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Exploring the Key Determinants of Success for Food Truck Entrepreneurs Insights from Structural Equation Modelling Study

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Abstract

Growth of food trucks, which provide ready-to-eat meals in public areas and boost urban economies, has had a substantial influence on the traditional restaurant sector. This study examines the major variables that affect food truck owners' operational performance and sustainability in order to determine what makes them successful. The research used a structural equation modelling (SEM) methodology to ascertain crucial success elements, such as the regulatory environment, marketing tactics, and technological uptake. Food truck owners provided information so that researchers could evaluate how these variables interacted to determine the success of the venture. The results show that technology innovations greatly improve customer involvement and operational efficiency, especially in social media and mobile payment applications. The report also emphasizes the value of adaptable marketing approaches and the assistance that food truck enterprises receive from supportive regulatory environments. This research advances knowledge of the dynamics of the mobile food business by offering actual data on the success determinants of food truck owners. The information that was acquired is beneficial to stakeholders, legislators, and business owners who want to promote a robust and sustainable food truck industry. The study also emphasizes how effective SEM may be when analysing intricate relationships between various factors that affect an entrepreneur's ability to succeed.

Keywords: Food Entrepreneurship, Food Truck Entrepreneurs, Food Trucks, Market Factors, Structural Equation Modelling.

Introduction

Food trucks are now a key part of the mainstream restaurant sector, serving ready-to-eat cuisine in public places (1,2). Street food began in ancient times and has grown into specialised mobile food carts and trucks that are popular not just in poor nations but even in European and US cities (3). The emergence of food carts has spurred arguments over street trade rules, resulting in a resurgence of street commerce and the need for fresh approaches to hawking policies. Food truck growth may be linked to inexpensive beginning costs and the use of technology, such as social media and applications for mobile payment for advertising and operational efficiency (4). While food trucks have many positives, like the development of jobs and the economy, they also bring up issues with sustainability and cultural appropriation, especially with the rise of gourmet food trucks that provide a variety of gastronomic experiences (2). In the food sector, food trucks have become more and more popular as a business model since they provide clients with both supernatural needs and utilitarian value, they provide convenience, affordability, and strategic locations while also satisfying curiosity and offering entertainment (5). Customers' inclinations to return to food trucks are influenced by their brand equity (6). However, there are obstacles for food trucks in urban settings, such as problems with planning and policy. Although food trucks are common in Malaysia, questions have been raised over food safety and sanitary standards Foodborne infections may result from improper food preparation and storage practices brought on by food trucks' small footprint and mobility. Resolving these problems is essential to the industry's success and future expansion. They have the power to improve public life and rejuvenate metropolitan areas. Cities, however,

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find it difficult to efficiently regulate and promote food truck operations, key policy issues for food truck operations were identified by a research conducted in Kansas City, Missouri, and included street usage, permits, and public health (7). Gourmet food trucks are typically more efficient than conventional ones, according to research, underscoring the significance of creativity in this industry (8). By bringing more nutritious food alternatives to low-income urban neighbourhoods, food trucks can also help address challenges related to food access (9). Food trucks provide convenience and hedonistic rewards to millennial, but worries about their ecological footprint and sanitation may have a detrimental impact on attitudes and visitation intentions (10). The theory of planned behavior provides an explanation for consumers' intention to purchase food trucks by taking into account aspects like attitude and previous behavior (11). It has been demonstrated that using active Wi-Fi visitor analytics to track customer interaction with food trucks is a workable approach, as it reveals variations in vendor engagement and bounce rates (12). A number of changes have been brought to eating out by the food truck phenomena, such as gourmetization, vehicle modification, online platform use, particular management strategies, and creative uses of public locations (13). All of these studies demonstrate how food trucks are becoming more and more significant in today's urban food culture. Studies conducted recently have looked into the food truck society in Edmonton, Canada, and several Indian towns. Price, taste, hygienic conditions, variety, level of service, and externals all had a big influence on Belagavi, India customers' decision to buy food trucks (14). According to a research conducted in Coimbatore, India, patrons of food truck parks expressed great satisfaction with the quality of the food and the live entertainment, with the most preferred cuisines being Indian and Mexican (15). Food trucks in Edmonton serve up dishes that bridge regional and international cuisines by drawing inspiration from authentic, fusion, ethnic, and local culinary traditions. These trucks help create a cultural "Other" that consumers may consume by promoting ideas of genuineness, conventionality, and premium ingredients. Food truck sellers create internationally inspired, regionally significant ethnocultural cuisines by drawing influence from their pasts, transnational identities, and global experiences (16). Despite these difficulties, food trucks have succeeded by providing organic and regionally produced food choices, which can boost business and competition (17). Customer happiness and word-of-mouth behavior have been demonstrated to be influenced by elements including food truck appearance and employee friendliness. Future development and achievement in the food truck sector will depend on how well it handles these issues and takes advantage of consumer preferences as it continues to change (18). This study uses semi-structured interviews to try and pinpoint the critical factors that determine food truck entrepreneurs' success. Numerous research has been conducted on various entrepreneurs using this model; therefore, the results of the studies will also be included in this model in an organized manner (19). The amount of literature on food entrepreneurship is growing; in the last few years, there has been a noticeable surge in publications (20). There aren't many studies contrasting food and non-food entrepreneurs, though. According to one study, food entrepreneurs share many traits and demographics with their non-food parallels, despite the fact that they confront different risks (21). The entrepreneurial mind set is still little understood, especially when it comes to food-based social entrepreneurship. Concerns exist that scholars may not be performing adequate "ground work" in the field of entrepreneurship despite the increased interest. This research gap offers chances for additional study of the distinctive features of food entrepreneurship, such as the entrepreneurial attitude, social effect, and sector-specific difficulties, which could influence policy and encourage the growth of food-based (22). In order to determine the critical factors that influence food truck entrepreneurs' company success, this study was carried out.

The Giessen Amsterdam Model of Entrepreneurial Success

The significance of early developmental characteristics and personality traits in determining entrepreneurial achievements is highlighted by the Giessen-Amsterdam model of entrepreneurial success. According to research, an entrepreneurial Big Five personality profile

combined with age-appropriate entrepreneurial ability in adolescence which is impacted by authoritative parenting and role models predicts entrepreneurial skills during venture development (23). These abilities then translate into aspirational growth objectives and prosperous entrepreneurship. Social networks and inventive potential in emerging markets are crucial components of success for migrant entrepreneurs operating in metropolitan settings (24). A scoring system for entrepreneurial attributes has been created, taking into account both human characteristics and elements of the business strategy, in order to aid in the prediction of entrepreneurial success (25). This scale represents the general consensus among consultants regarding the behavioral prerequisites for beginning entrepreneurs and how these prerequisites relate to situational factors. This model has been extended in recent research, with an emphasis on the significance of both small and large elements, such as human, financial, and social capital (26). Furthermore, subjective metrics for evaluating the achievement of entrepreneurs have been created, taking into account things like financial gains, relationships at work, personal fulfilment, community impact, and firm performance (27). Beyond typical financial indicators, these multidimensional approaches offer a more thorough insight of entrepreneurial performance. This model is the best fit for the specific style of the current investigation.

Food Entrepreneurship

Recent years have seen a rise in interest in food entrepreneurship studies, as seen by the amount of research examining many facets of this area. Through specialized programs and food initiative centers, universities play a critical role in promoting food innovation and entrepreneurship (28,29). Both rural and urban populations gain from these programs' complete support, which includes instruction, technical assistance, and help with product creation. A bibliometric analysis shows that, especially in the past four years, publications about entrepreneurship in the food business have been on the rise (20). According to studies, food entrepreneurs are similar to non-food entrepreneurs in many aspects, including expectations, demographics, and traits, even if they confront different risks (21). In general, the creation of specialty meals from agricultural goods and the advancement of ecologically sound food systems are the main goals of food entrepreneurship, which is acknowledged as an essential component of the food industry. Numerous facets of the food truck business, including as food safety, customer behavior, and cultural effects, have been the subject of recent studies. Due to facility, financial, and time constraints, food truck owners have difficulties when it comes to offering food safety training (30). These studies provide light on the intricate details of the food truck industry, including its operating difficulties, customer preferences, and cultural relevance. Additionally, this demonstrates the need for more research on a specific sort of entrepreneur in order to better understand their traits.

