

# Financial Performance Evaluation in India's Food Industry Using the TOPSIS Method

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Abstract: When evaluating financial performance, industry-specific elements that have an influence on the food business are considered, including raw material costs, pricing dynamics, the competitive environment, regulatory environment, and consumer trends. When assessing a company's general health and future prospects, it is important to take these elements into account because they have an impact on its financial performance Over the years, India's food business has undergone substantial development and change, driven by factors including shifting customer tastes, urbanisation, and rising disposable income. The industry includes a number of subsectors, including restaurants, processed food, drinks, dairy products, and confectionery. Over the years, India's food business has undergone substantial development and change, driven by factors including shifting customer tastes, urbanisation, and rising disposable income. The industry includes a number of subsectors, including restaurants, processed food, drinks, dairy products, and confectionery. Investment Decisions: Evaluating the financial performance of food sector firms enables investors to make wise investment choices. Risk management: It's crucial to comprehend the financial status of businesses in the food sector. Industry Competitiveness: Analysing financial performance sheds light on the Indian food industry's competitive environment Government agencies and regulatory organizations can use financial performance assessments to develop policies and regulations that support the expansion and sustainability of the food sector. Sector Analysis: Evaluations of financial performance help with a more comprehensive study of the Indian food business. Investment Decisions: Evaluating the financial performance of food sector firms enables investors to make wise investment choices. Risk management: It's crucial to comprehend the financial status of businesses in the food sector. Industry Competitiveness: Analyzing financial performance sheds light on the Indian food industry's competitive environment Government agencies and regulatory organisations can use financial performance assessments to develop policies and regulations that support the expansion and sustainability of the food sector. Sector Analysis: Evaluations of financial performance help with a more comprehensive study of the Indian food business. Company 1, Company 2, Company 3, Company 4, Company 5, Company 6 Net Profit Margin, Current Ratio, Debt Ratio, Debt to Equity After doing topsis analysis company 2 has ranked 1 company 2 has ranked 6 TOPSIS method provides a systematic and comprehensive approach for evaluating alternatives based on multiple criteria. It considers both the positive and negative aspects of each alternative and helps decision makers in selecting the most suitable option based on their preferences and objectives.

Keywords: Net Profit Margin, Current Ratio, Debt Ratio, Debt to Equity, financial performance

## 1. INTRODUCTION

Due to ineffective SME operations, the Indian food industry is dealing with a serious issue of wastage of roughly 30% of farm goods. The SMEs in the Indian food industry face a variety of difficulties, including financial difficulties, a lack of technical expertise, a lack of business investment, etc. In this regard, a number of important elements can assist food SMEs in lowering energy consumption and minimising waste of agricultural goods for sustainable growth. In order to support SMEs' sustainable increase in the Indian food sector, this research seeks to identify and examine crucial ICT application variables. For the examination of the variables, the Grey based Decision Making Evaluation Laboratory approach was used. 'Government actions and policies', 'Public-private collaboration', and 'Encouraging ICT' findings the most significant influences are "ICT integrated effective food

