Challenges of the Fast Food Industry in India : An Integrated ISM-MICMAC Approach

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Abstract

Purpose : India's fast food industry was the fastest-growing in the last decade, but not everything was as shiny as it looked from the outside. Many challenges were posing a threat to the survival of this industry. So, the purpose of the present study was to conduct a structural analysis of the challenges of the fast food industry in India using interpretive structural modeling (ISM).

Design/Methodology/Approach : Challenges of fast food industries have been identified from the literature, which was further endorsed for significance using responses from the domain experts through a structured questionnaire. The rationale of this paper was to apply ISM to develop a hierarchical structure among the vital challenges of fast food industries in India. The ISM technique analyzed the mutual interaction and ranking among the challenges. Furthermore, MICMAC analysis was applied to explain this dependence and driving power challenges.

Findings : During the first phase of the research, an opinion survey of experts was endorsed. The challenges of "lack of fresh ingredients" and "availability of ready-to-eat meals" were dropped based on the *t*-test. ISM was applied to the validated challenges. Ten validated challenges were modeled into five levels. "Changing tastes of millennial customers" was found to be the most important challenge of the fast food industry, which appeared at the lowest level. The ISM model supported examining and building up a model of interactions, mutual influence, and relationships among the challenges faced by the fast food industry.

Limitations : The research work bounded the study in India, and subjectivity in expert opinion might exist.

Practical Implications : The study is relevant to fast food industry professionals, food delivery aggregators, and food processing and packaging professionals. They need to be aware of the lacunae, the importance of challenges, and their interdependence found out from the study for future courses of action.

Originality/Value : The study investigated the core challenges of the fast food industry in India. Secondly, it had methodological novelty in the context. Finally, the study led to a multidimensional implication for various stakeholders in India's fast food industry context.

Keywords : **interpretive structural modeling, fast food industry, hierarchical structure, and MICMAC analysis**

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Rapid economic growth and urbanization have facilitated a paradigm shift in the food industry in India. Home-cooked food has taken a back seat, and in its place, people enjoy and relish fast food served in food joints. According to the dictionary, fast food is defined as food that is made and served rapidly. Another way to describe fast food is as cooked quickly yet has a strong flavor that lingers in our mouths. Fast food has also been referred to by some consumer behavior experts as convenience food items that help customers save time and effort on meal preparation, purchasing, and cleaning up afterward (Barska, 2018). Due to their hectic lifestyles, most families, parents, and professionals find it difficult or impossible to prepare meals at home. As a result, people take their school-age children to fast-food restaurants for breakfast or lunch. According to Adebayo (2009), the fast food sector seems to have filled the need left by people's hurried lifestyles in recent years from a functionalist perspective. Major global fast-food conglomerates and numerous local businesses have contributed to the mushroom expansion of the food industry in India since the market was liberalized in 1991. This increase in population may be linked to elements like the nuclear family structure, rising per capita income, increased employment of females, urbanization of smaller cities, and, last but not least, youth exposure to Western culture (Sharkey, 2009). According to research, more characteristics encourage than hinder teenage fast food consumption, and these factors can be found both at the individual and social levels (Majabadi et al., 2016; Shamal & Mohan, 2019). Specific difficulties, however, continue to hinder the sector's progress. Therefore, this sector must concentrate on increasing operational effectiveness, achieving optimal economics, and guaranteeing the company's viability.

This study uses interpretative structural modeling (ISM) to analyze the difficulties facing the Indian fast food sector. To build a model, this method uses a pair-wise comparison. Analyzed are the connections between the fast food sector's issues and the forces that drive and depend on them. Based on input from subject matter experts in the field of fast food, 12 issues have been identified from the existing literature and validated using a questionnaire-based survey. Additionally, a framework is created using the ISM technique based on a consensus among experts.

Literature Review

The following is a thorough literature assessment of the fast food sector's difficulties. Experts in the respective domain further validated these challenges in India. A brief explanation of these challenges is summarized in Table 1. We looked at several databases for the literature review, including EBSCO, PROQUEST, Google Scholar, Scopus, Science Direct, and Emerald, to conduct keyword searches for terms like "India," "Fast Food Industry," and "Challenges." After that, the identified problems were categorized into themes. The literature review covered the period from 2002 to 2022 to identify the difficulties.

Consumers Shift to Healthy Foods

High-calorie foods attract health problems. It is thought that if people were prepared for a healthy lifestyle, there could be less incidences of heart disease (Ashakiran & Deepthi, 2012; Atinkut et al., 2018; Fuhrman, 2018).

Inconvenience in Managing Daily Operational Expenses

Running a business is incredibly difficult because of regular expenses. The food sector is not any different. They struggle to keep up with everyday spending because every commodity becomes more expensive daily (Cross, 2017; Shahid et al., 2014).

Consistency in Raw Materials and Allied Supplies to the Fast Food Industry

Due to their poor nutritional quality, out-of-home foods have gained popularity over the past 10 years and are a significant contributor to the rise in obesity (Hanif & Usman, 2018; Janssen et al., 2018).

Cut-throat Competition among the Players

An essential demanding component was recognized as an intense rivalry. Additionally, digital marketers pose a hazard (Mhlanga, 2018; Montgomery et al., 2012; Ostapenko, 2011).

The Threat of Being Sued by Consumers

In the service sector, customers are treated with great respect. Therefore, the food sector operates in a climate of fear lest they be sued for any wrongdoing over the provision of subpar food or other ancillary services. (Burnett, 2006; Mello et al., 2003).

Lack of Fresh Ingredients

Hygiene, environment, and balanced nutrition are prominent for this industry to sustain itself (Thiemann & Roman-Alcalá, 2019).

Issues of Creating a Unique Brand of Taste and Quality

Most of the food joints offer more or less similar palate in their food offerings. So, building a brand of its own is genuinely challenging. For example, KFC China's outreach program to cater to the needs of Chinese customers' behavior and loyalty was indeed a strategic move to build its own identity (Chen, 2013).

Acquiring and Managing a Skilled Workforce

A trained staff is required to maintain and sustain the food business. However, the labor hired for this task does not come at the public expense of low-wage assignments in the fast food business. It is mentioned in an article about skills difficulties in the hospitality industry (Aynalem et al., 2016; Baum, 2002).