Entrepreneurial Skills

Entrepreneurial abilities are essential for company success in a variety of industries. The following key competencies have been identified: scheduling, self-motivation, communication, marketing, and financial management (31). Entrepreneurs and wannabe entrepreneurs regard critical thinking and managerial skills as the most crucial talents. In the informal economy, communication and negotiating abilities are especially important (32). Additionally, technological proficiency acts as a positive mediator in the link between successful businesses and entrepreneurial abilities. It's interesting to note that, in contrast to seasoned business owners, aspiring entrepreneurs undervalue the value of perseverance (33). These results emphasize the necessity of focused skill development in programs that assist and educate entrepreneurs. Moreover, they highlight how entrepreneurial skills are changing, with a focus on technical proficiency, creativity, and invention in today's corporate environment (34).

Market Factors

Numerous studies have demonstrated the important impact that market dynamics play in business success. For entrepreneurs, conducting market research, identifying opportunities, and having the capacity to get and apply pertinent knowledge are essential (35). Market orientation, customer orientation, and competitor orientation have been discovered to have an important connection with entrepreneurial success (36). Finding market prospects is often noted as a key

source of inspiration for business owners. Market forces do not, however, determine success exclusively. Resource management, inventiveness, socializing, adaptability, leadership style, and external assistance are further crucial components. A person's ambition, abilities, expertise, and independence are all important factors in their achievement as an entrepreneur. Gaining insight into and making use of these elements can help create an atmosphere that is favourable to economic expansion and business achievement.

Operational Efficiency

Since operational efficiency greatly boosts production and lowers expenses, it is essential for the success of entrepreneurs (37). Research indicates that entrepreneurs who take part in programs for entrepreneurship demonstrate better management techniques, which raises growth rates and gross margins (38). Cost framework, proposition of value, critical resources, and essential activities are important elements that impact operational efficiency (39). Entrepreneurial traits also matter, even though external factors like size, location, and rivalry have a big influence on MRA management of necessary assets and operational effectiveness (40). The key to improving operational efficiency and the general achievement of entrepreneurs in the digital era is the proper integration of digital technology, such as websites and consumer involvement. These results emphasize how crucial it is to concentrate on both internal and external elements in order to enhance operational effectiveness and spur company expansion (37).

Customer Engagement

In the food industry, client engagement is critical to both client retention and business success. Research indicates that the presence of customers has a beneficial impact on the way they behave towards local cuisine and the continuation of food stagramming activities (41). Customer involvement has a major impact on transactional and personal commitment in the fast-food industry, which in turn influences repurchase intentions and good word-of-mouth (42). Interaction and inventiveness are key components of successful customer engagement strategies for small firms, as they improve communication with customers (43). More engagement with clients and success are achieved in the hospitality industry when a consumer-centric care approach is used across the value chain, with suppliers and consumers alike (44). This strategy can help reduce poverty in underdeveloped countries and highlights the need of servant leadership. In general, building relationships, adding value, and enhancing business outcomes all depend on consumer interaction in the food industry.

Regulatory Environment

The food business is significantly shaped by the regulatory framework, which strikes a balance between consumer protection and technical progress. Regulations can act as a guide for the development of safe food technologies (45), despite the opinion of some that they are obstacles. To increase balance and efficacy, proposals for a separate food regulating board have been made because the present regulatory framework is complicated and may stifle innovation (46). The prevention of obesity necessitates government initiatives that focus on the food surroundings. Prominent recommendations include enhanced labelling (47), density limitations for fast food outlets, pricing reforms, and marketing laws. Economic disincentives, competing policies, and business influence are some of the implementation challenges. Regulations are essential for guaranteeing food safety and averting foodborne illnesses as the world's food systems grow increasingly integrated. Regulators and operators of food businesses can control hazards across the supply chain with the use of traceability solutions (48). Because it guarantees public health, environmental sustainability, and food safety, the regulatory environment is vital to the food industry. Food production has negative externalities that must be avoided, ecologically safe food production must be encouraged, and the standard of food products reaching the market must be regulated. Achieving hygiene and ecological balance in the food sector requires the establishment of an accurate ecological monitoring network and the implementation of suitable legislation (49).

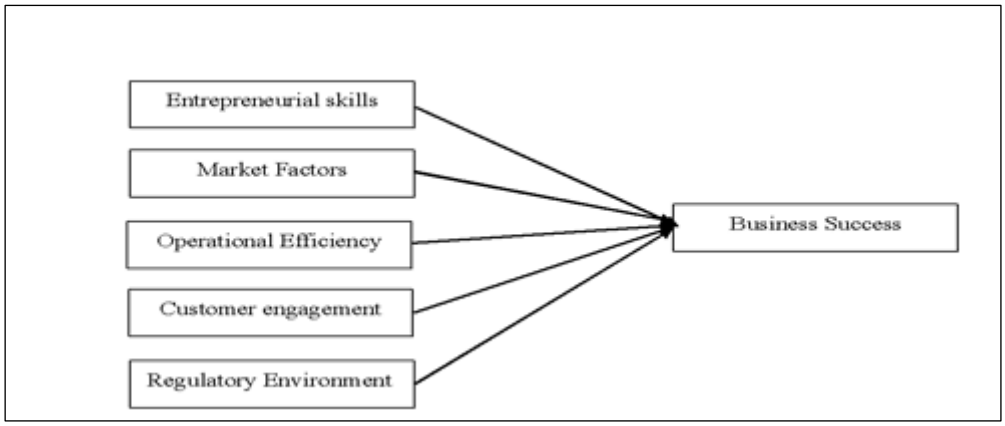

Figure 1: Research Framework and Hypothesis Development

An integrative model as figure 1 emphasizes the interrelated elements influencing food truck entrepreneurs' success is presented by the conceptual framework that is offered. Five key components are identified, each of which has a major influence on how company outcomes are shaped: "Entrepreneurial Skills," "Market Factors", "Operational Efficiency", "Customer Engagement", and "Regulatory Environment". "Entrepreneurial Skills" are the cornerstone, implying that an entrepreneur's character traits, strategic acumen, and capacity for adaptation are essential for negotiating the complexity of the food truck industry. The capability of the business to survive and expand is directly impacted by the entrepreneur's inventiveness and problem-solving skills. These conceptions are intricately linked to one another rather than being in isolation. For example, operational efficiency can increase customer engagement by guaranteeing constant service quality, while entrepreneurial talents impact a company's ability to handle market conditions and regulatory difficulties. According to the paradigm, "Business Success" in the food truck sector results from these variables' holistic and dynamic interaction, where one component supports the others. This portrays the success of food truck owners as a complex process that necessitates striking a balance between internal resources and external responsiveness. The model highlights the significance of a holistic approach, wherein success in one domain can bolster and magnify accomplishments in other domains, culminating in long-term economic expansion and a competitive edge in a demanding and rapidly changing industry.

Business Success

Entrepreneurial business success is a complex idea that goes beyond financial indicators. Entrepreneurs frequently place a higher priority on non-financial aspects like pride in their profession, personal fulfilment, and flexibility in their lifestyle, even though development and profitability are also vital (50). Both monetary and non-monetary indicators are used to measure success; measurements pertaining to customers are especially useful in identifying profitable business endeavours (51). Profitability, productivity growth, personnel retention, innovation, and turnover growth are critical success elements. A comprehensive strategy that takes into account social, economic, and environmental aspects is needed for sustainable entrepreneurship. Numerous models that take into account a range of variables that affect business performance have been created to evaluate entrepreneurial success (52). In the end, how an entrepreneur defines success is a critical factor in determining how their business performs, underscoring the significance of matching success metrics to individual and group objectives (51). Small and medium-sized businesses' SMEs ability to expand and survive depends on their ability to succeed as entrepreneurs. It formalizes the operation of the organization quantitatively and includes the effectiveness and productivity of the whole system of the enterprise. Business success is largely determined by elements like the entrepreneur's abilities and the way in which entrepreneurship is implemented; these factors account for 60.6% of the diversity in SMEs' success (53). Numerous fields, including economics, information technology, management,

and accounting, are used to measure entrepreneurial success; this underscores the significance of measuring the efficacy of activities and processes for making choices. Furthermore, it has been discovered that business management education specifically, an MBA degree positively influences entrepreneurial performance, highlighting the importance of education in obtaining commercial success. As a result, gauging the performance of a corporation requires a mix of non-financial and financial metrics, on-going system enhancements, and cultivating win-win results through skilful negotiating.

