

After the Covid-19 Pandemic, The structure, Behavior, and Performance of Indonesia's Halal Food Industry:

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Abstract

The goal of the study is to assess Indonesian halal food in the future in terms of structure, behavior, performance, and digital marketing. Indonesia, which has the world's largest Muslim population, has a comparative advantage in that it has many options to produce and export food and drinks of high export quality that adhere to halal standards. Although there are several sources of food raw materials, their utilization is not ideal. The study's objective is to evaluate Indonesian halal food in the context of structure, behavior, performance, and digital marketing in the future. The fact that Indonesia, which has the biggest Muslim population in the world, has a variety of ways to produce and export halal-compliant foods and beverages gives it a comparative edge. Although there are many places to get food's raw materials, the way they are used is not ideal.

Key word:

SBP, CR4, MES, Growth and PCM

Introduction

Industry companies have been obliged to reevaluate their 2020 goals as a result of the corona virus pandemic, often known as Covid-19. According to the Association of Indonesian Food and Beverage Entrepreneurs (Gummi), growth would be between 8% and 9% in 2020. Food and beverage growth is forecast to be only at the level of 4% to 5% if GDP is forecasted to be between 0.4% and 2.3% lower.

Food security is viewed as a societal advancement that might enable the globe to adequately feed more than 10 billion people (Anis and Norfaria 2022). According to statistics from 2018, Indonesia has a population of 252 million, a Gross Domestic Product (GDP) of IDR 15,833,943 billion, 6,749 firms that produce halal food, and 937,599 workers overall. There are 1,741,779 businesses in the small halal food sector, employing 3,612,058 people. Along with conventional and contemporary digital marketing, halal food goods should see an increase in sales and business continuity in order to expand their marketing reach internationally. It is now time for developing nations. For medium and large to start emphasizing adequate food security in social and economic development as well as benefiting from economic growth and trade in clothing and food that are needed by many nations, the manufacturing GDP must reach 3,119,617 billion (\$19.70%), there must be 29,554 companies with a total workforce of 6,005,669 people, and these numbers are from the manufacturing sector (New et al. 2017).

The business world of the food and beverage industry works with the product mix, local culture, and consumer desires to create a distinctive and easily recognizable characteristic. If it is deemed to be good, producers distribute it to the market in order to meet the various needs of consumers and their various desires (Medeiros et al 2017). Based on a number of factors, including applied technology, human resources, market potential, and economic contribution, as well as a review of the viability of local superior products from an economic perspective, significant attempts to increase socioeconomic development can be found. Development of local agriculturally based food items and other commodities for local communities utilizing appropriate technologies (Tulipa et al. 2020).

The world's largest Muslim nation, Indonesia, has a comparative advantage in that it has numerous options to produce and export food and beverages of high export quality that adhere to halal standards (Ruangkanjanases et al. 2019). Based on implementation's acceptability (75.9%) and viability (67.6%), 71.3% of people have a favourable view toward labeling actions on products. At a significance level of 0.05, it was found that there was a significant association between knowledge, attitude, applicability, and acceptance (Zulkifli et al. 2020).

An analysis of Muslim populations in Thailand and Indonesia to determine the factors that influence their decision to purchase packaged foods that are halal. Olson et al. 's article appeared in the International Journal of Research in Business and Social Science in 2021. Because of rising incomes, customers now pay more for their health (Nurul N.R. et al. 2023). To considerably expand the nation's economy, develop the agricultural export business and other sectors.

Now that imported goods are beginning to flood our country, there are many different styles of eye-catching packaging. People should use caution while selecting these goods since there may be ingredients concealed that make them unfit for Muslim eating. Interviews were used to pinpoint the commonly interconnected halal/halalan, toyyib/toyyiban, and control locations in storage (Omar et al. 2013). Issues with Halal Toyyiban Along the Supply Chain (Riaz and Chaudry 2015) The Hazard Analysis Critical Control Point (HACCP) is an application of Halal Toyyiban Principles Along the Supply Chain from the Source of Supply to the Customers, which Adhere to the Halal Toyyiban Concept Stipulated by Islamic Law. In order to maintain the products' halal status, the halal items shouldn't be mingled with other non-halal products during the supply chain process. When choosing a product, respondents valued environmental factors more than economic ones (Bakti H.B et al. 2019). While engaging in these activities, the food product may be exposed to a variety of dangers that could have an impact on its classification as halalan toyyiban.

Indonesian Ulama Council (MUI) Fatwa No. 26 of 2013 relating to the use of Halal-certified goods. To ensure that the country has access to food, drinks, and halal materials, MUI has been given a Halal certificate (Nafis 2019). The halal criteria have also been created by MUI in accordance with Islamic law. Following the investigation and research necessary to obtain a fatwa, a Halal certificate is issued. Because of insufficient facilities and infrastructure, politics was not properly integrated, and the halal certification procedure was not fully utilized in Indonesia.

