

## Validating a six-pillar framework for restaurant entrepreneurship: Evidence from Thailand's dynamic food sector

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**Abstract:** The restaurant sector in Thailand is an integral part of its national economy and cultural identity, but the entrepreneurial competencies needed to succeed in it are a topic of considerable debate. This study develops and validates a comprehensive framework to fill this knowledge gap. A first-order confirmatory factor analysis (CFA) of survey data from 400 restaurant entrepreneurs across Thailand was used to validate a six-component model. The six validated components of entrepreneurial competencies were: Inspiration/Motivation (IPR), Proactiveness (PAT), Risk-Taking (RTK), Innovation (INV), Service Quality (SVQ), and Business Ethics (ETC). The study found that SVQ was the most important component, suggesting that this is a key entrepreneurial competence in this service-reliant industry. The model fit indices demonstrated that the measurement model had an excellent fit (CFI=0.95, RMSEA=0.01). The reliability and validity levels for all the constructs satisfied the thresholds. The validated framework provides a practical diagnostic tool for strengthening SME performance in Thailand's restaurant sector.

**Keywords:** *Entrepreneurial components, Restaurant entrepreneurship, Service quality, SME management, Thailand.*

### 1. Introduction

The global agri-food system is increasingly driven by entrepreneurial small and medium-sized enterprises (SMEs), which represent a significant interface within the restaurant sector between food production, service, and culture [1]. In Thailand, the restaurant sector is of major economic and social significance. Thailand is widely described as the "Kitchen of the World" [2]. Thailand's food and gastronomic tourism economy contributes significantly to Thailand's national GDP (gross domestic product) [3], as the restaurant industry continues to expand and remains resilient, growing 23% in 2023 and generating 314 billion Thai baht (THB  $\approx$  \$9–10 billion) in revenue. Notably, food delivery services and 'soft power' contributed to these significant numbers. The restaurant industry's adaptability to COVID-19, for example, via digital platforms and delivery services [4], highlights this resilience and the significance of the sector and its entrepreneurial stakeholders in bolstering economic stability [5, 6].

Entrepreneurs are seen as key agents of economic development, innovation, and job creation [7]. In the case of restaurant entrepreneurship, entrepreneurs embody the concepts of hospitality, speedy service, fierce competition, and service cultural expectations. They are also expected to have competent service quality management, proactive learning, and market adaptation skills [8].

The literature provides compelling Entrepreneurial Orientation (EO) models of overarching entrepreneurial traits, such as innovativeness, risk-taking, proactiveness [8], sustainable performance [9], as well as decades of research on hospitality service quality [10]. However, significant research gaps remain, as there is no integrated, empirically validated framework for the specific components of entrepreneurship and their manifestations within the restaurant sector, especially in developing economies such as Thailand.

The extant literature examines these aspects in divergent ways (e.g., the effects of innovation and the evaluation of service quality), often separately, and generic EO measurement scales are applied without modification, which seldom consider industry-specific components such as restaurant service excellence and business ethics [11], as central dimensions of an entrepreneur.

This study, hence, attempts to fill this void with three main objectives.:

RO1: To identify and describe the key latent components that structure entrepreneurship in the specific context of the Thai restaurant industry.

RO2: Develop and statistically validate a measurement model for these components.

RO3: To analyze the relative structural importance of these components within the validated model.

The objectives are pursued with the following research questions:

RQ1: What defines the core elements of restaurant entrepreneurship in Thailand?

RQ2: What are the relationships among these components within a valid and reliable measurement model?

RQ3: From the perspective of restaurateurs, which constituent unit is regarded as the most important within the framework?

By addressing the above questions, the authors hope to provide a context-specific tool for scholars and practitioners. This framework may facilitate understanding and the design of targeted training actions and policies to improve SME resilience and performance in an important part of the international agri-food business ecosystem. The article is structured as follows: the study begins with a review of the relevant literature and presents the conceptual framework. The authors then describe the methodology adopted, analyze the results, and discuss the implications.

## 2. Background

### 2.1. Restaurant Entrepreneurship

Entrepreneurship in the restaurant sector has its own challenges and opportunities compared with other industries. Restaurant businesses are naturally low-barrier-to-entry yet high-exit, highly competitive [12], and highly reliant on customer relations [13] and customer service [14]. The product is part tangible (food) and part intangible (customer service, environment) [15]. This adds a level of difficulty related to consistent quality and innovation. On top of these everyday operational difficulties, the industry is highly vulnerable to external shocks, ranging from economic downturns to public health crises (e.g., COVID-19), which require entrepreneurs to be exceedingly flexible and perseverant [16]. Taken together, although general entrepreneurial theory offers a starting point, a unique framework is needed to reflect the industry's core capabilities that drive success.

### 2.2. Key Entrepreneurial Constructs

The literature highlights several core constructs relevant to entrepreneurship, which inform this study's components:

Innovation (INV) and Proactiveness (PAT) are core components of Entrepreneurial Orientation (EO). Innovation involves seeking novel solutions, menus, and processes, while PAT reflects an opportunity-seeking, forward-looking perspective. Examples in restaurant businesses include menu engineering, food tech, and the invention of new service models such as ghost kitchens [17].

Risk-Taking (RTK): RTK refers to the classical entrepreneurial trait of committing resources to ventures with uncertain outcomes [18]. In the restaurant business, this entrepreneurial trait includes financial investment, experimenting with new concepts, and operating under uncertain market conditions.

Inspiration/Motivation (IPR): Foundational to entrepreneurial action, IPR encompasses goal-directed energy, perseverance, and internal passion. It is the engine that sustains effort through challenges [19].