Relationship between Entrepreneurial skills and Business success

Empirical studies demonstrate a robust correlation between entrepreneurial competencies and company triumph in many settings. In the informal economy, effective interpersonal and negotiating abilities are very important for success (33). Five essential skill aspects were found in an Indian study: inborn aptitude, technical capabilities, human connections, leadership, and communication. All of these skill dimensions are correlated with perceived economic success (54). It was discovered that entrepreneurial abilities significantly impacted the success of businesses in Indonesia (55). The association between creativity and commercial performance is also mediated by information technology competence, according to recent study, which implies that both computer skills and entrepreneurial talents are becoming more and more crucial for corporate success (34). These results highlight how crucial it is to acquire a wide range of entrepreneurial abilities, including technological know-how, in order to increase the possibility that a business will succeed.

H1: Entrepreneurial skills positively influence business success

Relationship between Market factors and Business success

Many studies have demonstrated the critical impact that market dynamics play in the success of entrepreneurs. Finding opportunities and conducting thorough market research are essential for company success. In order to create and coordinate market elements that are critical for SME development, like business assistance services and technology help, the state must take an entrepreneurial approach (56). Success factors, however, go beyond market factors. Business planning, resource management, networking, innovation, and resilience are further key factors in the success of entrepreneurs. For businesses to succeed, government assistance, efficient resource management, and prompt opportunity exploitation are essential (57). While one study revealed that innovation was less significant than other characteristics, another highlights the significance of entrepreneurship in terms of strategic priorities for environments that are competitive (58). Gaining insight into and making use of these elements can help create an atmosphere that is favourable to economic expansion and entrepreneurial success.

H2: Market factors positively influence business success

Relationship between Operational efficiency and Business success

Successful entrepreneurship depends heavily on operational effectiveness, especially in the digital age. Research indicates that the seamless incorporation of digital technologies improves operational effectiveness, resulting in higher output and lower expenses (37). When compared to individuals without such expertise, entrepreneurs who take part in entrepreneurship programs exhibit superior managerial techniques, which leads to better gross margins and increase rates (38). Operational management in the digital age includes strategic integration that adapts to market dynamics in addition to production efficiency. Entrepreneurial businesses that are successful use new technologies, create novel goods and services, and take social and environmental responsibilities into account (59). Building business resilience requires the capacity to quickly adjust to changes in the market, reorganize production procedures, and enhance the quality of output. In the current corporate environment, operational efficiency when combined with electronic communication and strategic management makes a substantial contribution to entrepreneurial success.

H3: Operational efficiency positively influences business success

Relationship between customer engagement and Business success

A key component of entrepreneurship and business success is customer engagement. It is

regarded as a major factor influencing company efficiency and a forecaster of business expansion (60,61). Through referrals and repurchases, engaged customers are important assets that guarantee steady and profitable growth (60). Relationships between businesses and customers can be improved by implementing customer engagement techniques like interactive communication and innovation. For small and medium-sized businesses SMEs, these tactics are especially crucial for developing enduring client relationships (43). Additionally, value co-creation the process by which companies and consumers collaborate to create advantages for both parties and customer engagement are strongly related (61). Managers need to be mindful of the possibility of value co-destruction, though, should these relationships not be handled skilfully. Businesses should concentrate on utilizing client contributions through a variety of channels, such as content produced by users, forums, and new product projects, in order to optimize the advantages of customer involvement (60).

H4: Customer engagement positively influences business success

Relationship between regulatory environment and Business success

An important factor in the success of entrepreneurs and the expansion of businesses is the regulatory environment. Research indicates that laws pertaining to property registration, contract enforcement, and business formation are important indicators of the emergence of new firms in European nations (62). Opportunity entrepreneurship is heavily influenced by the perceived quality of the business and regulatory environments; people tend to wait to act until they are certain that the regulatory environment is favourable. Family-controlled businesses typically have faster employment growth rates but slower rates of sales growth than their non-family-controlled counterparts (63). Less favourable regulatory conditions, however, have a greater negative impact on family-controlled businesses' sales and staff growth rates (64). Furthermore, the self-regulation mechanisms employed by entrepreneurs, such as appraisal and locomotion, contribute to the success of the organization by influencing entrepreneurial awareness components (65-67). These results highlight how crucial it is to strengthen business regulations in order to promote entrepreneurship and improve macroeconomic outcomes.

H5: Regulatory environment positively influences business success

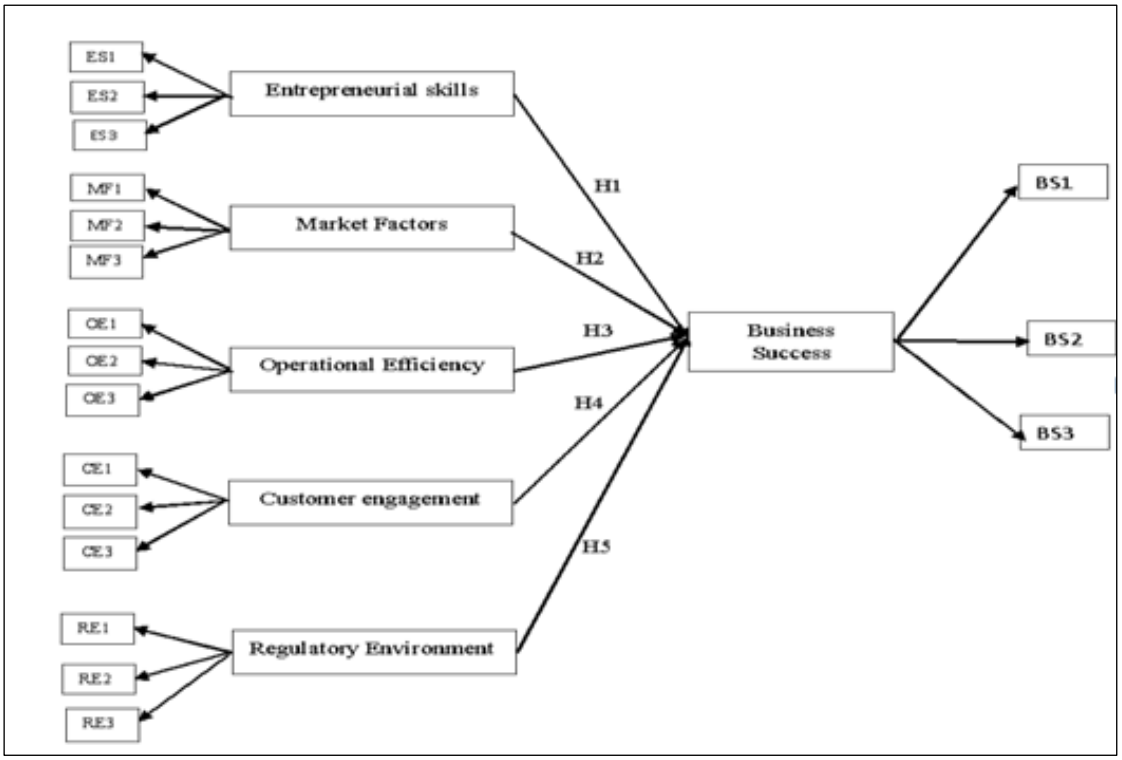

Figure 2: Conceptual Framework and Hypothesis Development of Key Determinants of Success of Food Truck Entrepreneurs