According to Martin (1994), there are other aspects such as technology, progressivity, strategies, and efforts to increase sales that have an impact on how the three components of SBP interact with one another. The industrial economy specifically looks at how markets, businesses, and industries are structured, behave, and function (Jaya, 2019). Prior investigation Food and beverage items from 2009 to 2013 had a monopolistic market structure (SBP: Structure-Behavior-Performance; Yuliat, 2017). The market structure is oligopoly, in contrast to the SBP of the beverage sector in Indonesia between 2010 and 2014 (Kholik 2015). The first researchers looked at both food and drinks, while the second looked exclusively at drinks. The authors will solely look at halal dining in Indonesia in order to make the research unique (Pujadi et al. 2020). Food, housing, transportation, and communication are among the basic needs that are consumed as a result of many factors. The interaction's outcomes also show that there are no differences in household expenditure on basic necessities in urban and rural areas, proving that all countries and continents have an unavoidable need for food (Nurul N. R, et.al. 2018).

PT CDMI Consulting's 2018 research reveals that the evaluation of four significant food businesses that are well-known to the Indonesian public: PT Indofood Sukses Makmur, PT Mayora Indah, PT Ultrajaya Milk Industry, and PT. Nippon Indosari as well as serving as a secondary data source in this study and a source of information for the Central Bureau of Statistics for the country—have all gone public.

Literature review

Structure, Behavior and Performance

For more than 50 years, researchers have studied human needs and how meeting those needs might improve one's quality of life (QOL) or one's happiness as an individual in a society. Numerous research have examined how to order requirements within a given hierarchy, beginning with Maslow's pyramid of needs (Maslow 1954). These studies include Max-Neef (1992), Nussbaum and Glover (1995), and Sirgy et al. (1995). It is challenging to determine the criteria for ranking needs; any hierarchy of needs will always be subjective and deficient for a variety of reasons.

Industrial economists examine a variety of corporate policies (the firm's policy) in dealing with rivals and customers, including how to establish prices for inputs and goods, ad campaigns, and R & D.

William G. Shepherd wrote *The Economics of Industry organization* in 1990. According to Denis W. and the book current *Industrial Organization*, there are three key advantages to current techniques over Structure, Behavior, and Performance (SCP). First, rather than using an accounting proxy, they estimate market performance (Carlton and Perloff, 2005). Second, rather than using endogenous factors like concentration ratio and advertising to explain variations in performance, they use changes in exogenous variables (wage, taxes, and demand growth). Thirdly, they are founded on optimizing models for certain sectors so that theories regarding behavior can be put to rest. Buyers and sellers both have bargaining power. The SBP relationship is further explained in (Carlton 2005) who writes, "In the SBP paradigm, an industry's performance—its ability to successfully produce benefits for consumers—depends on the conduct—of sellers and buyers, which depends on the structure of the market. The structure itself is dependent on fundamental factors like technology and product demand. The number of firms or another measure of the distribution of firms, such as the relative market shares of the largest enterprises, are frequently used by researchers to summarize the structure. The existence of a hypothesis that argues that the performance or existence of the market (or industry) is influenced by the conduct of enterprises forms the basis of the BCP method to industrial organization study.

Structure

According to Hirschey and Bentzen (2016), a market structure is made up of all businesses and people who are willing and able to buy or sell a specific good at a specific time and location. Consume attitudes, subjective standards, behavioral control, and health are on the opposing side (Wong et al. 2021) Consciousness significantly affects consumers' motivations to make purchases. Market Structure (Carlton and Perloff 2005) states that the type of structure is determined by the number of firms in a market and the ease of entry and exit by new firms.

A firm engages in strategic conduct when choosing its course of action to change the market landscape and boost profits. According to Shepherd (1990), structural factors include entry barriers, concentration, market share, firm size distribution, and lesser aspects. In some businesses, horizontal integration predominates over vertical integration (Pindyck, and Rubinfeld 2018). Market structure affects how businesses that engage in it behave, according to Edward S. Manson (1939, 1949), and Sutton (1998) in DW Carlton and J M Perloff (2005). In general, it can be seen in terms of distribution balance, market expansion, technical advancement, and efficiency.

The most common method for determining market concentration is to calculate the Hirschman-Herfindahl Index (HHI) using the reference ratio of the four biggest companies in the sector (CR4) (Shepherd 1990). The largest share of the firm has a significant impact on the amount of HHI since the smaller the share given by a company, the lower the square value of its market share. The following is a typical model for analyzing how structure affects a company's profitability. Amount of According to these experts, it can be concluded that market structure refers to the elements of the market, such as the quantity of buyers and sellers, the quality of the product, the level of product knowledge held by the seller and the buyer, and the circumstances surrounding market entry barriers. The unique environment in which a company operates, with features that influence how prices are set and how well a corporation performs, can also be referred to as the market structure. Concentration, product differentiation, company size, growth and entrance obstacles, vertical integration and diversification, and government regulation are all components of market structure.