supply chain," "Coordination between different departments," and "Collaboration and strategic alliances across supply chain." The findings imply that the attempts to improve the food supply chain are centred on "Government policies and initiatives." Since the Indian government controls many parts of food sector policymaking, it is the major consumer of SMEs. To improve the competitiveness of the Indian food sector, the government must act to promote Business environment-related economic policies, private investments, and IT service providers, findings While the aspects that have the most influence are "effective food supply chain," "coordination across multiple departments," and "collaboration and strategic partnerships throughout supply chain," ICT also integrates these elements. The results show that the focus of efforts to enhance the food supply chain is on "Government policies and initiatives." The Indian government oversees a large portion of the policymaking in the food industry, making it the main buyer of SMEs. The government must take measures to promote local and foreign investments, IT Economic policies that are relevant to the business climate, service providers, and boosting the competitiveness of the Indian food industry. This project will assist managers in developing profitable and long-lasting ICT solutions for SMEs in diverse food supply chains. financial performance (ROE). Institutional investors may improve corporate governance by enhancing management performance, which lowers capital costs, leverage risk, and total firm capital costs. This improves company performance and economic stability. The papers in this series emphasise the critical role that WCM plays in boosting business growth and profitability (Gill and Biger, 2013). According to the research, insufficient working capital management, poor planning, and insufficient control have all contributed to the demise of organisations (Kroes and Manikas, 2014). Current research has shown that macroeconomic factors have a substantial impact on the enterprises, notably on WCM (Goel and Sharma, 2015). In the Indian manufacturing industry, many enterprises behave in different ways in terms of commercial and economic WCM efficiency. We appreciate the comments and advice provided by an anonymous referee and editor. This journal's full text archive and current issue are both accessible. The papers in this series emphasise the critical role that WCM plays in boosting business growth and profitability (Gill and Biger, 2013). According to the research, insufficient working capital management, poor planning, and insufficient control have all contributed to the demise of organisations (Kroes and Manikas, 2014). Current research has shown that macroeconomic factors have a substantial impact on the enterprises, notably on WCM (Goel and Sharma, 2015). In the Indian manufacturing industry, many enterprises behave in different ways in terms of commercial and economic WCM efficiency. We appreciate the comments and advice provided by an anonymous referee and editor. This journal's full text archive and current issue are both. Additionally, industrialised nations have been the target of study (Li et al., 2014). Although this research adds to the body of knowledge on WCM, their conclusions cannot be applied to emerging nations like IndiaScheffler dishes are used levels in India. Their economic attractiveness is assessed. Institutional kitchens come in three sizes, with capacities ranging from small (for 200 people) to big (for 1000 people). Aperture for collecting solar energy, necessary investment, and a number of small, medium, and large-sized business financial performance indicator values that follow. Developed countries have also been the subject of research (Li et al., 2014). These studies add to the body of information on WCM; however, their conclusions do not hold true for emerging nations like India. At the institutional and communal levels, the economic attractiveness of employing Scheffler dishes for solar steam cooking is evaluated in India. There are three sizes available for institutional kitchens: small (for 200 people), medium (for 500 people), and huge (for 1000 people). the solar energy aperture size, the required funding, and the importance of numerous financial success measures for Estimates Scheffler bowls have been created for small, medium, and big institutional solar steam cooking systems. The amount that steam produced annually has been measured at more than thirty distinct places across the nation. Between 583 and 1072 kilogrammes of steam are produced per square metre each year. The geography affects how economically appealing the Scheffler dish-based solar steam cooking method is, as one might imagine. Accordingly, medium-sized, small, and big corporate kitchens are expected to have discounted return times. Due to advantages of scale, large-scale solar steam boiling systems are intrinsically more financially viable. For medium-sized, large-sized, and small institutional solar steam cooking systems, estimates are being established. have been used to measure the annual volume of generated steam. The container's aperture is expected to produce between 583 and 1072 kg of steam annually. The location has an impact on the dish-based solar steam cooking system's economic attractiveness, as one might assume. Because of the economies of scale that accompany these systems' capital expenses, large-scale solar steam cooking systems are more financially appealing. India has conducted a cost analysis on the use of r dishes for solar steam cooking at the institutional u community levels. two sizingsSmall (for 200 people), medium (for 500 people), and large (for 1000 people) are the three sizes that have been taken into consideration. For tiny, medium, including Between 583 and 1072 kg of steam are thought to be produced annually per square metre of the dish's aperture. As would be predicted, the locations exert an impact on the is economically viable. Small, medium, and large institutional kitchens are each expected to have a discounted payback period of nine, seven, and six years, respectively. The economies of scale in the capital expenses of large-scale solar steam cooking systems make them more alluring from a financial standpoint. There is no proof that lean and creative solutions have been used in an efficient manner. This shows the need for research on the ways and degrees to which innovation and leanness affect the success of an organization. Although numerous studies have been done and are highlighted in the literature,