The conceptual and hypothesis framework as figure 2 provides a thorough understanding of the major factors affecting food truck entrepreneurs' success. “Business Success”, which is conceived as the dependent variable, is at the core of this model. Five crucial independent factors, “Entrepreneurial Skills, Market Factors, Operational Efficiency, Customer Engagement, and Regulatory Environment”, are suggested to have contributed to this success. The five hypotheses H1 to H5 that link these variables to the main outcome suggest that each of these factors has a direct and significant impact on business success. It is believed that "Entrepreneurial Skills" H1 are essential for negotiating the intricacies of the food truck business. These abilities include the entrepreneur's capacity for creativity, efficient resource management, and strategic decision-making that propels the company ahead. The particular sub-dimensions ES1, ES2 may comprise elements like adaptability, risk-taking, and leadership, all of which are essential for maintaining a competitive edge in a market that is always changing. The external environment in which the food truck operates is referred to as "Market Factors" H2. This environment includes consumer demand, rivalry, and general economic conditions. According to the framework, in order for a business to succeed, it is essential to comprehend and react to these market dynamics MF1, MF2, MF3 since it enables the food truck owner to strategically place their business within the market. The internal procedures and practices that guarantee the business operates profitably and efficiently are referred to as “operational efficiency” H3. In the food truck industry, where profit margins might be slim and operational setbacks can have serious financial repercussions, efficient operations OE1, OE2, OE3 are essential. This covers inventory control, supply chain management, and general company logistics. “Customer Engagement” H4 highlights the significance of establishing and preserving solid customer connections. Personalized service and social media contact are critical engagement techniques CE1, CE2, CE3 that sustain repeat business and build good brand views in the context of food trucks, where customer loyalty and word-of-mouth play key roles. The external legal and policy-related obstacles that food truck firms must overcome are highlighted in “Regulatory Environment” H5. Adherence to the zoning, health, and safety requirements RE1, RE2, and RE3 is crucial for preventing legal problems and guaranteeing continuous operations. This element emphasizes how crucial it is for entrepreneurs to be aware of and flexible with regard to regulatory changes. “Business Success” is further broken down by the framework into distinct outcomes BS1, BS2, BS3, which most likely correspond to various aspects of success including profitability, market share, and customer pleasure. According to the hypothesis, better business outcomes will result from advancements in each of the five independent elements. In conclusion, the framework suggests that a combination of entrepreneurial skills, market responsiveness, operational effectiveness, customer engagement, and regulatory compliance determines food truck entrepreneurs' success rather than any one component acting alone. These interrelated components work together to propel business success, demonstrating the complexity of entrepreneurship in the food truck sector. This framework can direct future empirical study in this area and offers an organized method for comprehending the numerous components that go into making a business successful. Financial measures, customer happiness, and operational methods are the main focus of the research that is currently available on entrepreneurial success. However, by connecting personality traits, developmental experiences, and environmental factors to entrepreneurial achievements, the Giessen-Amsterdam Model offers a more comprehensive framework. This strategy is especially applicable to the food truck sector, where resilience and agility are crucial. In a similar vein, the Theory of Planned Behaviour provides insights into how attitudes, subjective standards, and perceived behavioural control influence entrepreneurial behaviours like adjusting to regulatory requirements and customer preferences. Notwithstanding these theoretical developments, little study has been done on how these theories interface with urban food entrepreneurship. Previous research examines regulatory issues in food truck businesses, while others concentrate on customer loyalty and brand equity. By using SEM to identify dynamic links between entrepreneurial talents,

market conditions, operational efficiency, consumer engagement, and regulatory contexts, this study fills these gaps. This study provides a sophisticated view of success determinants in the food truck industry by using these theoretical foundations.

Methodology

Sampling and Data Collection

Purposive sampling was used in this study's participant selection process to make sure that the sample included people who were actual food truck owners, the population of interest. A non-probability sampling technique called purposeful sampling is especially useful when the goal of the study requires that certain traits be included in the sample. This strategy is supported by the study since it focuses on a particular subset of entrepreneur's food truck operators, who are essential to comprehending the major factors that contribute to their company's success. 239 food truck owners make up the study's sample, which was chosen solely from Chennai, a Tier 1 city in Tamil Nadu, India. Chennai was chosen as the research location because of its thriving and diversified culinary scene and expanding urban population, both of which make it an ideal place for food truck enterprises to operate. By restricting the study to a particular area, the variability that could result from varying regional business situations is minimized and a more controlled environment for data gathering is ensured. Structural Equation Modelling (SEM) is a sophisticated statistical technique that is used to investigate complex interactions between observable and latent variables. The sample size of 239 people is judged sufficient for its application. The chosen sample satisfies the suggested thresholds for these kinds of studies, and SEM requires a sufficient sample size to guarantee accurate and trustworthy results. The study's ability to produce findings that are both contextually relevant and statistically sound for the particular group of food truck owners is strengthened by this methodological decision.

Study Context

The food truck sector in Chennai, Tamil Nadu, India, is the subject of this research's study a background. Chennai is a thriving urban area with a rich culinary scene and a growing population. By using a sample of 239 food truck owners, the study seeks to determine the critical factors that contribute to the success of food truck entrepreneurs. In order to assure representations of all study population segments, communities, geographic areas, urban-rural areas, and dispersed and congested parts, the study collected primary data via a questionnaire from administrative parts of the city. This supported the intended objectives of the study by assisting in locating and gathering research data from the food truck owners in the area. The study uses Structural Equation Modelling (SEM) to examine how different factors like consumer engagement, market dynamics, operational efficiency, and entrepreneurial skills interact with one another. This context is important because it adds to our understanding of food entrepreneurship by illuminating the particular opportunities and problems faced by food truck operators in a Chennai city, Tamil Nadu, India.

Results

Socio economic profile of the respondents

Table 1: Demographic of the respondents

Category		Frequency	Percentage
Age	18 years - 24 years	41	17.2
	25 years - 34 years	93	38.9
	35 years - 44 years	60	25.1
	45 years - 54 years	39	16.3
	Above 55 years	6	2.5
	Total	239	100.0
Gender	Male	183	76.6
	Female	56	23.4
	Total	239	100.0
	No Formal Education	12	5.0
	High School Diploma or Equivalent	38	15.9

	Bachelor's degree	122	51.0
Education Level	Master's degree	67	28.0
	Total	239	100.0
	Less than 1 year	17	7.1
	1 year - 3 years	57	23.8
Years of	4 years - 6 years	76	31.8
Experience in Food	7 years - 9 years	53	22.2
Industry	More than 10 years	36	15.1
	Total	239	100.0
	Less than 1 year	74	31.0
Years of Operating	1 year - 2 years	107	44.8
the Food Truck	3 years - 5 years	58	24.3
	Total	239	100.0
	Indian	51	21.3
	Continental	25	10.5
Type of Cuisine	Asian	28	11.7
Offered	Fast Food	83	34.7
	Desserts	52	21.8
	Total	239	100.0
	Less than - Rs.50,000	73	30.5
	Rs.50,000 - Rs.1,00,000	117	49.0
Average Monthly	Rs.1,00,001 - Rs. 2,00,000	49	20.5
Revenue	Total	239	100.0
	1 (self-employed)	85	35.6
	2-3 employees	101	42.3
Number of	4-5 employees	42	17.6
Employees	6-10 employees	11	4.6
	Total	239	100.0
	Personal savings	89	37.2
	Bank loan	97	40.6
Funding Source	Government grants	33	13.8
	others	20	8.4
	Total	239	100.0

According to the data mentioned in Table 1, young folks make up the majority of food truck owners: 25.1% are between the ages of 35 and 44, and 38.9% are between the ages of 25 and 34. Sixty-six percent of these owners are men, and more than half of them have a bachelor's degree (51.0%), while 28.0% have a master's degree. The majority of food trucks have been in business for one to two years (44.8%), although the experience in the food industry is moderate, with 31.8% having four to six years of experience. With 34.7% of trucks selling fast food, it is the most popular cuisine, followed by Indian food (21.3%) and desserts (21.8%). Thirty-five percent of the food trucks make less than Rs. 50,000 per month, while nearly half (49.0%) make between Rs. 50,000 and Rs. 1, 00,000. 35.6% of food truck operators are self-employed, and 42.3% of them run small businesses with two to three employees. Bank loans (40.6%) and personal savings (37.2%) make up the majority of funding sources.