Business Ethics (ETC): Transparent governance, fair treatment of employees and suppliers, and commitment to the local community are increasingly recognized as prerequisites for sustainable entrepreneurship [20]. In the food service business, which is exposed and entirely based on reputation, ethical practices serve as a significant intangible asset.

Service Quality (SVQ): Although SVQ is primarily treated as an important operational outcome in management literature, for entrepreneurs, the strategic prioritization and management of service quality is a fundamental competitive capability that, with food, mediates both a restaurant's image [21] and market differentiation, ultimately shaping customer loyalty. The authors argue that it should be promoted as part of the entrepreneurial construct within this industry-specific framework.

### 2.3. The Thai Context

Thailand's restaurant industry encompasses various business formats, including street food stalls and international franchised luxury segments, such as Thai government-certified Thai Select restaurants [22] and Michelin-starred restaurants [23, 24]. As of March 31, 2025, there were 24,555 legal entities operating restaurants in Thailand, with 97.44% classified as small and medium-sized enterprises (SMEs) [25].

Cultural aspects shape the kinds of business success that orient entrepreneurial behavior in this context. For example, the importance of personal relationships, adaptability (literally, "jai yen" or "tempered/cool heart"), and a strong tourism-oriented economy are highlighted [26]. At the same time, studies of Thai SMEs tend to focus on resilience and community networks [27]. The authors therefore conclude that the expression and relative importance of the entrepreneurial components identified above may differ here, warranting empirical investigation.

### 2.4. Conceptual Framework and Hypothesized Model

Synthesizing the literature, this study proposes that restaurant entrepreneurship in Thailand is a multi-dimensional construct best represented by six correlated latent components: Inspiration/Motivation (IPR), Proactiveness (PAT), Risk-Taking (RTK), Innovation (INV), Service Quality (SVQ), and Business Ethics (ETC). Each component is theorized to be a distinct but related aspect of the entrepreneurial capability set, measurable through specific behavioral indicators.

Therefore, the researchers hypothesize that these six components form a coherent measurement model that will demonstrate a good fit with empirical data collected from Thai restaurant entrepreneurs. The validation of this model will provide a more nuanced and applicable understanding of entrepreneurship in this specific agribusiness management context than applying generic models alone.

## 3. Methods

### 3.1. Research Design

This study used a cross-sectional, quantitative research design to develop and validate the measurement model of entrepreneurial components for the restaurant business in Thailand. CFA was selected as the primary analytical method because it enabled researchers to test the proposed, theoretically grounded six-factor model derived from the literature [28]. Unlike exploratory methods, CFA tests how well the hypothesized structure fits the observed data, making it the appropriate tool for our research objective of model validation [29].

### 3.2. Population and Sampling

The target population comprised all officially registered restaurant business entrepreneurs in Thailand, as listed in the Department of Business Development (DBD), Ministry of Commerce, database for the period 2019-2023. A multistage random sampling technique was employed to ensure national representativeness and manageability, given the large, geographically dispersed population.

### 3.3. *Sample Stratification*

Thailand was divided into five major geographical strata: North, Northeast, Central, East, and South.

**Cluster Selection:** Two provinces were randomly selected from each stratum, yielding 10 representative provinces.

**Random Selection:** From the DBD list within each selected province, restaurant entrepreneurs were randomly sampled proportionally to the stratum size until a target sample of 400 was reached

This approach balances geographical coverage with practical constraints on data collection. The sample size of 400 exceeds the minimum requirement of 10 observations per estimated parameter for CFA (approximately 300 for our model) and is well within the recommended range of 10–20 observations per indicator variable, ensuring robust and stable parameter estimates [30].

### 3.4. *Instrument Development and Measurement*

The data collection instrument was a structured questionnaire with three parts:

#### 3.4.1. *Part 1*

Demographic and business profile (e.g., type of restaurant, years in operation, number of employees).

#### 3.4.2. *Part 2*

Measurement of the six entrepreneurial components. Items for this section were generated through a multi-step process:

**Item Generation:** An initial pool of 35 items was created based on a comprehensive review of literature on entrepreneurial orientation, service quality, business ethics, and prior studies in the Thai context. [8–10].

Expert validation (content validity) was obtained from five experts in entrepreneurship, hospitality management, and quantitative research to verify item clarity, relevance, and the construct's representativeness in calculating the Item-Objective Congruence (IOC) index. All retained items had an IOC score of 0.80 or higher, within the accepted threshold [31].

**Pilot Test:** A pilot test was conducted with 50 restaurant entrepreneurs who were not included in the main sample. The reliability test showed that all six scales had alpha coefficients above 0.80, indicating excellent internal consistency in the pilot study [32].

#### 3.4.3. *Part 3*

Open-ended section for additional comments.

The final measurement section contained 30 items (5 per construct). All items were measured on a 5-point Likert scale (1 = Strongly Disagree to 5 = Strongly Agree). See Table 1 for a sample of items. Mean score evaluation criteria and interpretation used a five-level Likert-type opinion scale, where 5 was “I strongly agree” (4.50–5.00), 4 was “I agree” (3.50–4.49), 3 was “I am unsure” (2.50–3.49), 2 was “I disagree” (1.50–2.49), and 1 was “I strongly disagree” (1.00–1.49) [33].

### 3.5. *Data Collection*

Data were collected over three months in 2024. Trained enumerators administered the questionnaire through a combination of scheduled in-person meetings and online forms (for respondents preferring remote participation). Informed consent was obtained from all participants. The study protocol was reviewed and approved by the relevant institutional ethics committee (COA No. 18, Exp. 18/68).