further research is needed to fully understand the simultaneous effects that these two techniques have on both finances and the environment. The connection between leanness, innovation in products, processes, and financial performance and environmental performance is therefore explored in this article. We use to empirically evaluate the model's assumptions in order to do this. This work builds on structural equation modelling. The construct measures are evaluated using confirmatory factor analysis (CFA), and the assumptions of the structural model are tested using route model analysis. The study's results show that innovation and leanness both considerably enhance financial and environmental performance, which supports the hypothesised model. The study's findings demonstrate how important it is to consider both leanness and innovation since both directly and indirectly through innovation, leanness has an impact on both financial and environmental performance. bring the consequences of lean and innovation behaviours on the economic and environmental results of specific firms and supplies to the attention of practitioners, academics, and policy makers. The study's findings support the model's hypotheses and demonstrate how creativity and leanness significantly improve financial performance. The findings of this study further highlight how crucial it is to take both innovation and leanness into account because leanness indirectly affects innovation's capacity to fulfil its core objectives of enhancing financial and sustainable performance. The effects of innovative and lean practises on a company's financial as well as ecological sustainability specific organizations and supply chains may be brought to the attention of practitioners, academics, and policymakers by these results.

## 2. MATERIAL AND METHOD

*Company:* A business is a corporation that exists independently from its owners on a legal level. There are extra reporting deadlines and supervisors' legal duties, which complicate the company's organisational structure and increase set and operational expenses.

*Net Profit Margin:* The fraction of gains or net revenues made as a percentage of revenue is referred to as "net revenue margin," occasionally spelled as "net margin." It is the proportion of a corporation's or corporate segment's revenue from operations to expenditures. The margin of net profits is typically expressed as a percentage, though it can also be given in decimal form.

*Total Assets Turnover:* The ratio of the asset turnover is a measure of how effectively a business generates income or sales using its own assets. To determine how many sales were produced from each dollar of firm assets, a ratio measures the gross revenue of the company to the typical overall amount of assets.

*Current Ratio:* This liquidity statistic evaluates an organization's ability to pay short-term or loans that are due within a year. It demonstrates to analysts and investors how a company can use its present wealth to settle all of its unpaid debt and other liabilities.

*Debt Ratio:* The term "debt ratio" refers to a type of financial ratio that evaluates a company's level of indebtedness. The debt ratio is a ratio of all debt to total assets, expressed as a decimal or percentage. One way to think about it is the proportion of the resources of a business that are partially financed by debt.

*Debt to Equity:* The debt-to-equity ratio (D/E ratio) of a business indicates how much debt it has in relation to its equity. It is determined by dividing a corporation's total debt by its entire shareholder equity. A higher D/E ratio suggests that the company would have trouble covering its debts.

Method: Multi-criteria decision-making frequently employs the TOPSIS (method for Order of Preference by Similarity to Ideal Solution) method. By considering how closely they resemble the ideal answer, it helps in choosing the greatest alternative from a set of possibilities. The approach offers a thorough examination by considering both the advantages and disadvantages of each choice. The next stage is to identify the pertinent criteria and confirm that they are quantitative and then scaled up to one. The weight of each criterion is then determined to reflect its relative importance. determining the ideal solutions that are both beneficial and detrimental for each circumstance Finding the favorable and unfavorable ideal solutions for each criterion allows for the Following that, the choices are rated according to which one comes closest to the ideal, affirmative response, with the one with the highest score being the most preferred. The method offers a system and logical approach to decision-making, enabling quick comparisons and assessments across a range of factors. This article provides a summary of the normalization procedures using the Technique for Order Preference by It to and the Entropy Method, two extensively used techniques. The greatest and greatest values are established by identifying the beneficial and detrimental ideal answers for each criterion. Calculated is the separation between each alternative y the two possible outcomes. The choices are then graded according to how closely they resemble the ideal, beneficial result, with the selection with the best score being the most desirable. The approach to decision-making provided by the method is systematic and analytical, allowing for efficient comparisons and evaluations across several criteria. It has been shown that normalization affects the, which changes how much each attribute changes the distance between each option and the perfect solution as well as the unfavorable ideal solution. The greater the DAD, the more the attribute affects the outcome of the decision. It has been demonstrated that, in contrast to vector normalization, which does not alter the respectively, min-max normalization alters and may result in the appearance of multiple zeros. To