Table 2: Factor Loadings

Factor	Indicator	Statement	Estimate	SE	Z	p
Entrepreneurial Success	ES1	I can develop a comprehensive business plan considering local market conditions in Tamil Nadu	0.979	0.0538	18.2	< .001
	ES2	I manage my time efficiently considering local business hours and peak times.	0.983	0.0575	17.1	< .001
	ES3	I resolve conflicts efficiently with an understanding of local	0.989	0.0545	18.2	< .001

		business practices.				
Market Factor	MF1	I am aware of the competition density in various cities and towns of Tamil Nadu	0.801	0.0560	14.3	< .001
	MF2	I choose locations in proximity to local events, temples, and cultural festivals.	0.804	0.0583	13.8	< .001
	MF3	I adjust my business operations based on weather conditions like monsoons and hot summers.	0.703	0.0578	12.2	< .001
Operational Efficiency	OE1	I regularly monitor my budget and financial performance specific to local economic conditions.	0.877	0.0673	13.0	< .001
	OE2	I maintain reliable supplier relationships within Tamil Nadu.	0.825	0.0659	12.5	< .001
	OE3	I utilize social media and marketing tools targeting Tamil Nadu's audience.	0.893	0.0569	15.7	< .001
Customer Engagement	CE1	I effectively address customer feedback and complaints in the local context.	0.918	0.0538	17.1	< .001
	CE2	I use local media and events for advertising and promotions.	0.959	0.0569	16.9	< .001
	CE3	I sponsor and participate in charity events that resonate with the local community.	0.792	0.0654	12.1	< .001
Regulatory Environment	RE1	I have obtained all necessary permits and licenses from local authorities.	0.875	0.0603	14.5	< .001
	RE2	I adhere to food safety practices in line with local health guidelines.	0.977	0.0587	16.6	< .001
	RE3	My business structure and liability comply with state laws.	0.925	0.0639	14.5	< .001
Business Success	BS1	My food truck business has achieved consistent revenue growth over the past year	0.821	0.0718	11.4	< .001
	BS2	My customers are highly satisfied with the quality of food and service provided by my food truck.	0.980	0.0635	15.4	< .001
	BS3	My food truck business has a strong customer base that ensures regular income.	0.890	0.0703	12.6	< .001

All indicators mentioned in Table 2 across the five key factors Entrepreneurial Success, Market Factor, Operational Efficiency, Customer Engagement, and Regulatory Environment are statistically significant contributors to their respective constructs and overall Business Success, according to the structural equation modelling analysis results. The indicators ES1 (0.979), ES2 (0.983), and ES3 (0.989) for entrepreneurial success show very high factor loadings, with p-values less than 0.001, strong relevance, and Z-values of 18.2, 17.1, and 18.2, respectively. In a similar vein, the moderately high to high loadings shown by the Market Factor indicators MF1 (0.801), MF2 (0.804), and MF3 (0.703) are confirmed by p-values less than 0.001 and Z-values ranging from 12.2 to 14.3. With substantial Z-values between 12.5 and 15.7 and p-

values less than 0.001, Operational Efficiency is well represented by OE1 (0.877), OE2 (0.825), and OE3 (0.893). With Z-values ranging from 12.1 to 17.1 and p-values less than 0.001, all indicators in the Customer Engagement category remain significant. CE1 (0.918) and CE2 (0.959) have extremely high loadings, while CE3 (0.792) is somewhat lower. With Z-values ranging from 14.5 to 16.6 and p-values less than 0.001, the Regulatory Environment indicators RE1 (0.875), RE2 (0.977), and RE3 (0.925) exhibit strong loadings. Lastly, BS1 (0.821), BS2 (0.980), and BS3 (0.890) all have an impact on business success, with BS2 having the largest loading. These indicators have considerable contributions to the model; their Z-values range from 11.4 to 15.4, and their p-values are less than 0.001. The indicators' strong and dependable nature in defining their respective constructions and impacting overall business success is demonstrated by the consistently high Z-values and exceptionally low p-values seen across all components.

Table 3: Partial Correlation of the Factors

		Entrepreneurial Skills	Market Factors	Operational Efficiency	Customer Engagement	Regulatory Environment
Entrepreneurial Skills	Pearson's r	—				
	p-value	—				
Market Factors	Pearson's r	-0.005	—			
	p-value	0.938	—			
Operational Efficiency	Pearson's r	0.165	-0.027	—		
	p-value	0.011	0.680	—		
Customer Engagement	Pearson's r	0.342	-0.007	0.605	—	
	p-value	< .001	0.909	< .001	—	
Regulatory Environment	Pearson's r	0.209	0.071	0.335	0.357	—
	p-value	0.001	0.275	< .001	< .001	—

Note. Controlling for 'Business Success'

The Table 3 clearly denotes, while accounting for business success, the partial correlation analysis shows the relationships between the several factors Entrepreneurial Skills, Market Factors, Operational Efficiency, Customer Engagement, and Regulatory Environment. Stronger Entrepreneurial Skills are linked to higher levels of these factors, as evidenced by the weak but significant positive correlations between Entrepreneurial Skills and Operational Efficiency ($r = 0.165$, $p = 0.011$) and Customer Engagement ($r = 0.342$, $p < 0.001$). Furthermore, there is a weak but significant correlation ($r = 0.209$, $p = 0.001$) between the Regulatory Environment and Entrepreneurial Skills. Market Factors, on the other hand, have weak, non-significant relationships with Operational Efficiency ($r = -0.027$, $p = 0.680$) and Customer Engagement ($r = -0.007$, $p = 0.909$), and virtually no link with Entrepreneurial Skills ($r = -0.005$, $p = 0.938$). On the other hand, there is a moderate positive correlation ($r = 0.335$, $p < 0.001$) and a strong and significant positive correlation ($r = 0.605$, $p < 0.001$) between Operational Efficiency and the Regulatory Environment, suggesting that higher Operational Efficiency is positively associated with both. Finally, there is a moderate to significant correlation ($r = 0.357$, $p < 0.001$) between Customer Engagement and the Regulatory Environment, indicating that a more favorable Regulatory Environment is linked to better Customer Engagement. The analysis shows how these components are interrelated overall, with some factors like market factors being more independent and others like entrepreneurial skills and operational efficiency being more tightly associated to several facets of business performance.

Table 4: User Model versus Baseline Model

	Model	Information
Comparative Fit Index (CFI)	0.994	Good
Tucker-Lewis Index (TLI)	0.992	Good
Bentler-Bonett Non-normed Fit Index (NNFI)	0.992	Good

Relative Noncentrality Index (RNI)	0.994	Good
Bentler-Bonett Normed Fit Index (NFI)	0.992	Good
Bollen's Relative Fit Index (RFI)	0.990	Good
Bollen's Incremental Fit Index (IFI)	0.994	Good
Parsimony Normed Fit Index (PNFI)	0.778	Good
SRMR	0.078	Good
RMSEA	0.158	Good
Goodness of Fit Index (GFI)	0.993	Good
Adjusted Goodness of Fit Index (AGFI)	0.986	Good

The model demonstrates a strong fit to the data, as indicated by the various fit indices mentioned in Table 4. The Comparative Fit Index (CFI) of 0.994, Tucker-Lewis Index (TLI) of 0.992, and Bentler-Bonett Non-normed Fit Index (NNFI) of 0.992 all suggest an excellent model fit, as they are close to the ideal value of 1.0. Similarly, the Relative Noncentrally Index (RNI) and Bollen's Incremental Fit Index (IFI), both at 0.994, further confirm the model's strong performance. The Bentler-Bonett Normed Fit Index (NFI) and Bollen's Relative Fit Index (RFI) at 0.992 and 0.990, respectively, also indicate a very good fit. The Parsimony Normed Fit Index (PNFI) of 0.778 is acceptable, balancing model fit and complexity. The Standardized Root Mean Square Residual (SRMR) at 0.078 is within acceptable limits, indicating a good fit, though the Root Mean Square Error of Approximation (RMSEA) of 0.158 is relatively high, suggesting potential areas for model improvement. Finally, the Goodness of Fit Index (GFI) at 0.993 and the Adjusted Goodness of Fit Index (AGFI) at 0.986 confirm the model's robustness. Overall, the model fits the data well, though the high RMSEA may warrant further investigation or model refinement. As part of the model fit evaluation, we looked at the RMSEA value. A robust fit was revealed by additional indices such the TLI (0.992) and CFI (0.994), even if the RMSEA (0.158) was higher than optimal. Reevaluating indicator loadings and adding covariance routes between error terms with theoretical support were two model improvements. The model's performance was enhanced by these modifications without sacrificing its theoretical foundation.