### 3.6. *Data Analysis*

Data analysis was performed using SPSS 28.0 and AMOS 28.0, following a two-stage CFA analytical procedure. SPSS was used for descriptive and reliability analyses; AMOS was used for CFA path modeling.

### 3.7. Measurement Model Assessment

This stage evaluates the reliability and validity of each latent construct. Internal consistency reliability was assessed using Composite Reliability (CR), with a threshold of  $> 0.70$  according to Ab Hamid et al. [34]. Convergent validity assessment used the Average Variance Extracted (AVE), with a threshold of  $> 0.50$ , and involved examining the statistical significance ( $p < 0.01$ ) of all standardized factor loadings ( $\lambda$ ), which should ideally be  $> 0.60$ . Discriminant validity was assessed by comparing the square root of the AVE for each construct with its correlations with other constructs. According to Ab Hamid et al. [34], the square root of AVE should be greater than the inter-construct correlations.

### 3.8. Model Fit Assessment

After establishing a valid measurement model, the overall fit of the hypothesized six-factor structure was evaluated against the data using multiple fit indices to account for the limitations of any single statistic. These included the  $\chi^2/df$  (Normed Chi-square), where an acceptable criterion has been established as  $< 2.0$  [35], the GFI/AGFI ( $> 0.90$ ) [36], and the Root Mean Square Error of Approximation (RMSEA) ( $< 0.08$ ) [36]. Additionally, CFA model fit is determined using the RMR (Root Mean Square Residual  $< 0.08$ ) and the SRMR (Standardized Root Mean Square Residual  $< 0.08$ ), which are the square roots of the differences between the residuals of the sample covariance matrix and the hypothesized covariance model [36]. The Comparative Fit Index (CFI), a revised version of the NFI that accounts for sample size ( $> 0.95$ ) [35], and the Tucker-Lewis Index (TLI) ( $> 0.90$ ), a revised NNFI, should always be used with SRMR, RMSEA, and CFI for evaluation [36]. This multi-method approach supports the validity and reliability of the proposed framework.

## 4. Results

### 4.1. Sample Characteristics

Data were collected from 400 restaurant entrepreneurs across Thailand, with the sample representative of the sector's diversity. As such, 41% were street-food/stall walk-in venues, 32% were small- to medium-sized seated restaurants, and the remaining 27% were branches of larger restaurant franchises. Most respondents (78%) had operated their own business for over five years. This ensured the data reflected experienced entrepreneurs.

### 4.2. Measurement Model Reliability and Validity

Table 1 displays the results of the measurement model assessment for six latent constructs, inspiration/motivation (IPR), proactiveness (PAT), risk-taking (RTK), innovation (INV), service quality (SVQ), and business ethics (ETC), each measured with five indicators.

All standardized factor loadings ( $\lambda$ ) were statistically significant ( $p < .001$ ) and ranged from 0.69 to 0.78. Since all loadings exceeded the recommended minimum of 0.60 [30], this indicates that the indicators were good representations of their associated constructs. The AVE ranged from 0.50 to 0.58, meeting the minimum criteria of 0.50 suggested by Fornell and Larcker [37]. This confirms convergent validity at the construct level, demonstrating that the six-factor measurement model exhibits acceptable reliability and validity in assessing entrepreneurial characteristics in the restaurant sector.

It should also be noted that minor differences in individual indicator  $R^2$  values exceeding a reasonable threshold are often observed in social scientific studies due to the difficulty of capturing complex behavioral constructs such as entrepreneurship, where some items measure more general contextual or perceptual content. Slightly smaller individual indicator  $R^2$  values ( $< 0.50$ ) do not imply misspecification or violate the measurement model's validity and reliability [37]. According to Fornell and Larcker [37], convergent validity may still be adequate when AVE is slightly below 0.50, provided that composite reliability exceeds 0.60.

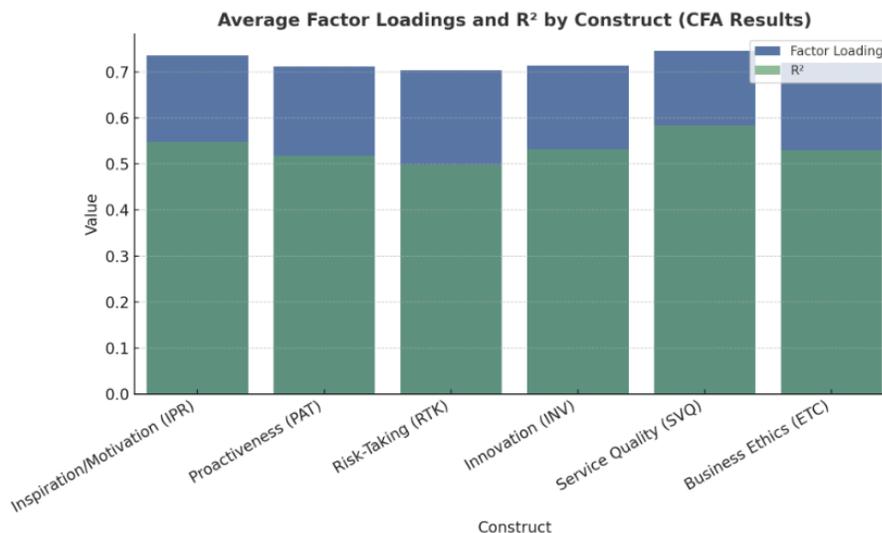
**Table 1.**  
Measurement Model Results.