evaluate the impact of normalization on the entropy-based approach, information entropy, a measure of It makes use of the variety of attribute data. It has been shown that normalization affects how much each attribute contributes to the difference between each option and the ideal choice as well as the contrarian perfect solution. The greater the, the more the attribute affects the outcome of the decision. It has been shown that vector normalization and sum normalization do not affect DAD, but min-max normalization does. Information entropy (IE), A measure of data point variety is used to assess how normalization would affect the entropy-based approach. It has been demonstrated that normalizations have an effect on the, which in turn affects how much each characteristic contributes to the gap between each choice and the ideal answer. The bigger the DAD, the more the attribute influences the decision's result. It has been demonstrated that neither vector normalization nor sum normalization will alter the DAD. The impacts of normalizations on the Information entropy (IE), a gauge of attribute data variety, is used to assess entropy-based approaches. It is discovered that the DAD is vulnerable to normalization, which in turn influences how much each characteristic contributes to the distance between each option and the desired perfect solution and the ideal answer. The bigger the DAD, the more the attribute influences the decision's result. Information entropy is used as a measure of attribute variation as we examine the implications of normalization on the entropy-based TOPSIS approach. It has been demonstrated that normalization has and the bigger the DAD, the more the attribute influences the decision's result. It has been shown that although vector normalization and sum normalization have no effect on the DAD, min-max normalisation not only changes the DAD but may also cause several zero values to emerge. As a result, the calculated. Numerous studies have attempted to extend the TOPSIS approach, but these efforts have been unsuccessful since the decision matrix cannot achieve the optimum answers, which are frequently provided as actual values. The majority of these articles defuzzify the elements of the fuzzy decision matrix, which inevitably results in the loss of crucial information and may even yield erroneous findings. We provide a brand-new direct way for the fuzzy extension in this work that does not have the drawbacks of earlier methods. We demonstrate that the variations in the weighted sums of local criteria between the ideal solutions and the alternatives may be seen as modifications. It is well established that in many real-world circumstances, utilising weighted sums to aggregate local criteria is not the best course of action. Due to this, we suggest adding other local criterion aggregation types to the approach in addition to weighted sums and developing a system for the generalisation of various aggregation modes, which will lead to subpar outcomes. The multi-attribute [10] employed incremental analysis to get over issues with ratio scales that numerous MCDM techniques have. according to Shih et al. [11], The benefits of include the following: weighing the pros and cons of every option; assessing each option's performance according to a variety of criteria. also provides the logic behind human decision-making. has been effectively utilised in recent years in the areas of transportation [14], product design [8], and supply chain management [12]. However, as human judgements can occasionally be inaccurate due to a lack of information, confusing facts might not be adequately stated. Therefore, while evaluating each alternative's performance on the model and the respective weights of the various criterialt is common to acquire values or interval values. One instance is Jahanshaloo et al. Included among its benefits are taking into consideration both the best and worst scenarios and comparing the efficacy of every option according to a wide variety of variables. also provides the logic behind human decision-making. In recent years, Yang and Hung utilised to answer a plant layout design issue by outlining the model for interval data and providing a special way for figuring on how well each alternative score. However, there are two main issues with the TOPSIS method. . The first downside is the design of the normalised decision matrix, which usually results in a small discrepancy between the conducted measurements and the normalised scale for each criterion. In other words, a system with a narrow gap is awful for ranking and cannot accurately convey the real superiority of options. Another flaw in the strategy is that risk assessment for a decision maker was never taken into account. Depending on their propensity for risk, decision-makers differ in how likely they are to overestimate the likelihood. The benefits of include the following: including both the best and worst case scenarios; assessing each alternative's performance according to a variety of criteria. also provides the logic behind human decision-making. risk-averse, risk-neutral, and risk-seeking behaviours in recent years. It is hard to assess the subjective propensity associated with various decision makers' preferences without taking risk propensity into account. The approach's fundamental tenet is that, in order to solve these two problems, the alternative should be picked if it is farthest from the unfavourable perfect solution and closer to the positive one. are clearly recognised in traditional MCDM approaches. The consequences of lean and innovative practises on the financial and environmental performance of specific organisations and supply chains may be brought to the attention of practitioners, academics, and policymakers by these results. are also displayed as real numbers in the [4], however since it's not always possible to know for sure what the true values are The benefits of include the following: weighing the pros and cons of every option; assessing each option's performance according to a variety of criteria. also provides the logic behind human decision-making. Although the TOPSIS technique has undergone several fuzzy modifications recently, these extensions aren't comprehensive since the ideal answers are frequently provided as actual values or because they cannot be achieved in the decision matrix. components is a common practise that almost always results in the loss of crucial data and may The best solutions are discovered using the real valued