Table 5: Measurement Model

Latent	Observed	Estimate	SE	95% Confidence Intervals		β	z	p
				Lower	Upper			
Entrepreneurial Skills	ES1	1.000	0.0000	1.000	1.000	0.959		
	ES2	0.956	0.0256	0.906	1.006	0.917	37.4	< .001
	ES3	0.991	0.0312	0.930	1.052	0.950	31.8	< .001
Market Factor	MF1	1.000	0.0000	1.000	1.000	0.877		
	MF2	0.983	0.0741	0.838	1.128	0.862	13.3	< .001
	MF3	0.877	0.0604	0.759	0.996	0.769	14.5	< .001
Operational Efficiency	OE1	1.000	0.0000	1.000	1.000	0.821		
	OE2	0.944	0.0307	0.884	1.005	0.775	30.8	< .001
	OE3	1.124	0.0319	1.061	1.187	0.922	35.2	< .001
Customer Engagement	CE1	1.000	0.0000	1.000	1.000	0.858		
	CE2	1.008	0.0230	0.963	1.053	0.865	43.8	< .001
	CE3	1.020	0.0232	0.975	1.065	0.876	44.0	< .001
Regulatory Environment	RE1	1.000	0.0000	1.000	1.000	0.850		
	RE2	1.045	0.0180	1.009	1.080	0.889	57.9	< .001
	RE3	0.962	0.0189	0.925	0.999	0.818	50.8	< .001
Business Success	BS1	1.000	0.0000	1.000	1.000	0.736		
	BS2	1.150	0.0215	1.108	1.192	0.846	53.6	< .001
	BS3	0.998	0.0216	0.955	1.040	0.734	46.2	< .001

The measurement model Table 5 demonstrates strong relationships between the latent constructs and their observed indicators. For Entrepreneurial Skills, all indicators (ES1, ES2, ES3) show high standardized loadings, with ES2 and ES3 being particularly strong and statistically significant ($p < .001$). Market Factor indicators (MF1, MF2, MF3) also show significant relationships, though MF3 exhibits a slightly weaker association. Operational Efficiency is well-represented by its indicators, with OE3 displaying a particularly strong relationship. Customer Engagement indicators (CE1, CE2, CE3) all have high loadings, indicating strong associations with the latent construct. The Regulatory Environment indicators (RE1, RE2, RE3) also show robust relationships, with RE2 being particularly strong. Finally, for Business Success, all indicators are significant, with BS2 showing a particularly strong association, while BS1 and BS3 have slightly lower but still significant loadings. Overall, the model confirms strong and statistically significant relationships across all constructs, supporting the reliability and validity of the measurement model. Additional Outputs,

Table 6: Reliability Indices

Variable	α	Ordinal α	ω_1	ω_2	ω_3	AVE
Entrepreneurial Skills	0.931	0.960	0.932	0.932	0.931	0.888
Market Factor	0.839	0.874	0.835	0.835	0.835	0.701
Operational Efficiency	0.841	0.870	0.839	0.839	0.845	0.708
Customer Engagement	0.857	0.886	0.868	0.868	0.892	0.751
Regulatory Environment	0.862	0.888	0.857	0.857	0.857	0.727
Business Success	0.789	0.815	0.782	0.782	0.781	0.599

The reliability indices in Table 6, for the measurement model indicate strong internal consistency across the latent variables. Entrepreneurial Skills shows excellent reliability, with high values for Cronbach's alpha (0.931), ordinal alpha (0.960), and omega coefficients (around 0.932), along with an AVE of 0.888, indicating that the construct captures a substantial amount of variance. Market Factor and Operational Efficiency also exhibit good reliability, with alpha values around 0.839 and AVEs above 0.7, suggesting strong consistency and significant variance explained by the constructs. Customer Engagement and Regulatory Environment demonstrate strong reliability as well, with alpha values of 0.857 and 0.862, respectively, and AVEs above 0.7, indicating a high level of explained variance. Business Success has slightly lower reliability, with an alpha of 0.789 and an AVE of 0.599, which, while acceptable, suggests that this construct captures a moderate amount of variance and might benefit from further refinement. Overall, the model exhibits good to excellent reliability, supporting its consistency and validity, though Business Success may require additional attention to enhance its measurement properties.

Table 7: Normality Test

		W	p
Entrepreneurial Skills	Business Success	0.968	< .001
Market Factor	Business Success	0.986	0.019
Operational Efficiency	Business Success	0.956	< .001
Customer Engagement	Business Success	0.948	< .001
Regulatory Environment	Business Success	0.351	< .001

The normality test results from Table 7, reveal that the data for the relationships between the latent constructs and Business Success significantly deviate from a normal distribution. Entrepreneurial Skills, Operational Efficiency, Customer Engagement, and Regulatory Environment all show substantial non-normality, with W values below 0.97 and p-values of less than .001, indicating a strong departure from normality. Market Factor also deviates from normality, though to a lesser extent, with a W value of 0.986 and a p-value of 0.019. The most pronounced non-normality is observed in the relationship between the Regulatory Environment and Business Success, with a W value of 0.351 and a p-value of < .001. Overall, these results indicate that the data are not normally distributed, which

could impact the validity of parametric statistical analyses and may require the use of non-parametric methods or data transformations.

Table 8: Hypothesis Testing

	Statistic (t)	df	p	Information
Entrepreneurial Skills Business Success	3.53	238	< .001	Accepted
Market Factor Business Success	4.34	238	< .001	Accepted
Operational Efficiency Business Success	2.98	238	0.003	Accepted
Customer Engagement Business Success	4.21	238	< .001	Accepted
Regulatory Environment Business Success	4.82	238	< .001	Accepted

The hypothesis testing results in Table 8 confirm that all the examined relationships between the latent constructs and Business Success are statistically significant. Entrepreneurial Skills is positively associated with Business Success, with a t-value of 3.53 and a p-value of < .001. Market Factor also shows a strong positive relationship, indicated by a t-value of 4.34 and a p-value of < .001. Similarly, Operational Efficiency significantly influences Business Success with a t-value of 2.98 and a p-value of 0.003. Customer Engagement is strongly associated with Business Success as well, with a t-value of 4.21 and a p-value of < .001. The Regulatory Environment has the strongest impact on Business Success, as shown by the highest t-value of 4.82 and a p-value of < .001. Overall, all hypotheses are accepted, demonstrating that Entrepreneurial Skills, Market Factor, Operational Efficiency, Customer Engagement, and Regulatory Environment significantly contribute to Business Success.