Construct / Indicator Item	$\lambda$	t-value	R <sup>2</sup>
1. Inspiration/Motivation (IPR)		CR = 0.92, AVE = 0.56	
IPR1: Setting clear work goals and being determined until successful.	0.76	10.05***	0.59
IPR2: Being open to facing reality and accepting criticism.	0.74	10.11***	0.52
IPR3: Being a good role model for subordinates and striving for self-improvement.	0.70	9.13***	0.54
IPR4: Applying new knowledge and past work experience to current tasks.	0.73	9.07***	0.56
IPR5: Having a positive mindset and being open to stakeholder feedback for business development.	0.75	9.56***	0.53
2. Proactiveness (PAT)		CR = 0.88, AVE = 0.53	
PAT1: Having a growth mindset and flexibility to adapt to current situations.	0.69	10.41***	0.54
PAT2: Consistently monitoring both traditional and digital business trends.	0.71	10.75***	0.53
PAT3: Developing differentiated strategies to deter new competitors.	0.74	9.43***	0.56
PAT4: Influencing subordinates' behavior to achieve goals willingly.	0.70	9.29***	0.46
PAT5: Turning crises into opportunities under challenging situations.	0.72	10.24***	0.50
3. Risk-Taking (RTK)		CR = 0.83, AVE = 0.50	
RTK1: Having self-confidence, making decisions bravely, and not being alarmed by change.	0.70	-	0.50
RTK2: Being willing to accept business risks that can occur in any situation.	0.69	10.06***	0.46
RTK3: Being able to solve problems and confront various situations without fear.	0.71	9.16***	0.52
RTK4: Having diverse backup plans for facing risks.	0.70	9.14***	0.48
RTK5: Consistently assessing work risks to deal with uncertain situations.	0.72	10.58***	0.53
4. Innovation (INV)		CR = 0.81, AVE = 0.51	
INV1: Enjoying modern technology for business support.	0.71	-	0.52
INV2: Being creative and always initiating new things before others.	0.70	9.46***	0.50
INV3: Being open to modern technology (e.g., AI) and utilizing it beneficially.	0.71	10.19***	0.53
INV4: Making an effort to find online channels to apply to the business.	0.72	10.27***	0.55
INV5: Being enthusiastic about constantly learning innovations.	0.73	9.17***	0.56
5. Service Quality (SVQ)		CR = 0.95, AVE = 0.58	
SVQ1: Prioritizing service by establishing clear service policies.	0.72	-	0.56
SVQ2: Having service quality standards accepted by customers, stakeholders, and the public.	0.74	11.89***	0.61
SVQ3: Focusing on providing equal service to customers and stakeholders.	0.78	10.32***	0.58
SVQ4: Being open to customer and stakeholder feedback and using it for improvement.	0.76	10.64***	0.56
SVQ5: Clearly assessing customer and stakeholder satisfaction with explicit feedback.	0.73	11.21***	0.61
6. Business Ethics (ETC)		CR = 0.91, AVE = 0.54	
ETC1: Valuing transparent management policies and good governance.	0.69	-	0.52
ETC2: Being responsible towards employees, customers, partners, stakeholders, and society.	0.72	11.89***	0.50
ETC3: Building trust between the business and employees, customers, partners, and stakeholders.	0.73	10.32***	0.56
ETC4: Strictly complying with laws and regulations related to employees, customers, partners, and stakeholders.	0.71	9.64***	0.48
ETC5: Fairly respecting individuality and human dignity.	0.75	9.21***	0.59

Note: \*\*\*p < 0.001;  $\lambda$  = Standardized factor loading; CR = Composite Reliability; AVE = Average Variance Extracted. Some t-values are not reported because certain parameters were fixed for model identification purposes.

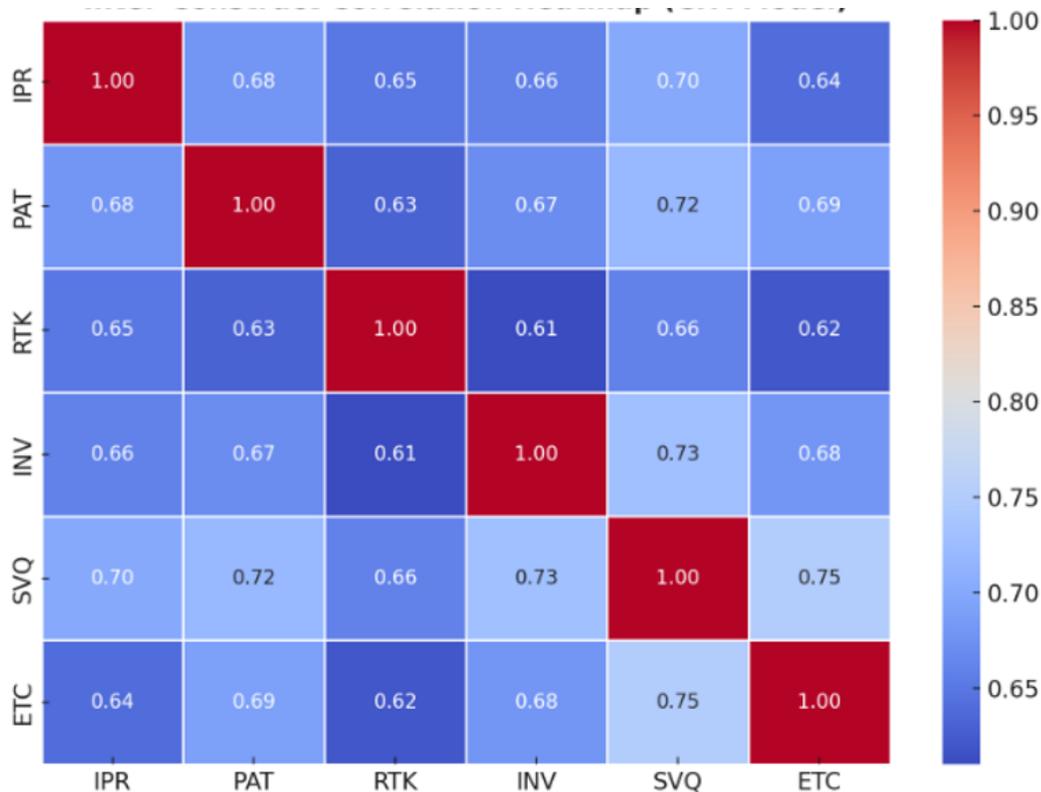
The validated six-factor measurement model is presented in Figure 1, depicting the latent constructs: Inspiration/Motivation (IPR), Proactiveness (PAT), Risk-Taking (RTK), Innovation (INV), Service Quality (SVQ), and Business Ethics (ETC), along with their respective observed indicators. All the standardized factor loadings were statistically significant ( $p < 0.0001$ ). The indicators' composite reliability exceeded the recommended 0.70 level, and AVE was greater than the suggested 0.50 value.