Availability of Ready-to-Eat Meals

In the absence of the desired product, substitute products might quickly enter the market. There are many readymade meals on the market that may pose a threat to fast food restaurants. Substitute products pose a significant threat (Hillier-Brown et al., 2017).

Changing Tastes of Millennial Customers

Customers born between 1980 and early 2000 are referred to as millennials. They are more concerned about issues of health and the environment. As a result, their preferences go toward organic foods. Meeting the millennials' taste criteria is a significant challenge for the fast food sector (Elete, 2018; Goyal & Singh, 2007).

Rising Labor Cost

Can the workforce lag when the world is motivated to seek a higher standard of living? This is also reflected in the fast food industry. Every year, the cost of labor in the fast food sector rises. This could be attributed to increased minimum wage and pressure to provide employees with a fair living salary (Katić et al., 2020).

Copycat Players in the Market

A success story in the industry is quickly replicated and adopted. Leaders in fast food companies are constantly searching for new methods to provide unique experiences to discerning customers. Players who try to imitate everything may fail (Brewer, 2018; Pingali, 2007).

Research Gap

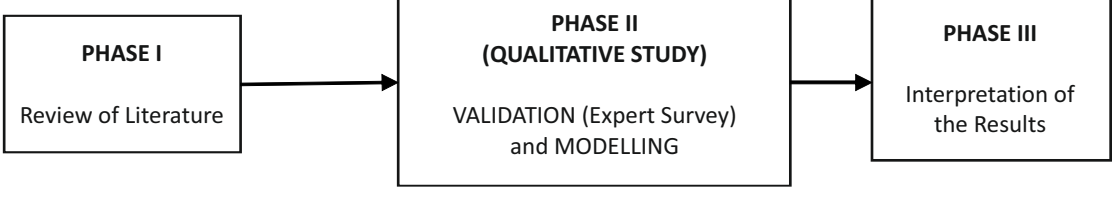
Few studies have explored issues of the fast food industry in India. Though these challenges have been studied in isolated ways to find out how they impact the fast food industry in an Indian context, studies on the interaction among these challenges are lacking within a framework. Hence, their literature is scarce in understanding the mutual interaction among these challenges and deciphering their priorities. Driving power and dependence among these challenges is also lacking.

Methodology

The Objective of the Study

The study's primary objective is to validate the identified challenges of the fast food industry in India from literature reviews through expert surveys. Furthermore, the ISM methodology was conducted to find the interdependence between the challenges and portray them on multiple levels based on their importance. Subsequently, MICMAC analysis was conducted to find dependence and the driving power of these challenges. The same analysis portrays the challenges of the fast food industry in four quadrants. Figure 1 depicts the research methodology used for the paper.

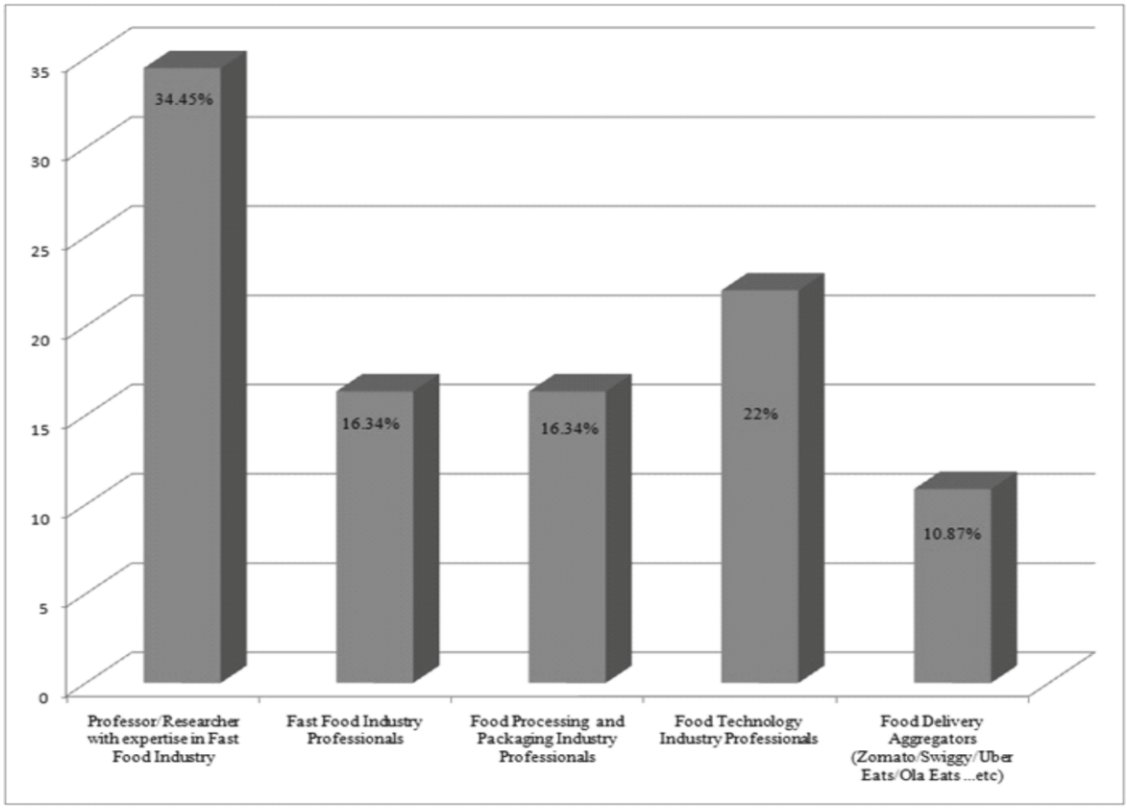
Figure 1. ***Phases in Research Methodology***



Expert Survey Methodology

To verify the challenges of the fast food industry, an exercise was conducted to elicit feedback using a structured questionnaire from experts through an online survey. A break-up of the profile of the experts is summarized in Figure 2.

Figure 2. ***Profile of the Experts***



Initially, 43 experts were contacted through email to explain the purpose of the study. Thirty-one experts agreed to grade their thoughts on the highlighted difficulties on a 5-point Likert scale. As a result, comments were read to accept or reject the fast food industry's problems. A sample *t*-test was employed to compare the mean of each challenge with test values equal to the mean value of 3. The following is a description of the hypotheses to confirm the challenges. Valid challenges are assessed and retained based on the results of the *t*-test.