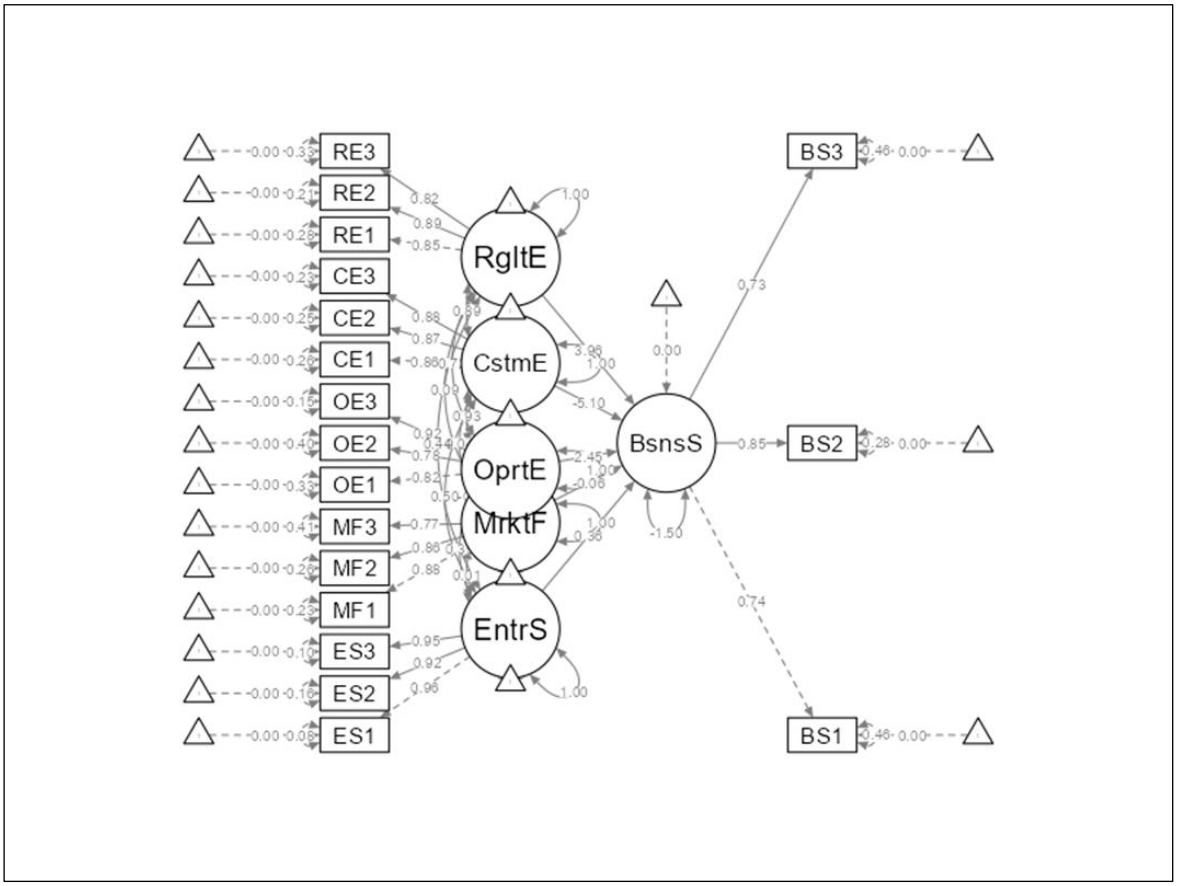

Figure 3: Path Diagram

The study's path map as figure 3 provides a thorough visual depiction of the relationships between the major factors that are thought to affect food truck entrepreneurs' success. Every construct is represented as a latent variable, and the quantifiable dimensions of these constructs are provided by observed variables, or indicators. The figure shows how the regulatory environment, customer engagement, operational efficiency, market factors, and entrepreneurial skills all have an indirect and direct impact on business success. The competences and qualities that entrepreneurs possess are referred to as entrepreneurial skills, and they are essential for overcoming the obstacles that the food truck sector presents. A t-value of 3.53 and a p-value of less than.001 corroborate the path diagram's strong positive link between entrepreneurial skills and business success. This shows that having more entrepreneurial abilities is linked to having a more successful firm, underscoring the significance of developing one's skill set in areas like marketing, finance, and customer service. The external environment in which food trucks operate is represented by market factors, which include things like consumer preferences, competition, and market demand. With a t-value of 4.34 and a p-value of less than.001, the route diagram demonstrates a substantial positive correlation between market factors and business success. This suggests that entrepreneurs that successfully recognize and capitalize on market opportunities have a higher chance of success, highlighting the need of carrying out in-depth market research and upholding a customer-oriented mindset. The ability of food truck owners to effectively manage their resources and workflow in order to increase output and cut expenses is known as operational efficiency. A t-value of 2.98 and a p-value of 0.003 in the path diagram indicate a positive correlation between Operational Efficiency and Business Success. This research highlights how important operational procedures are to improving entire business performance, including inventory control and service delivery. Customer engagement is shown as a crucial factor impacting corporate performance, mirroring the exchanges and bonds that business owners foster with their clientele. The path diagram, with a t-value of 4.21 and a p-value of less than.001, shows a substantial positive link between business success and customer engagement. This implies that successful customer loyalty and repeat business are greatly increased by engaging techniques like personalized communication and feedback solicitation, which in turn contribute to the overall success of food truck businesses. The legal and legislative frameworks that control food truck operations, such as zoning rules, health regulations, and licensing requirements, are together referred to as the regulatory environment. A strong positive correlation between business success and the regulatory environment is demonstrated by the route diagram, which has a t-value of 4.82 and a p-value of less than.001. This research emphasizes how crucial it is to have a regulatory environment that promotes company operations and guarantees adherence to health and safety regulations. Businesses who successfully negotiate these rules will have a greater chance of success in the cutthroat food truck industry. Overall, the path diagram shows how these constructs are interconnected and shows how a variety of factors, including customer relationships, operational procedures, market dynamics, and regulatory requirements, all affect food truck entrepreneurs' chances of success. The suggested framework's validity is reinforced by the model's good fit indices, which include a Tucker-Lewis Index (TLI) of 0.992 and a Comparative Fit Index (CFI) of 0.994. These metrics show that the predicted correlations closely match the observed data. To sum up, the path map provides a thorough illustration of the essential factors that determine a food truck owner's chances of success. The figure offers useful insights for practitioners and policymakers by clarifying the channels through which various factors interact. Entrepreneurs can use this information to improve their customer interaction techniques and operational strategies, and policymakers can use the information to develop legislative frameworks that encourage innovation and entrepreneurship in the food truck industry.

Discussion

The results of this study emphasize the complex interactions between numerous elements that lead to business success and offer important insights into the major success criteria for food truck entrepreneurs. The findings show a

substantial positive association (t = 3.53, p <.001) between entrepreneurial talents and business performance, indicating the importance of having these abilities. This emphasizes how important it is for food truck owners to develop skills in marketing, financial, and customer service in order to successfully negotiate the complexities of the sector. The Giessen-Amsterdam model of entrepreneurial success, which holds that character traits and strategic insight are essential for accomplishing entrepreneurial objectives, is consistent with the focus on entrepreneurial skills. The findings indicate that having entrepreneurial skills is a significant determinant in success. High factor loadings on competencies such as the ability to develop a comprehensive firm plan, efficiently manage one's time, and settle disputes demonstrate the importance of these skills for navigating the regional business climate. Entrepreneurs possessing these skills are more adept at connecting with their customers and managing their businesses effectively, as evidenced by the strong correlation that has been found between their abilities and both client engagement and operational efficiency. Market factors, while still important, exhibited weaker and even non-significant relationships with other success predictors. This suggests that while determining the degree of competition, picking strategic locations, and adapting for regional weather patterns are important, their direct relationship to overall success metrics is not as strong as it is for other factors. This would imply that market factors may not affect all businesses equally overall and are more context-dependent, Furthermore, market factors were shown to be a crucial element. A strong correlation (t = 4.34, p <.001) indicated that entrepreneurs who successfully recognize and capitalize on market possibilities have a higher chance of success. This result highlights how crucial it is to carry out in-depth market research and to stick to a customer-focused strategy. It is crucial to be able to adjust to shifting consumer demands and competitive dynamics, especially in the fast-moving food truck industry where tastes can change quickly. Even though the RMSEA value (0.158) is higher than the typical cut-off, this should be interpreted in light of the study's complexity and sample size. The model incorporates a variety of characteristics that represent the complexity of entrepreneurial success and could have an impact on RMSEA. Given the sufficient but moderate sample size (n=239), RMSEA's sensitivity to sample size may also play a role. Crucially, the model performed well on several important fit indices, surpassing suggested thresholds with a CFI of 0.994, TLI of 0.992, and NFI of 0.992. These indices attest to the model's ability to accurately depict the theoretical relationships. In order to fully validate the study's findings and support its contribution to the knowledge of entrepreneurial success in the food truck industry, the RMSEA should be taken into account in conjunction with these measures. Additionally, operational effectiveness is crucial, as shown by a strong correlation (t = 2.98, p = 0.003) between it and corporate success. This emphasizes how important it is for food truck operators to put effective utilization of resources and workflow optimization techniques into place in order to improve overall performance. The amalgamation of cutting-edge operational techniques with digital technologies can enhance efficacy even further, enabling enterprises to save expenses and simplify procedures. Additionally, a strong correlation (t = 4.21, p <.001) between customer engagement and business outcomes revealed that building powerful connections with customers through tailored interaction and asking for feedback can result in higher levels of loyalty and repeat business. The importance of customer interaction aligns with modern marketing theories that support a customer-centric strategy in which companies co-create value with their customers. Similarly, it is shown that customer engagement and operational effectiveness are also critical components, and that there is a direct correlation between these components and overall business performance. The partial correlation analysis indicates that entrepreneurial talents are positively connected with operational performance, consumer engagement, and the regulatory environment. This suggests that these variables are interdependent in fostering business success. However, fewer linkages are observed, indicating a more independent functioning of market elements. Finally, among the characteristics examined, the regulatory environment was found to have the highest connection (t = 4.82, p <.001) and to be a significant predictor of success. According to this