representation of fuzzy values. The procedure utilised to identify the solution is not described at all in [41,69]. Added writers of a number of publications in the literature suggest other simplifications and constraints in place of

# 3. RESULTS AND DISCUSSION

		Total Assets			Debtto
Company	Net Profit Margin	Turnover	Current Ratio	Debt Ratio	Equity
Company 1	41.306329	1.140624	1.530169	2100.113929	0.887364
Company 2	0.276676	3.080025	0.777924	7304.608089	150.185025
Company 3	171.924544	0.693889	0.725904	3890.0169	3.200521
Company 4	163.916809	1.399489	7.584516	2344.012225	0.976144
Company 5	2.070721	3.940225	0.731025	7139.743009	37.970244
Company 6	19.079424	7.295401	1.602756	4230.721936	4.418404

TABLE 1. Financial performance evaluation in India's food Industry

Table 1 Shows the Financial performance evaluation in India's food Industry for Analysis using the TOPSIS Method. Company 1, Company 2, Company 3, Company 4, Company 5, Company 6 Net Profit Margin, Current Ratio, Debt Ratio, Debt to Equity is the data set value.



FIGURE 1. Financial performance evaluation in India's food Industry

Figure 1 Shows the Financial performance evaluation in India's food Industry for Analysis using the TOPSIS Method. Company 1, Company 2, Company 3, Company 4, Company 5, Company 6 Net Profit Margin, Current Ratio, Debt Ratio, Debt to Equity is the data set value.

		NORM/	ALIZED DATA			
	Net Profit Margin	Total Assets Turnover	Current Ratio	Debt Ratio	Debt to Equity	
Company 1	0.321924139	0.053495407	0.061960504	2.295443836	0.047184151	
Company 2	0.026346989	0.087906778	0.044178791	4.280984972	0.613844769	
Company 3	0.656771326	0.041724414	0.042676111	3.124071662	0.089609816	
Company 4	0.641293723	0.05925568	0.137946021	2.425075028	0.04948826	
Company 5	0.072078549	0.099427325	0.042826379	4.23239832	0.308650466	
Company 6	0.218790204	0.135291287	0.063413095	3.258010537	0.105287777	

TABLE 2. Norma	alized	Data
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Table 2 shows the Normalized Data value of financial performance evaluation in India's food Industry for Analysis using the TOPSIS Method. Company 1, Company 2, Company 3, Company 4, Company 5, Company 6 Net Profit Margin, Current Ratio, Debt Ratio, Debt to Equity is the data set value.

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FIGURE 2. Normalized Data

Figure 2 Shows the Normalized Data value of financial performance evaluation in India's food Industry for Analysis using the TOPSIS Method. Company 1, Company 2, Company 3, Company 4, Company 5, Company 6 Net Profit Margin, Current Ratio, Debt Ratio, Debt to Equity is the data set value.

	WEIGHT					
	Net Profit	Total Assets	Current	Debt	Debtto	
	Margin	Turnover	Ratio	Ratio	Equity	
Company1	0.25	0.25	0.25	0.25	0.25	
Company 2	0.25	0.25	0.25	0.25	0.25	
Company 3	0.25	0.25	0.25	0.25	0.25	
Company 4	0.25	0.25	0.25	0.25	0.25	
Company 5	0.25	0.25	0.25	0.25	0.25	
Company 6	0.25	0.25	0.25	0.25	0.25	

**TABLE 3.** weightages

Table 3 shows Weightages used for the analysis. We take same weights for all the parameters for the analysis.