Analysis and Results

Feedback from experts elicits well-built conformity on the identified challenges, except for one challenge, i.e., "Lack of fresh ingredients" and "Availability of ready-to-eat meals," as specified in Table 1.

Table 1. ***Results of Expert Survey***

S.No.	Proposed Fast Food Industry Challenges in India	Mean	Mode	Standard Deviation	*t* - value (Test Value=3*)	Significance Value	Validation
1	Consumers shift to healthy foods	3.61	4	1.20	2.84	0.008	Accept
2	The inconvenience of managing daily operational expenses	3.58	4	0.99	3.26	0.003	Accept
3	Consistency in raw materials and allied supplies to the fast food industry	3.61	4	0.92	3.71	0.001	Accept

4	Cut-throat competition among the players	4.26	4	0.73	9.61	0.000	Accept
5	The threat of being sued by consumers	3.35	4	0.95	2.08	0.046	Accept
6	Lack of fresh ingredients	3.26	4	1.29	1.11	0.274	Reject
7	Issues of creating a unique brand of taste and quality	3.77	4	0.99	4.35	0.000	Accept
8	Acquiring and managing a skilled workforce	3.74	4	1.12	3.67	0.001	Accept
9	Availability of ready-to-eat meals	3.13	4	0.96	.75	0.459	Reject
10	Changing tastes of millennial customers	3.61	4	1.02	3.34	0.002	Accept
11	Rising labor cost	3.90	4	1.04	4.82	0.000	Accept
12	Copycat players in the market	3.87	4	0.81	6.02	0.000	Accept

Note. (* 1 = *Strongly Disagree* ; 5 = *Strongly Agree*).

"Lack of fresh ingredients" and "Availability of ready-to-eat meals" are rejected as the significance value is greater than 0.05. "Cut-throat competition among the players," "Issues of creating a unique brand of taste and quality," "Rising labor cost," and "Copycat players in the market" are found to be the most significant. "Lack of fresh ingredients" and "Changing tastes of millennial customers" are found to be insignificant, with values of 0.274 and 0.459, respectively. "Rising labor cost" is the most important challenge, based on expert opinion, with a maximum mean score of 3.9. The result of the expert survey signifies that the challenges are quite vital from the Indian perspective (Mode = 4).

Methodology Adopted for the Modeling

Alternative approaches such as ANP, AHP, DEMATEL, graph theory, SEM, and BMW are used to develop the ISM-MICMAC methodology (Mangla et al., 2018). Table 2 compares the details of the multicriteria decision-making models to the ISM-MICMAC technique.

Table 2. ***Comparison of ISM-MICMAC with ANP/SEM/DEMATEL/AHP/Graph Theory/BWM/TISM***

ISM-MICMAC	ANP	SEM	DEMATEL
ISM methodology establishes interrelationships among the variables and portrays a hierarchical structure. MICMAC analysis validates the driving and dependence among the variables.	This method can deliver interdependencies between and among the variables.	SEM is applied to find out the causal relationship among the variables. The method supports statistical validation of the model. However, large samples are required here.	DEMATEL facilitates interpreting the importance of criteria and also analyzes the causal relationship among the criteria.
AHP	**Graph Theory**	**BWM**	**TISM**
AHP supports providing a classified framework of the variables. However, AHP does not establish interdependence among the variables.	Graph theory is applied to express the interlinks among the variables. The direction of the edges in the graph is, however, debated.	BWM can be referred to examine the alternatives with respect to the criteria in circumstances when objective metrics are not available to estimate the alternatives.	TISM additionally interprets the links; whereas, ISM interprets the nodes only. When variables are more, calibrating a digraph displaying transitive links may be complicated to comprehend.

Source : Mangla et al. (2018).

In the current context, we have selected ISM-MICMAC (Diabat & Govindan, 2011; Kanojia et al., 2022; Singh & Nanda, 2022; Warfield, 1974) due to the following advantages over other MCDM approaches as specified in Table 2.

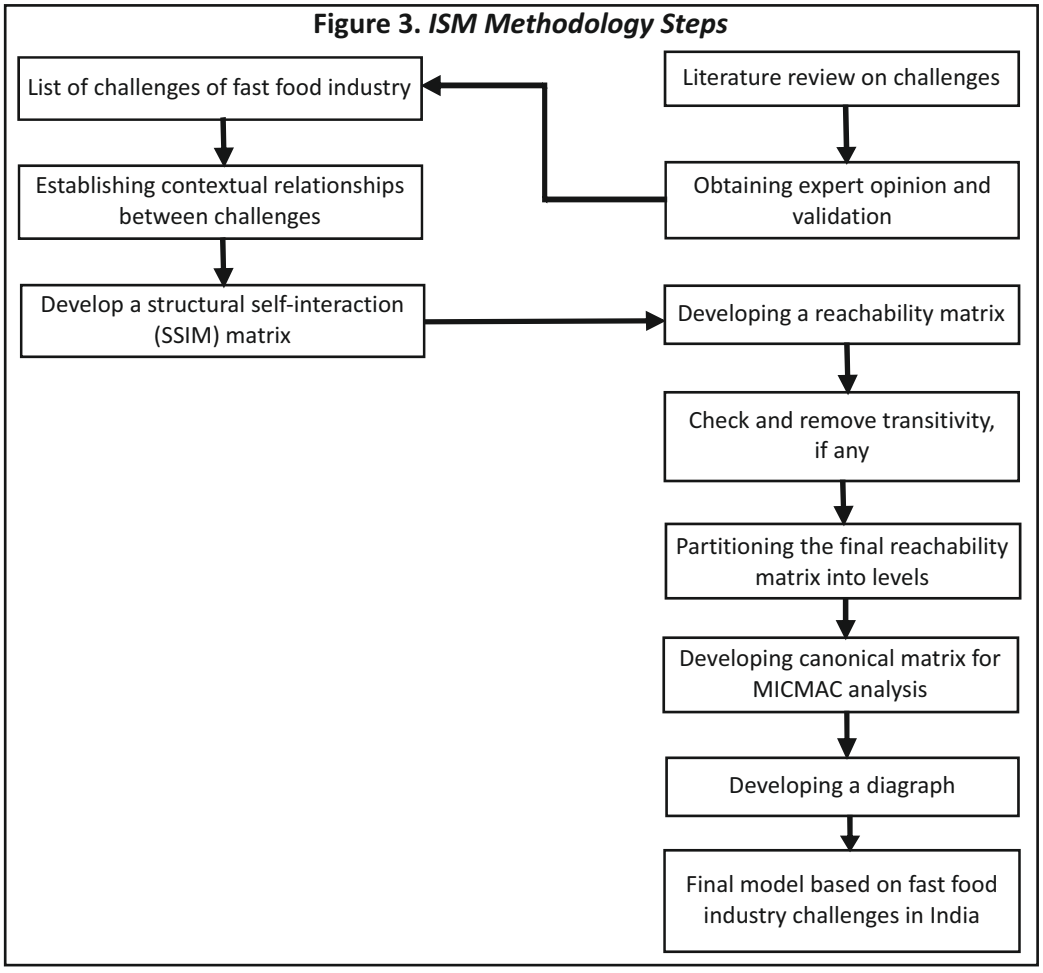
- It understands relationships among challenges within a framework with a clear understanding of the order and complexity of relationships among challenges under study. The systematic process considers all possible pair-wise comparisons per expert opinion.
- Application of transitive interpretation may reduce the relational queries by 50% to 80%.
- The driving power and dependence among the challenges are portrayed in MICMAC analysis.