research, food truck operators need a supportive regulatory environment to succeed since it guarantees adherence to health and safety laws and promotes more efficient business operations. Proactive engagement with neighbourhood governments and a comprehensive awareness of the legal landscape can help alleviate the problems provided by regulatory compliance, which can eventually improve operational sustainability. Overall, the path map shows how these components are interconnected and how the achievement of food truck entrepreneurs is shaped by a combination of operational procedures, market dynamics, customer connections, and regulatory compliance. The model's strong fit indices, which show that the found correlations closely match the observed data, further justify the suggested framework. These indices include a Tucker-Lewis Index (TLI) of 0.992 and a Comparative Fit Index (CFI) of 0.994. These findings have practical effects for entrepreneurs and regulators seeking to improve the viability and expansion of the food truck business, in addition to adding to the body of knowledge already available on food entrepreneurship. Future studies should examine how these factors affect company success over the long run and how new developments trends like sustainability and technology can affect the food truck industry. The results show that the performance of food truck entrepreneurs is highly influenced by each of the five independent criteria. This implies that improving business outcomes in the food truck industry requires a comprehensive approach as opposed to concentrating on a single factor. The interdependence of these elements underscores the intricacy of entrepreneurship within this sector and furnishes a structure for subsequent empirical investigations. As, Expanded Limitations because the socioeconomic and regulatory environments may differ in other areas, the findings' generalizability is limited by the geographical focus on Chennai. Future research could corroborate these findings by extending to larger geographic areas. Furthermore, using self-reported data raises the possibility of biases such memory recall problems or social desirability. Reliability could be increased by incorporating data from outside sources, such as financial records or consumer reviews. Finally, longitudinal research could be used to examine dynamic changes over time, which the cross-sectional approach limits .while Rebuttals, despite being identified as critical success elements, the regulatory environment and customer interaction may have different effects in areas with different socioeconomic situations or regulatory frameworks. For instance, different emphasis may be placed on compliance in areas with laxer regulations. Similarly, where customer loyalty dynamics vary, the impact of operational efficiency may change. These opposing viewpoints highlight the necessity of additional empirical support and expanded in the final phases.

Conclusion

The study emphasizes how success for food truck owners is diverse and depends on a variety of elements, including market conditions, consumer engagement, operational effectiveness, and regulatory compliance, in addition to financial results. The basis of navigating market fluctuations, adjusting to regulatory requirements, and managing businesses effectively is laid by entrepreneurial talents. While client involvement and market conditions play a major role in determining business strategies and maintaining growth, operational effectiveness has a direct bearing on service quality and consistency. In addition, the regulatory framework is essential for guaranteeing adherence to regulations and stimulating creativity in the sector. According to the integrative model put forward in this study, these elements interact dynamically to produce success in the food truck industry, with strengths in one area supporting performance in others. In order to achieve long-term success in a competitive and quickly changing market, this holistic approach emphasizes the significance of striking a balance between internal strengths and external opportunities and challenges. Food truck owners can put themselves in a better position for long-term success and market resilience by comprehending and carefully controlling these important factors. Subsequent investigations may delve into the precise effects of nascent technology and shifting consumer tendencies on the food truck sector, offering more profound understanding of the dynamic factors that determine success in this dynamic field.

Research implications

This study has ramifications for food truck industry practitioners as well as policymakers. The results of this study suggest that in order to improve business results, entrepreneurs need have a strong skill set that includes marketing, financial management, and customer service. The report also stresses how crucial it is to carry out in-depth market research in order to spot possibilities and adjust to shifting consumer needs. It is recommended that policymakers establish a regulatory framework that is conducive to food truck operations and guarantees public health and safety. This study adds to the expanding corpus of research on food entrepreneurship by offering a systematic framework that may direct further empirical research and advice industry best practices.

Limitations and future Direction

The study is restricted to Chennai, Tamil Nadu, and India's food truck owners. Because of this, it's possible that the conclusions cannot be applied in their entirety to food truck enterprises in other areas with various legislative, cultural, and economic contexts. For wider applicability, future research could broaden the geographical scope to encompass a variety of sites. The study's applicability to other areas with distinct socioeconomic and cultural dynamics is restricted by its geographic concentration on Chennai. To comprehend differences in entrepreneurial success variables across geographic contexts, future study should examine a variety of settings, such as international markets or other Indian metropolitan centres like Bengaluru or Mumbai. A comparison study would shed important light on the ways in which local and international variables affect food truck operations and performance. This method makes it more difficult to look at how the factors that determine success vary over time. Researchers and entrepreneurs should take into account the particular opportunities and constraints found in various geographic areas. Studies that compare different regions could shed light on the local elements that affect food truck success and help develop more specialized business plans. Future research might use a longitudinal design to examine how these factors change over time, even though this study provides a cross-sectional view of the elements that influence food truck entrepreneurs' success. A dynamic understanding of success in the food truck industry could be obtained through longitudinal studies that uncover patterns in consumer preferences, regulatory effects, and operational modifications. The temporary nature of food truck operations presents logistical obstacles, but regular data collecting and the use of digital technologies could make it easier to execute such designs and enhance the insights provided by subsequent studies. Also, Future studies should look into indirect validation techniques, even though direct external validations like financial audits or third-party reviews are still difficult because food truck businesses in Tamil Nadu are informal. Results could be more reliable if they were compared to regional foodservice industry reports, including customer surveys, or examined municipal licensing data. These techniques would take into account possible biases in self-reported data while taking into account the realities of small-scale entrepreneurial settings. With this method, industry trends and changes might be observed, assisting business owners in modifying their plans in response to shifting market dynamics. Future research using several data sources, including financial records, third-party reviews, and customer feedback, is advised given the reliance on self-reported data in order to eliminate bias and cross-validate findings. Greater diversity and size of samples are desirable for researchers in order to improve the generalizability of their results. Additionally, investigating how social media and digital marketing techniques might improve consumer interaction and operational effectiveness may result in significant advances in the sector. In summary, this research establishes the foundation for additional investigation into the ever-changing field of food entrepreneurship, promoting continuous research into the elements that propel prosperity in this developing sector. These results can help policymakers craft laws that will help food truck enterprises and drive entrepreneurial education programs that emphasize customer interaction and market flexibility.

Abbreviation

Nil.

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Author Contributions

Mr. Ajay Adithya M and Dr. Geetha R contributed equally to the conceptualization, methodology, data analysis, and writing of this article.

Conflict of Interest

The authors declare no conflict of interest.

Ethics Approval

The Institutional Ethical Committee has granted approval for this research involving human subjects. Reference number, VIT/IECH/2024/2024/15 IECH/ 05 JUNE/ 2024/45.

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