Both criteria indicated convergent validity of the measurement model, as they confirmed its internal consistency and measurement adequacy.



**Figure 1.**  
Average Factor Loadings and R<sup>2</sup> Values from the Results for the First-Order CFA Model of Entrepreneurial Restaurant Owner Characteristics.

To better understand the CFA results, Figure 2 presents visual representations of the average standardized loadings and inter-construct correlations. While the heatmap for the correlations (Figure 2a) shows that all factors exhibit positive and significant correlations, suggesting conceptual coherence and discriminant validity of the models, the bar chart to the right (Figure 2b) indicates that all constructs surpassed the cut-off criterion of  $\lambda = 0.70$ , leading to satisfactory indicator reliability. The graphical results provide evidence of adequate reliability and construct validity for the measurement model in Figure 1.



**Figure 2a–2b.**

Visual heatmap summary of CFA results.

**Note:** Figure 2a presents a heatmap of the mean standardized factor loadings ( $\lambda$ ) for each indicator, where color intensity reflects loading strength (red = higher loadings; blue = lower loadings). The numerical values within each cell represent the corresponding  $R^2$  values (proportion of variance explained). Higher loadings are particularly evident in the Service Quality (SVQ) and Inspiration/Motivation (IPR) constructs. Figure 2b provides the color scale legend used to interpret loading magnitudes in Figure 2a. This visualization enables rapid assessment of indicator reliability and the relative strength of relationships within the CFA model.

Discriminant validity was tested by determining whether the square root of the AVE of each construct was larger than its correlations with all other constructs. As shown in Table 2, the square root of the AVE (diagonal elements) of each construct was greater than its highest correlation with any other construct, indicating that each latent variable is distinguished and shares more variance with its own block of indicators than with others [37].

**Table 2.**

Descriptive Statistics, Correlations, and Discriminant Validity of the Constructs.

Construct	Mean (M)	Standard Deviation (SD)	IPR	PAT	RTK	INV	SVQ	ETC
IPR	3.92	0.71	0.75					
PAT	3.88	0.69	0.72	0.73				
RTK	3.79	0.74	0.65	0.68	0.71			
INV	3.85	0.70	0.70	0.74	0.66	0.71		
SVQ	4.07	0.66	0.68	0.70	0.61	0.69	0.76	
ETC	3.90	0.72	0.71	0.69	0.63	0.67	0.74	0.73

**Note:** All correlations are significant at  $p < .01$ . Correlations are estimated from the CFA model.

#### 4.3. Model Fit

Based on the CFA results, the authors determined that the model provided an excellent fit. This determination was made based on the model having  $\chi^2(281) = 394.67$  and  $p < .05$ , with a normed chi-square ( $\chi^2/df = 1.40$ ) well below the threshold of 2.0 [35]. The CFI = 0.95 and the TLI = 0.92, exceeding the 0.90 benchmark. The RMSEA = 0.01 and the SRMR = 0.04 were also both well below 0.05, indicating an excellent fit. These indices collectively provide strong support for the validity of the proposed six-component structure.

#### 4.4. Construct Importance

In answering RQ3, it was determined that the average standardized factor loading for each construct was credible, with SVQ (Mean  $\lambda = 0.75$ ) having the highest loading, followed by IPR (Mean  $\lambda = 0.74$ ), ETC (Mean  $\lambda = 0.72$ ), PAT (Mean  $\lambda = 0.71$ ), INV (Mean  $\lambda = 0.71$ ), and lastly, RTK (Mean  $\lambda = 0.70$ ). This indicates that, within the validated framework, SVQ is the most salient and consistently measured component in Thai restaurant entrepreneurs' perceptions.

### 5. Discussion

The purpose of this study was to develop and validate a framework representing the main attributes that constitute entrepreneurship in the critical restaurant industry in Thailand. The results of the first-order CFA indicate strong empirical support for a correlated six-factor model of entrepreneurship consisting of Inspiration/Motivation (IPR), Proactiveness (PAT), Risk-Taking (RTK), Innovation (INV), Service Quality (SVQ), and Business Ethics (ETC). The model provided an excellent fit, and all constructs demonstrated strong reliability and validity. This validated framework offers a nuanced, context-specific answer to RQ1 and RQ2 that transcends generic models of entrepreneurship, while also identifying the distinctive capabilities considered valuable in this industry.