After validation of the challenges of the fast food industry in the Indian context, the challenges are hierarchically modeled using ISM. The description of the ISM modeling is narrated in the following subsections.

Modeling the Challenges of the Fast Food Industry

ISM is a qualitative modeling technique. A framework is generated with multiple levels based on a personal interview with experts. In ISM, pair-wise comparison and transitive are accomplished to build a framework. Steps of ISM are followed (Figure 3).

Figure 3. *ISM Methodology Steps*



Nine subject matter experts were chosen through the judgmental sampling method. These experts also joined the expert survey and consented to participate in the second research phase.

Criteria for selection for ISM modelling :

- Fast food industry professionals, food delivery aggregators, food processing and packaging industry professionals in India.
- Professors/researchers with considerable knowledge and expertise in the fast-food industry in India.

Step I : Creation of a Structural Self-Interaction Matrix (SSIM)

Here, we find pairwise relationships among the challenges based on the remarks of a panel of experts. Nine experts were consulted using four symbols to decipher the relationship between the challenges.

- V - Challenge m will affect Challenge k.
- A - Challenge k will affect Challenge m.
- X - Challenge m and Challenge k will affect each other.
- O - Challenge m and Challenge k are not related.

According to expert consultation, the symbols are reflected in the SSIM (Table 3).

Table 3. ***Structural Self-Interaction Matrix***

S. No.	Challenges of the Fast Food Industry in India	10	9	8	7	6	5	4	3	2
1	Consumers shift to healthy foods. *(A1)*	O	O	O	V	V	V	X	O	O
2	The inconvenience of managing daily operational expenses. *(A2)*	O	O	O	A	O	O	O	A	*
3	Consistency in raw materials and allied supplies to the fast food industry. *(A3)*	O	O	O	O	X	O	O	*	
4	Cut-throat competition among the players. *(A4)*	V	V	A	X	X	V	*		
5	The threat of being sued by consumers. *(A5)*	A	O	O	O	O	*			
6	Issues of creating unique brands of taste and quality. *(A6)*	A	V	A	A	*				
7	They are acquiring and managing a skilled workforce. *(A7)*	A	A	A	*					
8	Changing tastes of millennial customers. *(A8)*	V	V	*						
9	Rising labor costs. *(A9)*	O	*							
10	Copycat players in the market. *(A10)*	*								

Step II : Reachability Matrix

This matrix is generated from SSIM, formed based on a pairwise comparison of challenges. Here, the four symbols of SSIM are substituted by "1" and "0" based on the following guidelines (Table 4):

- If (s,t) input in SSIM is V, then (s,t) input in IRM will be 1, and (t,s) input in IRM will be 0.
- If (s,t) input in SSIM is A, then (s,t) input in IRM will be 0, and (t,s) input in IRM will be 1.
- If (m,k) input in SSIM is X, then (s,t) input in IRM will be 1, and (t,s) input in IRM will be 1.
- If (m,k) input in SSIM is O, then (s,t) input in IRM will be 0, and (t,s) input in IRM will be 0.

Table 4. ***Initial Reachability Matrix***

S. No.	Challenges of the Fast Food Industry in India	1	2	3	4	5	6	7	8	9	10
1	Consumers shift to healthy foods.	1	0	0	1	1	1	1	0	0	0
2	The inconvenience of managing daily operational expenses.	0	1	0	0	0	0	0	0	0	0
3	Consistency in raw materials and allied supplies to the fast food industry.	0	1	1	0	0	1	0	0	0	0
4	Cut-throat competition among the players.	1	0	0	1	1	1	1	0	1	1
5	The threat of being sued by consumers.	0	0	0	0	1	0	0	0	0	0
6	Issues of creating unique brands of taste and quality.	0	0	1	1	0	1	0	0	1	0
7	Acquiring and managing a skilled workforce.	0	1	0	1	0	1	1	0	0	0
8	Changing tastes of millennial customers.	0	0	0	1	0	1	1	1	1	1
9	Rising labor cost.	0	0	0	0	0	0	1	0	1	0
10	Copycat players in the market.	0	0	0	0	1	1	1	0	0	1

In this study, the ISM package developed using R is referred to (Anand & Bansal, 2017), which could eliminate manual effort to build the final reachability matrix and level partitioning.

Final Reachability Matrix

The initial reachability matrix is applied using R Studio, which generates the ISM matrix as the final reachability matrix, where 1s in green color are determined by applying the law of transitivity (Table 5).

