigauw, 2000), as detailed as follows.

**Table 2: Factor Loadings (n = 360)**

Variables	factor loading ( $\lambda$ )	error ( $\theta$ )	t	R <sup>2</sup>
Business environment (BE)				
Social environment (SE)	.58	.36	9.84	.64
Task environment (TE)	.66	.37	11.36	.63
Competitive environment (CE)	.73	.36	12.79	.64
Customer demand environment (CSE)	.57	.37	9.78	.63
Adjustment to environment (AE)	.59	.36	10.04	.64
Business strategies (BS)				
Competitive advantage (CA)	.63	.31	11.4	.69
Changing situation (IS)	.72	.39	13.71	.61
Corporate strategies (CS)	.66	.36	12.44	.64
Digital marketing (DM)	.65	.38	12.24	.62
Service quality (SQ)	.71	.30	13.35	.70
Business innovation (BI)				
Knowledge transferring culture (KTC)	.65	.58	12.58	.42
Resources and Capabilities (RC)	.73	.47	14.45	.53
Service development (SIC)	.86	.26	17.75	.74
Network cooperation (NC)	.58	.66	11.11	.34
Business performance (BP)				
Financial performance (FP)	.55	.39	9.40	.61
Customer performance (CP)	.79	.38	15.01	.62
Internal process (IP)	.79	.37	14.68	.63
Learning and development (LG)	.61	.33	11.52	.67
$\rho_c = .84 \rho_v = .57$				
chi-square = 0.41, df = 1, P-value = 0.52328, RMSEA = 0.000				

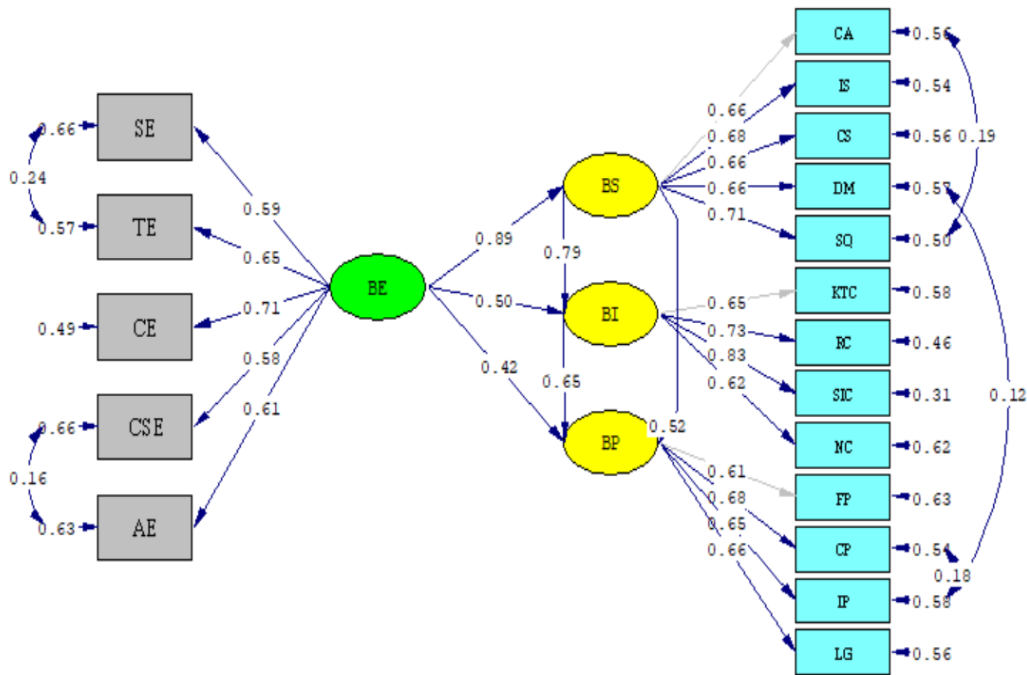
**Table 3: Direct Effect, Indirect Effect and Total Effect (n=360)**

Dependent variables	R <sup>2</sup>	Effects	Independent variables		
			Business strategies (BS)	Business innovation (BI)	Business environment (BE)
Business strategies (BS)	.80	DE	-	-	.89*(11.69)
		IE	-	-	-
		TE	-	-	.89*(11.69)
Business innovation (BI)	.60	DE	.79*(6.45)	-	.50*(2.51)
		IE	-	-	.36*(4.47)
		TE	.79*(6.45)	-	.86*(10.13)
Business performance (BP)	.86	DE	.52*(3.93)	.65*(3.15)	.42*(6.65)
		IE	.30*(5.67)	-	.37*(4.40)
		TE	.82*(4.22)	.65*(3.15)	.79*(9.19)
$\chi^2 = 216.60$ , df = 123, P-value = .00000, $\chi^2/df = 1.76$ , RMSEA = .046, RMR = .031, SRMR = .040, CFI = .99, GFI = .94, AGFI = .91, CN = 268.38					