Answering RQ3, the most prominent result is that SVQ has the most significant average factor loading. This provides evidence that the strategic crafting of experience as a resource for creating value is not simply an operational issue but an entrepreneurial competence for Thai restaurant entrepreneurs. This is also the component with the highest average factor loading. This result complements the service-dominant perspective of business, whereby entrepreneurs and customers co-create value, which is critical in Thailand's reputation-based tourism economy [38]. Indeed, superior service strengthens competitive positioning in saturated markets, and it is at the heart of customer bonding, which is necessary for resilience. This elevates service quality from a management output to an entrepreneurial foundation in our framework.

The robust substantiation of Business Ethics (ETC) as a core construct is another important contribution. This confirms a greater awareness that long-term entrepreneurial success, particularly for SMEs embedded in their communities, is based on sustainable and responsible entrepreneurial practices. For Thai restaurants, conducting business ethically, such as fairness, transparency, and social responsibility, helps create intangible assets of trust with employees, suppliers, and the local community [39]. This component may be more prevalent in Thailand's collectivist culture, where doing business is a very personal matter.

The prominence of the Inspiration/Motivation (IPR) and Proactiveness (PAT) themes is consistent with the traditional and strategic entrepreneurship literature [40]. The significance of these themes reinforces that the owner's intrinsic motivation and ability to anticipate opportunities and threats in the market remain an inherent engine of business adaptability and development, a trait demonstrated particularly through the pivots of several sectors during the COVID-19 pandemic.

Of note, while still exhibiting strong, convincing factor loadings, Innovation (INV) and Risk-Taking (RTK) were associated with slightly lower average loadings on the factor. To some extent, this may reflect the reality of running a small business in the sector. Limited resources necessitate incremental innovation

(e.g., menu enhancements, use of delivery apps) rather than radical innovation. Similarly, risk-taking may often be deliberative and offset by a need to survive in business, consistent with the risk-mitigation relationship described by some of the concept's observable indicators (e.g., making provisions for backup plans). In these ways, restaurant innovation and risk-compliant entrepreneurship in shades of meaning set them apart from, for instance, Silicon Valley start-ups in the high-tech sector.

### 5.1. Theoretical and Practical Implications

Theoretically, this study contributes to agribusiness and entrepreneurship literature by providing a validated, industry-specific measurement model. It bridges the gap between broad entrepreneurial orientation constructs and the specific context of food service, integrating service excellence and ethics as central dimensions. This offers a more precise tool for researchers examining the drivers of performance and resilience in this sector.

Practically, the framework provides a clear diagnostic tool for:

Entrepreneurs and managers: for self-assessment and identifying areas for competency development.

Educators and trainers: To design a targeted curriculum for aspiring restaurant entrepreneurs, moving beyond general business plans to focus on developing service leadership, ethical governance, and proactive strategic thinking.

Policymakers and support organizations: To tailor SME support programs. For instance, findings suggest that while training on digital tools (INV) is valuable, equal emphasis on service management systems (SVQ) and ethical supply chain practices (ETC) could yield a significant impact on sustainability and competitiveness.

### 5.2. Limitations and Future Research

This study has limitations that chart a course for future inquiry. First, the cross-sectional design establishes validity but cannot infer causality. Second, the data are self-reported, though statistical tests of discriminant validity help mitigate concerns about common-method bias. Third, the model was developed and validated specifically within the Thai context, which may limit generalizability.

Future research should:

Test the framework's predictive validity by linking component scores to objective performance metrics, such as profitability and survival rates.

Explore cross-cultural invariance to see how the component structure and weights differ in other countries' restaurant ecosystems.

Employ longitudinal designs to understand how these entrepreneurial components evolve over the business lifecycle.

Investigate antecedents (e.g., owner education, experience) that foster the development of these competencies.

Finally, while the constructs demonstrated adequate reliability and validity at the composite level, the squared factor loadings ( $R^2$ ) for some individual indicator items were modest (e.g., below 0.50). This suggests that, for future applications of this scale, certain items could be refined or replaced to improve their individual contributions to the measured constructs without compromising the overall validity of the six-factor framework.

## 6. Conclusion

In conclusion, this study successfully developed and validated a comprehensive, six-component framework of restaurant entrepreneurship in Thailand. By rigorously integrating core entrepreneurial traits with industry-critical dimensions of service quality and business ethics, the model provides a more complete and applicable picture of what it takes to succeed in this dynamic sector. The findings confirm that in the complex landscape of food service, entrepreneurial success is a multifaceted endeavor. The

validated framework serves as a solid foundation for future research and a practical guide for strengthening a sector that is crucial to Thailand's economy and cultural identity.

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### Institutional Review Board Statement:

This study involved human participants (restaurant entrepreneurs) and was conducted in full accordance with recognized ethical standards for research. The study protocol was reviewed and granted formal approval by the Rajamangala University of Technology Thanyaburi Institutional Review Board or equivalent ethics committee (Certification of Approval COA No. 18, Exp. 18/68). Prior to participation, all respondents provided informed consent. The consent process clarified the study's purpose, the voluntary and anonymous nature of participation, and the confidentiality of all responses. No identifying personal or business information was collected in the survey instrument.

### Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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### References

- [1] W. Wiboolyasarin, *Communicative usage and expressions, in Thai Grammar Instruction: A Comprehensive Guide to Structure, Usage, and Cultural Insights*. Singapore: Springer Nature Singapore, 2025.
- [2] K. Srisangkaew, C. Khamsing, and P. Kittivoraphan, "The influence of local food on tourist experience and travel behavior in Chiang Mai, Thailand: Insights for sustainable gastronomy tourism," *Connexion: Journal of Humanities and Social Sciences*, vol. 14, no. 1, pp. 27-57, 2025.
- [3] A. Krasae-in, P. Yodsurang, D. Jiarakul, K. Suksong, and A. Kiatthanawat, "An examination of the gastronomic landscape in riverside cities of Thailand," *International Journal of Food Design*, vol. 10, no. 1, pp. 67-86, 2025. [https://doi.org/10.1386/ijfd\\_00075\\_1](https://doi.org/10.1386/ijfd_00075_1)
- [4] N. Suksrimuang and P. Ongkunaruk, "Factors influencing the participation of Thai restaurants in food delivery services amid the COVID-19 pandemic," *Asia Pacific Management Review*, vol. 30, no. 3, p. 100333, 2025. <https://doi.org/10.1016/j.apmr.2024.11.003>
- [5] A. W. Bartik, M. Bertrand, Z. Cullen, E. L. Glaeser, M. Luca, and C. Stanton, "The impact of COVID-19 on small business outcomes and expectations," *Proceedings of the National Academy of Sciences*, vol. 117, no. 30, pp. 17656-17666, 2020.
- [6] T. Coles, B. W. Ritchie, and J. Wang, "Building business resilience to external shocks: Conceptualising the role of social networks to small tourism & hospitality businesses," *Journal of Hospitality and Tourism Management*, vol. 48, pp. 210-219, 2021. <https://doi.org/10.1016/j.jhtm.2021.06.012>
- [7] D. Rahmawati, "The critical role of entrepreneurship and innovation in enhancing community economic development and growth," *International Journal of Economics, Management and Accounting*, vol. 2, no. 12, pp. 977-986, 2025. <https://doi.org/10.47353/ijema.v2i12.282>
- [8] A. Canziani and M. Caccia, "The impact of entrepreneurial orientation on the financial performance of restaurant firms," *International Journal of Hospitality Management*, vol. 75, pp. 1-9, 2019.
- [9] R. Manigandan and J. N. V. Raghuram, "Linking entrepreneurial orientation to sustainable performance: The mediating role of green innovation," *International Journal of Productivity and Quality Management*, vol. 44, no. 3, pp. 331-355, 2025. <https://doi.org/10.1504/IJPMQ.2025.144900>

- [10] I. K. Lai, M. Hitchcock, T. Yang, and T.-W. Lu, "Literature review on service quality in hospitality and tourism (1984-2014) Future directions and trends," *International Journal of Contemporary Hospitality Management*, vol. 30, no. 1, pp. 114-159, 2018. <https://doi.org/10.1108/IJCHM-08-2016-0408>
- [11] M. Daradkeh, "Navigating the complexity of entrepreneurial ethics: A systematic review and future research agenda," *Sustainability*, vol. 15, no. 14, p. 11099, 2023. <https://doi.org/10.3390/su151411099>
- [12] S. Ismael, "The influence of innovation on customer service experience and expectations in fast-food restaurants," Master's Thesis, University of Johannesburg, Johannesburg, South Africa, 2024.
- [13] L. N. A. Addo, "The influence of customer experience (CX) on the success or failure of fast-food restaurants in Accra," PhD Thesis, Ashesi University, Accra, Ghana, 2024.
- [14] S. S. Jang and Y. Namkung, "The moderating role of menu innovation on the relationship between service quality and customer satisfaction in the restaurant industry," *Journal of Foodservice Business Research*, vol. 21, no. 4, pp. 345-360, 2018.
- [15] Y.-C. Chen, "Intangible cues in hospitality: Emotional and behavioral effects of ambient scents in high-end restaurants," *International Journal of Hospitality Management*, vol. 126, p. 104102, 2025. <https://doi.org/10.1016/j.ijhm.2025.104102>
- [16] Y. Pan and J. Chen, "The impact of owner's psychological capital on the resilience of small and medium-sized restaurant enterprises," *Journal of Business Venturing Insights* vol. 12, p. e00137, 2019.
- [17] A. Distanont, "The role of innovation in creating a competitive advantage," *Kasetsart Journal of Social Sciences*, vol. 41, no. 1, pp. 15-21, 2020.
- [18] A. A. Salameh, H. Akhtar, R. Gul, A. B. Omar, and S. Hanif, "Personality traits and entrepreneurial intentions: Financial risk-taking as mediator," *Frontiers in Psychology*, vol. 13, p. 927718, 2022. <https://doi.org/10.3389/fpsyg.2022.927718>
- [19] M. Z. Alam, "Freedom fuels innovation: Activating personality through trait activation using blessings of goal-setting freedom for intrapreneurial behaviour," *International Journal of Innovation Science*, 2025. <https://doi.org/10.1108/IJIS-09-2024-0259>
- [20] R. Silva, M. Rodrigues, M. Franco, C. Oliveira, and N. Sousa, "How do social responsibility and social entrepreneurship generate value creation in pandemics?," *Journal of Enterprising Communities: People and Places in the Global Economy*, vol. 17, no. 2, pp. 305-333, 2023. <https://doi.org/10.1108/JEC-07-2021-0108>
- [21] M. T. Khurshid, M. U. Nazir, M. A. A. Bhatti, and M. B. A. Bhatti, "The impact of service quality and perceived value on customer satisfaction: The mediating role of restaurant image in the hospitality industry," *Bulletin of Management Review*, vol. 2, no. 3, pp. 116-134, 2025.
- [22] W. Auapinyakul, S. Siripongdee, and P. Pimdee, "Antecedents of customer loyalty and perceived service quality: A SEM analysis of Thai restaurant brands," *The Journal of Asian Finance, Economics and Business*, vol. 9, no. 7, pp. 173-183, 2022. <https://doi.org/10.13106/jafeb.2022.vol9.no7.0173>
- [23] S. Kim, A. L. Riswanto, S. Sherpa, and H. S. Kim, "Generation Z's michelin choices: Survey and big data insights into thailand's michelin-starred restaurants," *International Journal of Tourism Research*, vol. 27, no. 5, p. e70135, 2025. <https://doi.org/10.1002/jtr.70135>
- [24] Y. Liang, T.-H. Cham, R. Kumarusamy, and H. T. Huam, "Do social media influencers' personal brands drive purchase intentions toward Michelin Guide restaurants? Empirical evidence from Malaysia and Thailand," *British Food Journal*, vol. 127, no. 11, pp. 3959-3979, 2025. <https://doi.org/10.1108/BFJ-10-2024-1058>
- [25] The Nation, "Thailand's restaurant businesses grew 28% in 2023, generating 314bn baht in revenue, with strong expansion driven by food delivery and soft power," 2025. <https://www.nationthailand.com/life/food/40049336>
- [26] A. Narula, "The driving forces behind tourism social entrepreneurship: A case study of social entrepreneurs in Thailand," PhD Thesis, University of Westminster, London, United Kingdom, 2023.
- [27] K. Hasayotin, R. Maisak, R. Setthajit, T. Ratchatakulpat, W. Naburana, and A. Supanut, "Empowerment of SMEs and entrepreneurial ecosystems: A qualitative study on diversifying pattaya's economy," *Revista de Gestão Social e Ambiental*, vol. 18, no. 7, pp. 1-30, 2024. <https://doi.org/10.24857/rgsa.v18n7-070>
- [28] P. Siriphatcharachot, A. Sukkamart, A. Thongkaw, P. Pimdee, and S. Moto, "High school student creativity, innovation, and teamwork skills from teacher's perspective: A second-order confirmatory factor analysis," *International Journal of Instruction*, vol. 18, no. 1, pp. 39-60, 2025.
- [29] G. Sureshchandar, "Quality 4.0—a measurement model using the confirmatory factor analysis (CFA) approach," *International Journal of Quality & Reliability Management*, vol. 40, no. 1, pp. 280-303, 2023. <https://doi.org/10.1108/IJQRM-06-2021-0172>
- [30] A. E. Legate, J. F. Hair Jr, J. L. Chretien, and J. J. Risher, "PLS-SEM: Prediction-oriented solutions for HRD researchers," *Human Resource Development Quarterly*, vol. 34, no. 1, pp. 91-109, 2023. <https://doi.org/10.1002/hrdq.21466>
- [31] T. Kantathanawat, A. Ussarn, M. Charoentham, and P. Pimdee, "Integrating mastery adaptive and problem-solving (MAPS) digital technology skills into a Thai community college student learning model," *Educational Process: International Journal*, vol. 14, p. e2025013, 2025.