Step III : Partitioning of Levels

The reachability and antecedent set for each fast food challenge are found in the final reachability matrix. The intersection of both these sets is derived from all the challenges. The challenges for which the intersection set and reachability set are the same occupy the top level in the ISM model. Once the top-level challenges are found, these are separated from other challenges. This process is repeated to search for the challenges in the next levels. The process continues until the level of each challenge is found. This procedure is carried out, in this case, using the

Table 5. ***Final Reachability Matrix***

A1	A2	A3	A4	A5	A6	A7	A8	A9	A10
1	**1**	**1**	1	1	1	1	0	**1**	**1**
0	1	0	0	0	0	0	0	0	0
0	1	1	**1**	0	1	0	0	**1**	0
1	**1**	**1**	1	1	1	1	0	1	1
0	0	0	0	1	0	0	0	0	0
1	**1**	1	1	**1**	1	**1**	0	1	**1**
1	1	**1**	1	**1**	1	1	0	**1**	**1**
1	**1**	**1**	1	**1**	1	1	1	1	1
0	**1**	0	**1**	0	**1**	1	0	1	0
0	**1**	**1**	**1**	1	1	1	0	**1**	1

R software suite. In R Studio, the ISM Package is applied to the initial reachability matrix to produce the "ISM Output" file, which contains all reachability sets, antecedent sets, and intersection sets with level partitioning. Table 6 shows the levels in bold.

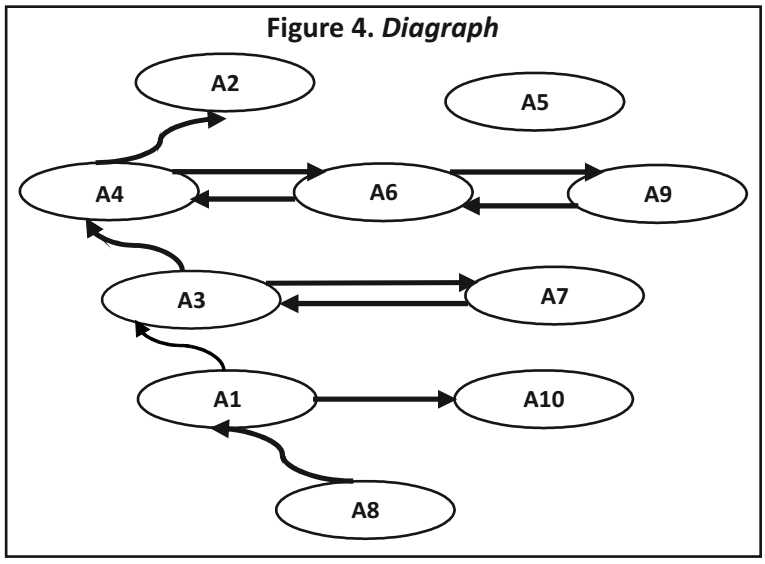
Step IV : Diagraph

A diagraph (Figure 4) is created using FRM (Table 5).

Table 6. ***Level Partitioning***

Challenges	Reachability Set	Antecedents Set	Intersection Set	Level
A1	A1 A3 A4 A6 A7 A9 A10	A1 A4 A6 A7 A8	A1 A4 A6 A7	0
A3	A3 A4 A6 A9	A1 A3 A4 A6 A7 A8 A10	A3 A4 A6	0
A4	A1 A3 A4 A6 A7 A9 A10	A1 A3 A4 A6 A7 A8 A9 A10	A1 A3 A4 A6 A7 A9 A10	**1**
A6	A1 A3 A4 A6 A7 A9 A10	A1 A3 A4 A6 A7 A8 A9 A10	A1 A3 A4 A6 A7 A9 A10	**1**
A7	A1 A3 A4 A6 A7 A9 A10	A1 A4 A6 A7 A8 A9 A10	A1 A4 A6 A7 A9 A10	0
A8	A1 A3 A4 A6 A7 A8 A9 A10	A8	A8	0
A9	A4 A6 A7 A9	A1 A3 A4 A6 A7 A8 A9 A10	A4 A6 A7 A9	**1**
A10	A3 A4 A6 A7 A9 A10	A1 A4 A6 A7 A8 A10	A4 A6 A7 A10	0
A1	A1 A7	A1	A1	0
A3	A3	A3	A3	**1**
A7	A7	A1 A7 A8 A10	A7	**1**
A8	A7 A8 A10	A8	A8	0
A10	A7 A10	A8 A10	A10	0
A1	A1	A1	A1	**1**
A8	A8 A10	A8	A8	0
A10	A10	A8 A10	A10	**1**
A8	A8	A8	A8	**1**

Figure 4. ***Diagraph***



MICMAC Analysis of Challenges of the Fast Food Industry

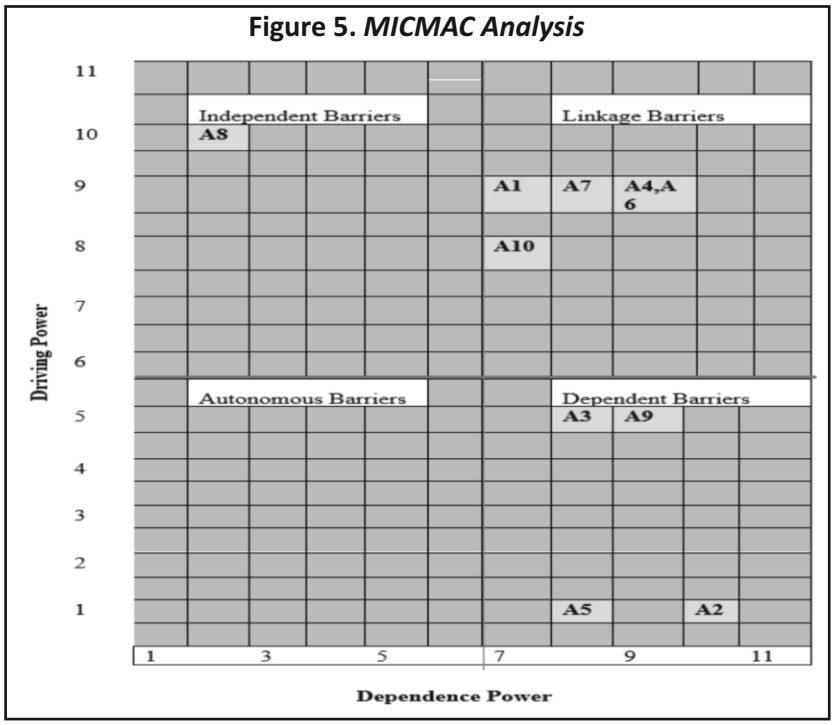
Classification is accomplished using this method based on the driving and dependence power of challenges. The analysis also supports the validation of the challenges of the ISM model. MICMAC analysis interprets the driving and dependence power of challenges of the fast food industry (Table 7). The 10 challenges of the fast food industry are shown in the four quadrants.