TABLE 4. Weighted Normalized Decision Matrix

	Net Profit	Total Assets			
	Margin	Turnover	<b>Current Ratio</b>	Debt Ratio	Debt to Equity
Company 1	0.080481035	0.013373852	0.015490126	0.573860959	0.011796038
Company 2	0.006586747	0.021976695	0.011044698	1.070246243	0.153461192
Company 3	0.164192832	0.010431103	0.010669028	0.781017915	0.022402454
Company 4	0.160323431	0.01481392	0.034486505	0.606268757	0.012372065
Company 5	0.018019637	0.024856831	0.010706595	1.05809958	0.077162617
Company 6	0.054697551	0.033822822	0.015853274	0.814502634	0.026321944

Table 4 shows weighted normalized decision matrix for financial performance evaluation in India's food Industry for Analysis using the TOPSIS Method. Company 1, Company 2, Company 3, Company 4, Company 5, Company 6 Net Profit Margin, Current Ratio, Debt Ratio, Debt to Equity is the weighted normalized decision matrix value.

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FIGURE 3. Weighted Normalized Decision Matrix

	Positive Matrix				
	Net Profit Margin	Total Assets Turnover	Current Ratio	Debt Ratio	Debt to Equity
Company 1	0.16	0.03	0.03	1.07	0.15
Company 2	0.16	0.03	0.03	1.07	0.15
Company 3	0.16	0.03	0.03	1.07	0.15
Company 4	0.16	0.03	0.03	1.07	0.15
Company 5	0.16	0.03	0.03	1.07	0.15
Company 6	0.16	0.03	0.03	1.07	0.15

**TABLE 5.** Positive Matrix

Table 5 shows Positive Matrix for financial performance evaluation in India's food Industry for Analysis using the TOPSIS Method. Company 1, Company 2, Company 3, Company 4, Company 5, Company 6 Net Profit Margin, Current Ratio, Debt Ratio, Debt to Equity is the Positive Matrix value.

**TABLE 6.** Negative Matrix

		Negative matrix					
	Net Profit Margin	Total Assets Turnover	Current Ratio	Debt Ratio	Debt to Equity		
Company 1	0.006587	0.010431103	0.010669028	0.573860959	0.011796038		
Company 2	0.006587	0.010431103	0.010669028	0.573860959	0.011796038		
Company 3	0.006587	0.010431103	0.010669028	0.573860959	0.011796038		
Company 4	0.006587	0.010431103	0.010669028	0.573860959	0.011796038		
Company 5	0.006587	0.010431103	0.010669028	0.573860959	0.011796038		
Company 6	0.006587	0.010431103	0.010669028	0.573860959	0.011796038		

Table 6 shows Negatives Matrix for financial performance evaluation in India's food Industry for Analysis using the TOPSIS Method. Company 1, Company 2, Company 3, Company 4, Company 5, Company 6 Net Profit Margin, Current Ratio, Debt Ratio, Debt to Equity is the Negatives Matrix value.

TABLE	7.	SI Plus
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	SI Plus
Company 1	0.548954
Company 2	0.922208
Company 3	0.675142
Company 4	0.541475
Company 5	0.919056
Company 6	0.713019

Table 7 Shows the SI Plus for financial performance evaluation in India's food Industry for Analysis using the TOPSIS Method. Company 1, Company 2, Company 3, Company 4, Company 5, Company 6 Net Profit Margin, Current Ratio, Debt Ratio, Debt to Equity is the SI Plus value.



#### FIGURE 4. SI Plus

Figure 4 Shows the SI Plus for financial performance evaluation in India's food Industry for Analysis using the TOPSIS Method. Company 1, Company 2, Company 3, Company 4, Company 5, Company 6 Net Profit Margin, Current Ratio, Debt Ratio, Debt to Equity is the SI Plus value.