- [32] T. Sirimongkol, "The effects of restaurant service quality on revisit intention in pandemic conditions: An empirical study from Khonkaen, Thailand," *Journal of Foodservice Business Research*, vol. 25, no. 2, pp. 233-251, 2022. <https://doi.org/10.1080/15378020.2021.1941560>
- [33] P. Pimdee, A. Ridhikerd, S. Moto, S. Siripongdee, and S. Bengthong, "How social media and peer learning influence student-teacher self-directed learning in an online world under the 'New Normal'," *Heliyon*, vol. 9, no. 3, p. e13769, 2023. <https://doi.org/10.1016/j.heliyon.2023.e13769>
- [34] M. R. Ab Hamid, W. Sami, and M. Mohmad Sidek, "Discriminant validity assessment: Use of fornell & larcker criterion versus HTMT criterion," *Journal of Physics: Conference Series*, vol. 890, no. 1, p. 012163, 2017.
- [35] B. G. Tabachnick and L. S. Fidell, *Using multivariate statistics*. Harlow, UK: Pearson, 2014.
- [36] D. Hooper, J. Coughlan, and M. R. Mullen, "Structural equation modelling: Guidelines for determining model fit," *Electronic Journal of Business Research Methods*, vol. 6, no. 1, pp. 53-60, 2008.
- [37] C. Fornell and D. F. Larcker, "Evaluating structural equation models with unobservable variables and measurement error," *Journal of Marketing Research*, vol. 18, no. 1, pp. 39-50, 1981. <https://doi.org/10.1177/002224378101800104>
- [38] L. T. Tuan, D. Rajendran, C. Rowley, and D. C. Khai, "Customer value co-creation in the business-to-business tourism context: The roles of corporate social responsibility and customer empowering behaviors," *Journal of Hospitality and Tourism Management*, vol. 39, pp. 137-149, 2019. <https://doi.org/10.1016/j.jhtm.2019.04.002>
- [39] R. Arica, B. Kudas, C. Cobanoglu, M. O. Parvez, V. Ongsakul, and V. Della Corte, "The role of trust in tourists' motivation to participate in co-creation," *Tourism Review*, vol. 78, no. 4, pp. 1182-1202, 2023. <https://doi.org/10.1108/TR-08-2021-0399>
- [40] A. N. Ngele and C. Nzelibé, "Developing entrepreneurial skills for small and medium scale enterprises (SME's)," *Journal of Global Social Sciences*, vol. 4, no. 14, pp. 147-163 2023. <https://doi.org/10.58934/jgss.v4i14.157>