Based on their presence in rows and columns, all 1s and 0s are summed to calculate driving and reliance power. The difficulties confronting the fast food business are depicted as variables on a two-dimensional graph (Figure 5).

Table 7. ***Canonical Matrix***

	A1	A2	A3	A4	A5	A6	A7	A8	A9	A10	Driving Power
A1	1	**1**	**1**	1	1	1	1	0	**1**	**1**	9
A2	0	1	0	0	0	0	0	0	0	0	1
A3	0	1	1	**1**	0	1	0	0	**1**	0	5
A4	1	**1**	**1**	1	1	1	1	0	1	1	9
A5	0	0	0	0	1	0	0	0	0	0	1
A6	**1**	**1**	1	1	**1**	1	**1**	0	1	**1**	9
A7	**1**	1	**1**	1	**1**	1	1	0	**1**	**1**	9
A8	**1**	**1**	**1**	1	**1**	1	1	1	1	1	10
A9	0	**1**	0	**1**	0	**1**	1	0	1	0	5
A10	0	**1**	**1**	**1**	1	1	1	0	**1**	1	8
Dependence Power	6	10	8	9	8	9	8	2	9	7	

Figure 5. ***MICMAC Analysis***



↳ ***Dependent Variables.*** These variables have low driving power and very high dependence. "Inconvenience of managing daily operational expenses," "Consistency in raw materials and allied supplies to the fast food industry," "Threat of being sued by consumer," and "Rising labor cost" are identified to be the dependent variables in this study.

↳ ***Independent Variables.*** These variables have strong driving power and weak dependence. Here, "Changing tastes of millennial customers" is established to be independent.

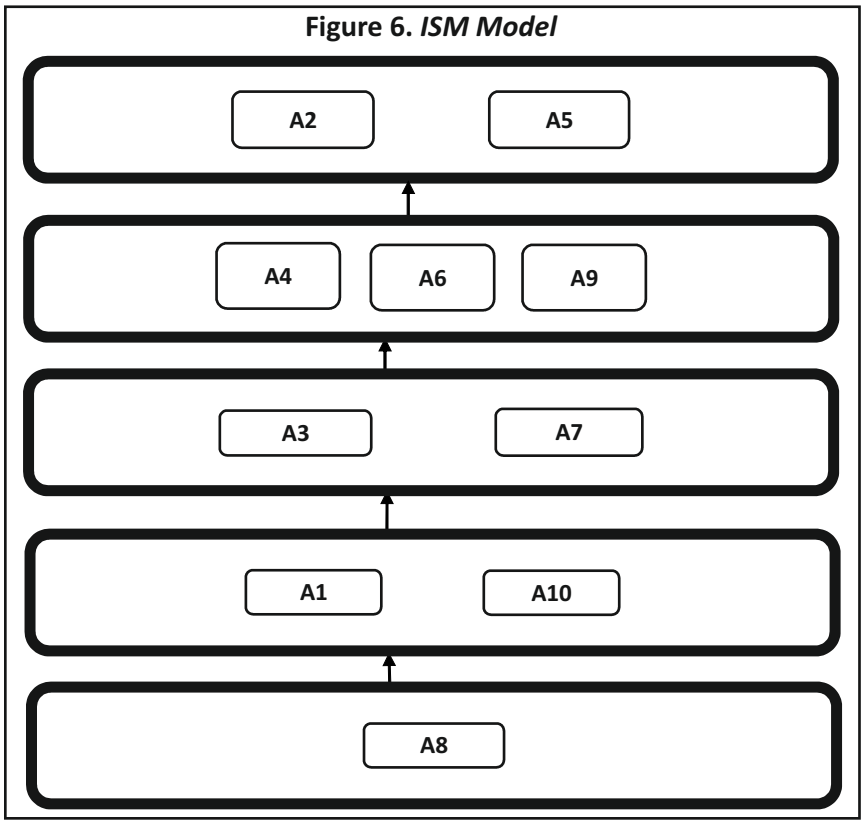
↳ ***Autonomous Variables.*** These variables have neither sufficient driving power nor sufficient dependence. So, these are mostly isolated from other variables. No autonomous variable is detected in this study.

↳ ***Linkage Variables.*** These factors have intense driving and dependent power and affect other variables. They are also imbalanced, and any action on these will affect other variables in addition to themselves. As linking variables, "consumers shifting to healthy foods," "cut-throat competition among players," "creating a unique brand of taste and quality," "acquiring and managing skilled workforce," and "copycat players in the market" are established.

Discussion and Concluding Remarks

During the initial stage of the study, the challenges identified from the existing literature are validated based on the opinion survey of subject matter experts using the *t* - statistics. During the second stage, these validated challenges are used to develop the ISM Model (Figure 6). This model derived five levels. The challenge of "Changing tastes

Figure 6. ***ISM Model***



of millennial customers (A8)" is found to be the most important challenge of the fast food industry, which appears at the lowest level (level 5). Millennial customers are the market's most energetic cohort group, and their enthusiasm for every activity is very high. They do not like to be dictated to; rather, they form their own opinions. Highly tech-savvy, they are also experimentalists.

When it comes to food, they love to innovate and try new cuisines. These challenges at level five support or influence "Consumers shift to healthy foods (A1)" and "Copycat players in the market (A10)" appear at the fourth level. There is a distinct shift in consumers' preference for healthy food. Deteriorating health conditions due to excessive consumption of junk food have forced consumers to look at alternate ways. The surge in demand for healthy food has shown dramatic shifts in strategies by retailers. At the same time, in the service industry, a success story gets copied faster and implemented immediately. Hence, leaders in fast food chains are always on the lookout for innovation in bringing new experiences to discerning customers. Copycat players may try to emulate everything but cannot match the competitive advantage of market leaders in terms of innovative and robust processes and motivated employees with a desire to win against all odds. "Inconvenience of managing daily operational expenses (A2)" and "Threat of being sued by consumers (A5)" challenges are found to be the basic challenges or the least important challenges that appear at the top level (level 1). The major part of working capital for a fast food retailer is used to meet operational expenses. The Indian market depends on a nonstructured vendor system to meet its day-to-day requirements. The lack of professional services in this area has increased the operating expenses of fast-food operators. Similarly, there are consumer laws in India, but consumerism seems weak in the Indian market. With specific reference to the fast food market, there's hardly any effect of consumers exerting their rights in case of issues related to the fast food sector.