	Si Negative
Company 1	0.074109841
Company 2	0.516334008
Company 3	0.260511379
Company 4	0.158971841
Company 5	0.488977142
Company 6	0.246998211

TABLE 8.	SI Plus
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Table 8 Shows the SI Negative for financial performance evaluation in India's food Industry for Analysis using the TOPSIS Method. Company 1, Company 2, Company 3, Company 4, Company 5, Company 6 Net Profit Margin, Current Ratio, Debt Ratio, Debt to Equity is the SI Negative value.



Figure 5 Shows the SI Negative for financial performance evaluation in India's food Industry for Analysis using the TOPSIS Method. Company 1, Company 2, Company 3, Company 4, Company 5, Company 6 Net Profit Margin, Current Ratio, Debt Ratio, Debt to Equity is the SI negative value.

	CI
Company	
1	0.118944
Company	
2	0.358929
Company	
3	0.278427
Company	
4	0.226958
Company	
5	0.347277
Company	
6	0.257285

TABLE 9. Ci Value

Table 9 Shows the CI value for financial performance evaluation in India's food Industry for Analysis using the TOPSIS Method. Company 1, Company 2, Company 3, Company 4, Company 5, Company 6 Net Profit Margin, Current Ratio, Debt Ratio, Debt to Equity is the CI value.



FIGURE 6. CI value

Figure 6 Shows the CI value for financial performance evaluation in India's food Industry for Analysis using the TOPSIS Method. Company 1, Company 2, Company 3, Company 4, Company 5, Company 6 Net Profit Margin, Current Ratio, Debt Ratio, Debt to Equity is the CI value.

	RANK
Company	
1	6
Company	
2	1
Company	
3	3
Company	
4	5
Company	
5	2
Company	
6	4

Table 9 Shows the Rank for financial performance evaluation in India's food Industry for Analysis using the TOPSIS Method. Company 1, Company 2, Company 3, Company 4, Company 5, Company 6 Net Profit Margin, Current Ratio, Debt Ratio, Debt to Equity. Company 2 is got the first rank whereas is the Company 4 is having the Lowest rank.



#### FIGURE 7. Rank

Figure 7 Shows the Rank for financial performance evaluation in India's food Industry for Analysis using the TOPSIS Method. Company 1, Company 2, Company 3, Company 4, Company 5, Company 6 Net Profit Margin, Current Ratio, Debt Ratio, Debt to Equity. Company 2 is got the first rank whereas is the Company 4 is having the Lowest rank.

#### **4. CONCLUSION**

When evaluating financial performance, industry-specific elements that have an influence on the food business are taken into account, including raw material costs, pricing dynamics, the competitive environment, regulatory environment, and consumer trends. When assessing a company's overall health and potential for the future, several variables that affect its financial performance must be taken into account. In multi-criteria decision-making, method is frequently utilised. By taking into account how closely they resemble the ideal answer, it helps choose the greatest choice from a group of alternatives. The approach offers a thorough examination by considering both the advantages and disadvantages of each possibility. The next step is to determine the pertinent criteria, making sure they are quantifiable and indicative of the decision problem. The TOPSIS technique provides an organised and systematic approach to decision-making, enabling efficient comparisons and assessments across several criteria. In this study, the entropy method (EM)'s most popular normalization techniques are: and the TOPSIS method for order preference by similarity to the ideal solution 8 companies than any other firm, 2 has the most CI. Compared to other companies, business 2 has the most si negatives. Every company's profit margin, turnover, assets, and other factors differ just slightly. By taking into account the distances between the positive ideal solutions, determine how near each choice is to the positive ideal solution The relative closeness value represents each alternative's overall performance. He The TOPSIS technique offers a thorough and methodical strategy for assessing alternatives based on a variety of factors. It helps decision-makers choose the best option based on their preferences and goals by taking into account both the positive and negative elements of each possibility. the Rank for financial performance evaluation in India's food Industry for Analysis using the TOPSIS Method. Company 1, Company 2, Company 3, Company 4, Company 5, Company 6 Net Profit Margin, Current Ratio, Debt Ratio, Debt to Equity. Company 2 is got the first rank whereas is the Company 4 is having the Lowest rank.

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