\*statistical significance at the .05 level

Note: In parentheses, they were the t-value. If the value was not between -1.96 and 1.96, it was statistically significant at the .05 level. DE=Direct Effect, IE=Indirect Effect, TE=Total Effect





Chi-Square=216.60, df=123, P-value=0.00000, RMSEA=0.046

**Figure 1: Adjusted structural equation model (n=360)**

The results of the data analysis indicated that the model was fit with the observational data by allowing the variance of standard errors ( $\theta$ ) of the 5 pairs of observed variables to have a relationship, with degrees of freedom (df) before adjustment being 125 and df after adjustment being 120, it was found that the adjusted model fitted well with the observational data. This conclusion was based on fit indices as follows:  $\chi^2=261.60$ ,  $df=123$ ,  $P\text{-value} = .00000$ ,  $\chi^2/df= 1.76$ ,  $RMSEA= .046$ ,  $RMR= .031$ ,  $SRMR= .040$ ,  $CFI = .99$ ,  $GFI= .94$ ,  $AGFI= .91$ ,  $CN = 268.38$ . The results of the goodness-of-fit index revealed that  $\chi^2= 216.60$ ,  $df= 123$ ,  $P\text{-value} = .00000$ , not meeting the statistical significance criterion ( $P\text{-value} > .05$ ). However, the  $\chi^2$  was sensitive to sample size. The  $\chi^2/df$  of  $1.76 < 2.00$  within an acceptable range was considered. Other acceptable fit indices are as follows:  $RMSEA = .046 < .05$ ,  $RMR = .031 < .05$ ,  $SRMR = .040 < .05$ ,  $CFI = .99 > .90$ ,  $GFI = .94 > .90$ ,  $AGFI = .91 > .90$ , and  $CN = 268.38 > 200.00$ ). Based on these goodness-of-fit indices, it concluded that the adjusted structural equation model fitted well with the observational data. The parameter estimates in the model were considered acceptable.

## CONCLUSION

The results revealed that the adjusted structural equation model of the influences of the business environment, business strategies, and business innovation on the performance of elderly care services in Thailand was with the empirical data at an acceptable level. The fit indices were as follows:  $\chi^2= 216.60$ ,  $df = 123$ ,  $P\text{-value} = .00000$ ,  $\chi^2/df = 1.76$ ,  $RMSEA = .046$ ,

RMR = .031, SRMR = .040, CFI = .99, GFI = .94, AGFI = .91, CN = 268.38. The model's parameter estimates are presented as follows:

1. Business Environment (BE) has a direct influence on Business Performance (BP) with a standardized coefficient of .42 and a statistical significance at the .05 level. This supports the hypothesis 1: business environment positively influences business performance of elderly care services in Thailand.
2. Business Environment (BE) has a direct influence on Business Strategies (BS) with a standardized coefficient of .89 and a statistical significance at the .05 level. This supports the hypothesis 2: business environment positively influences business strategies of elderly care services in Thailand.
3. Business Environment (BE) has a direct influence on Business Innovation (BI) with a standardized coefficient of .50 and a statistical significance at the .05 level. This supports the hypothesis 3: business environment positively influences business innovation of elderly care services in Thailand.
4. Business Strategies (BS) have a direct influence on Business Innovation (BI) with a standardized coefficient of .79 and a statistical significance at the .05 level. This supports hypothesis 4: business strategies positively influence business innovation of elderly care services in Thailand.
5. Business Innovation (BI) has a direct influence on Business Performance (BP) with a standardized coefficient of .65 and a statistical significance at the .05 level. This supports the hypothesis 5: business Innovation positively influences business performance of elderly care services in Thailand.
6. Business Strategies (BS) have a direct influence on Business Performance (BP) with a standardized coefficient of .52 and a statistical significance at the .05 level. This supports the hypothesis 6: business strategies positively influence business performance of elderly care services in Thailand.
7. Business Strategies (BS), Business Innovation (BI), and Business Environment (BE) collectively predict Business Performance (BP) with an accuracy of 86%.
8. Business Environment (BE) and Business Strategies (BS) jointly predict Business Innovation (BI) with an accuracy of 60%.
9. Business Environment (BE) can predict Business Strategies (BS) with an accuracy of 80%.

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