These two basic challenges at the top level are supported by "Cut-throat competition among the players (A4)," "Issues of creating a unique brand of taste and quality (A6)," and "Rising labor cost (A9)" challenges that appear in the second level. These second-level challenges also support each other. Similarly, "Consistency in raw materials and allied supplies to the fast food industry (A3)" and "Acquiring and managing skilled workforce (A7)" that appear in the third level support fourth-level challenges and also support second-level challenges of the fast food industry in India. Overall, our model discovered that the shifting tastes of millennial customers are critical in driving all other difficulties in India's fast food business. The rationale is obvious. When it comes to food, they enjoy experimenting with new dishes. Their selection is universal. As a result, exotic specialties are proliferating in fast-food restaurants. The study is the first of its kind in using ISM as a qualitative technique to explore the issues of the fast food business in India. This research identifies, performs leveling, and interrelates the challenges of the fast food industry in India.

Managerial and Theoretical Implications

The research identifies the changing taste of millennial customers as a major challenge, an independent challenge. This finding is significant for fast food industry professionals, food delivery aggregators, and food processing and packaging professionals. They need to be conscious of the importance of other challenges and their interdependence found out from the study for future action. Qualitative techniques like ISM are also a methodological contribution of this research from a theoretical perspective.

Limitations of the Study and Future Research Directions

The research work is based on ISM modeling. This modeling has a strong significance. However, bias involved in expert judgment might be present. The ISM model has not been statistically validated. Furthermore, total ISM (Hota & Nasim, 2020; Sushil, 2005a; Sushil, 2005b; Sehgal et al., 2022) can be used to evaluate the relationship between the problems through the use of an interpretative matrix (Sushil, 2012).

Authors' Contribution

Dr. Jyotiranjan Hota initiated the idea to develop a framework based on multicriteria decision-making techniques to rank and level challenges or enablers of the fast food industry in India. Dr. Arvind Tripathy was involved in marketing to conduct a review along with Dr. Jyotiranjan Hota. Both identified challenges using keywords like "India," "Challenges," and "Fast food industry." Dr. Mahuya Deb joined during the later stage of the literature review. From a statistics background, Dr. Deb used a *t*-test on expert comments to further validate the problems. Dr. Hota coordinated the selection of experts in a judgmental manner. Dr. Tripathy, Dr. Hota, and Dr. Deb also participated in the *t*-test analysis. In the study's second phase, Dr. Hota and Dr. Tripathy collaborated and conducted a second-level personal interview with specialists. Dr. Hota completed the entire ISM modeling process. Dr. Tripathy contributed to the creation of the SSID matrix. Dr. Hota carried out a MICMAC analysis. Dr. Deb projected the MICMAC analysis results in Excel format. Dr. Deb documented the MICMAC analysis procedure in collaboration with Dr. Hota. As stated above, Dr. Tripathy and Dr. Deb actively edited the manuscript based on the Editor's advice.

Conflict of Interest

The authors certify that they have no affiliations with or involvement in any organization or entity with any financial or non-financial interest in the subject matter or materials discussed in this manuscript.

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References

Adebayo, O. (2009, May 13). *Excellent and quality consumer services in the fast food industry.* Vanguard. https://www.vanguardngr.com/

Anand, A., & Bansal, G. (2017). Interpretive structural modelling for attributes of software quality. *Journal of Advances in Management Research*, *14*(3), 256–269. https://doi.org/10.1108/jamr-11-2016-0097

Ashakiran, & Deepthi, R. (2012). Fast foods and their impact on health. *Journal of Krishna Institute of Medical Sciences University*, *1*(2), 7–15.

Atinkut, H. B., Tingwu, Y., Gebisa, B., Qin, S., Assefa, K., Yazie, B., Melese, T., Tadesse, S., & Mirie, T. (2018). Factors influencing consumers' choice of street-foods and fast-foods in China. *African Journal of Marketing Management*, *10*(4), 28–39. https://doi.org/10.5897/ajmm2018.0572

Aynalem, S., Birhanu, K., & Tesefay, S. (2016). Employment opportunities and challenges in tourism and hospitality sectors. *Journal of Tourism & Hospitality, 5*(6), 1–5. https://doi.org/10.4172/2167-0269.1000257

Barska, A. (2018). Millennial consumers in the convenience food market. *Management, 22*(1), 251–264. https://doi.org/10.2478/manment-2018-0018

Baum, T. (2002). Skills and training for the hospitality sector: A review of issues. *Journal of Vocational Education & Training, 54*(3), 343–364. https://doi.org/10.1080/13636820200200204

Brewer, A. (2018). Copycat fast casual restaurants: Consumer response of Dublin professionals 25 - 39. *DBS Business Review, 2,* 113–126. https://doi.org/10.22375/dbr.v2i0.28

Burnett, D. (2006). Fast-food lawsuits and the cheeseburger bill: Critiquing Congress's response to the obesity epidemic. *Virginia Journal of Social Policy and the Law, 14*(3), 357.

Chen, W. (2013). *Globalisation and its challenges in China: Case studies of KFC*. In, CHEM Conference. https://shura.shu.ac.uk/id/eprint/25735

Cross, J. K. (2017). *Millennials and touch screen technology in the fast food industry: A narrative inquiry study* (Doctoral Dissertation). University of Phoenix.

Diabat, A., & Govindan, K. (2011). An analysis of the drivers affecting the implementation of green supply chain management. *Resources, Conservation and Recycling, 55*(6), 659–667. https://doi.org/10.1016/j.resconrec.2010.12.002

Elete, J. (2018). *Brand switching behaviour among millennial consumers of fast food brands in Dublin, Ireland* (Master's Thesis). Dublin, National College of Ireland. https://norma.ncirl.ie/id/eprint/3406

Fuhrman, J. (2018). The hidden dangers of fast and processed food. *American Journal of Lifestyle Medicine, 12*(5), 375–381. https://doi.org/10.1177/1559827618766483

Goyal, A., & Singh, N. P. (2007). Consumer perception about fast food in India: An exploratory study. *British Food Journal, 109*(2), 182–195. https://doi.org/10.1108/00070700710725536

Hanif, Y., & Usman, M. (2018). Adoption & implementation of supply chain management in fast food industry in Pakistan. *International Journal for Scientific Research & Development, 6*(1), 2183–2193.

Hillier-Brown, F. C., Summerbell, C. D., Moore, H. J., Routen, A., Lake, A. A., Adams, J., White, M., Araujo-Soares, V., Abraham, C., Adamson, A. J., & Brown, T. J. (2017). The impact of interventions to promote healthier ready-to-eat meals (to eat in, to take away or to be delivered) sold by specific food outlets open to the general public: A systematic review. *Obesity Reviews, 18*(2), 227–246. https://doi.org/10.1111/obr.12479

Hota, J., & Nasim, S. (2020). Validation and modelling of drivers and barriers of multivendor ATM technology in India from suppliers' perspectives. *Asia Pacific Journal of Information Systems*, *30*(2), 374–396. https://doi.org/10.14329/apjis.2020.30.2.374

Janssen, H. G., Davies, I. G., Richardson, L. D., & Stevenson, L. (2018). Determinants of takeaway and fast food consumption: A narrative review. *Nutrition Research Reviews, 31*(1), 16–34. https://doi.org/10.1017/S0954422417000178

Kanojia, M., Shukla, B., & Wali, A. (2022). Critical factors to technology development in Indian academia : An ISM-MICMAC approach. *Prabandhan: Indian Journal of Management*, *15*(5), 8–26. https://doi.org/10.17010/pijom/2022/v15i5/169578

Katić, I., Berber, N., Slavić, A., & Ivanišević, A. (2020). The relations between investment in employees' development and organizational productivity and service quality. *Technical Gazette, 27*(4), 1077–1083. https://doi.org/10.17559/TV-20181121101314

Majabadi, H. A., Solhi, M., Montazeri, A., Shojaeizadeh, D., Nejat, S., Farahani, F. K., & Djazayeri, A. (2016). Factors influencing fast-food consumption among adolescents in Tehran: A qualitative study. *Iranian Red Crescent Medical Journal, 18*(3), e23890. https://doi.org/10.5812/ircmj.23890

Mangla, S. K., Luthra, S., Mishra, N., Singh, A., Rana, N. P., Dora, M., & Dwivedi, Y. (2018). Barriers to effective circular supply chain management in a developing country context. *Production Planning & Control, 29*(6), 551–569. https://doi.org/10.1080/09537287.2018.1449265

Mello, M. M., Rimm, E. B., & Studdert, D. M. (2003). The McLawsuit: The fast-food industry and legal accountability for obesity. *Health Affairs, 22*(6), 207–216. https://doi.org/10.1377/hlthaff.22.6.207

Mhlanga, O. (2018). The fast food industry in South Africa: The micro-environment and its influence. *African Journal of Hospitality, Tourism and Leisure, 7*(4), 1–16. https://www.ajhtl.com/uploads/7/1/6/3/7163688/article_20_vol_7_4__2018.pdf

Montgomery, K. C., Chester, J., Grier, S. A., & Dorfman, L. (2012). The new threat of digital marketing. *Pediatric Clinics of North America, 59*(3), 659–675. https://doi.org/10.1016/j.pcl.2012.03.022

Ostapenko, N. V. (2011). The global burger war: Russians are looking for the best fast food option. *Competitiveness Review, 21*(4), 397–406. https://doi.org/10.1108/10595421111152183

Pingali, P. (2007). Westernization of Asian diets and the transformation of food systems: Implications for research and policy. *Food Policy, 32*(3), 281–298. https://doi.org/10.1016/j.foodpol.2006.08.001

Sehgal, P., Kaushal, S., & Sagar, M. (2022). Internal branding: Developing a predictive model for the Indian service sector. *Indian Journal of Marketing*, *52*(1), 8–22. https://doi.org/10.17010/ijom/2022/v52/i1/167649

Shahid, M., Shafiq, H., Khan, A., Bari, R., Shahzad, N., Ch, I. S., & Parveen, S. (2014). Financial exposure of McDonald's corp. success as a market leader. *International Journal of Accounting and Financial Reporting, 4*(1), 338–356. https://doi.org/10.5296/ijafr.v4i1.6086

Shamal, S., & Mohan, B. C. (2019). Consumer acceptance of branded fortified foods and beverages in India: Towards a conceptual framework. *Indian Journal of Marketing*, *49*(10), 7–22. https://doi.org/10.17010/ijom/2019/v49/i10/147562

Sharkey, J. R. (2009). Measuring potential access to food stores and food-service places in rural areas in the US. *American Journal of Preventive Medicine, 36*(4), S151–S155. https://doi.org/10.1016/j.amepre.2009.01.004

Singh, A., & Nanda, P. (2022). Comparing factors influencing loyal consumption behavior towards fast-food restaurants. *Indian Journal of Marketing*, *52*(6), 41–58. https://doi.org/10.17010/ijom/2022/v52/i6/169835

Sushil. (2005a). Interpretive matrix: A tool to aid interpretation of management and social research. *Global Journal of Flexible System Management, 6*(2), 27–30.

Sushil. (2005b). A flexible strategy framework for managing continuity and change. *International Journal of Global Business and Competitiveness, 1*(1), 22–32.

Sushil. (2012). Interpreting the interpretive structural model. *Global Journal of Flexible Systems Management, 13*(2), 87–106. https://doi.org/10.1007/s40171-012-0008-3

Thiemann, L., & Roman-Alcalá, A. (2019). Fast food sovereignty: Contradiction in terms or logical next step? *Journal of Agricultural and Environmental Ethics, 32*(5), 813–834. https://doi.org/10.1007/s10806-019-09800-4

Warfield, J. N. (1974). Developing interconnection matrices in structural modeling. In, *IEEE Transactions on Systems, Man, and Cybernetics*, *SMC-4*(1), 81–87. https://doi.org/10.1109/tsmc.1974.5408524

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