Behavior

In many nations, halal food has a significant and enormous impact on economic growth. Producers must pay attention to the fact that the halal food supply chain should, in fact, take a sustainable supply chain into consideration (Azhar et.al, 2021). Ferguson (1994) defined the term "conduct" as the manner in which a business interacts with the market in making decisions about prices (whether they are made independently or by agreement), product and advertising strategies, and research and innovation. On the other hand, consumer attitudes, subjective norms, behavior control, and health awareness has a significant impact on consumers' purchase intentions (Wong et al., 2005). Strategic behavior (conduct) is a set of actions a firm takes to influence the market environment to increase its profit. A decision-making process centered on choosing decisions that produce the highest possible amount of value or utility for an individual is referred to as rational behavior. According to the presumption of rational behavior, people would prefer to pursue acts that will benefit them above those that will be neutral or harmful to them. The majority of traditional economic theories are predicated on the idea that everyone engaging in an activity is acting rationally (Church and Ware 2000). The relationships between technical organizations, resource inputs, the characteristics of the labor and

product markets, and variables like the wage payment schema and supervisory system, all in relation to their impact on the department's members and behavior with the outcome (Warmington et al.1997).

Behaviors refer to the conduct (activities) of businesses in a market, including the choices they make and the processes they use to reach those choices. Thus, it focuses on how businesses determine pricing, whether they do so on their own or in concert with other businesses. How businesses decide how much money to spend on advertising and research, and how much money is spent on these activities (Paul R. Ferguson, 1988). It can be inferred from the differing viewpoints of experts that in industrial economics, conduct is defined as the methods by which businesses enter the market. Behavior is a pattern of responses and modifications to different businesses in an industry to accomplish its objectives and face competition through product, price, innovation, and advertising tactics so that businesses can compete.

Performance

According to Carlton and Perloff (2005), market performance refers to how well the market succeeds in providing advantages to consumers. An industry's performance can be seen in terms of added value, productivity, and efficiency. The difference between the input value and the output value is the added value. Productivity is the outcome attained per employee or per unit of manufacturing input over a predetermined amount of time. Shephard, W.G. (1990; 115) The Price Cost Margin (PCM) for all industries, which is the difference in price and marginal costs computed from the added value minus labor cost in the output section, is one of the metrics that can be used to measure performance.

The equation is: $\text{Prize Cost Payroll} + \text{Margin} = \text{Value Added}$; $\text{Product Value} = \text{Price} + \text{Cost} / \text{Price}$. 1990's W.G. Shephard. Structure and behavior then have an impact on the performance of the market, which is reflected in the firm's prices, rates of cost-cutting and innovation, and so on. A competitive structure and conduct are typically supportive of good performance. Are they using the existing production elements effectively and sparingly, in other words? Are they generating the "right" commodities in the "right" amounts while also being allocative efficient? Aspects of performance, such as the link between prices and costs and the degree of profits earned, might offer light on these challenges (Carlton and Perloff 2005).

According to Church and Ware (2000), innovation in new technologies will encourage profit increases and enable major corporations to maintain maximum profit (very profitable positions). According to the structural approach, behavior, and performance frameworks, performance is the end consequence of the overall market structure and the influence of industry conduct.

From the various viewpoints of these experts, it can be inferred that industrial performance is the end result of labor that is influenced by the industry's structure and practices, with the typical outcomes being associated with the degree of market control or company profit in a given sector. More specifically, efficiency, growth (including market expansion), employment opportunities, employee welfare, and sense of community can all be considered aspects of performance.

CR4

Although the number of enterprises in a market may appear significant, because market share might vary greatly, it typically doesn't provide much information regarding structure. Concentration (i.e., the four companies) own 90% of the market share for the CR4 measurement tool, indicating a strong oligopoly and a dominant firm (Shephert, 1990, 62).

Additionally, CR4 concentration and business earnings have been linked. In this concentration, the resultant coefficient is approximately 10, with a lower degree of significance. This correlation highlights the monopolist group's influence over the profits of all market participants. The risk of a 100% concentration only sees a 10% rise in earnings.

Digital Marketing

There are many Indonesian food industries and none with large production and marketing, limitations in running their business in terms of market awareness, limited sales area coverage, and facing competition from local and other regions and in general directly, most are still manual. The use of digital technology has changed the way marketers connect with their consumers today (Ritz et al. 2019). Li et al (2016) stated that digital marketing is a process of

institutional activity using digital technology to deliver, create, and communicate products or services from companies to consumers and other users.

Based on a number of factors, including applied technology, human resources, market potential, and economic contribution, as well as an analysis of the viability of local superior products from an economic perspective, significant efforts to improve socioeconomic development can be identified. Development of locally sourced food products and other goods for local communities utilizing appropriate technologies (Tulipa et al. 2020). The marketing process (Olsona, et al. 2021) : (1) prioritizes what the company wants to produce; (2) decides which marketing strategies will be used. The internet brought changes in the way of marketing products through the system of many new digital marketing tactics. Prospects, analysis, and adoption of other successful businesses are factors that were taken into account when developing a plan.

The impact of the supply chain on the development of new systems or products has been thoroughly investigated and debated in a number of literatures. It has been discovered that the integration of product manufacturers and consumers has a substantial direct impact on marketing performance, and that this impact is mediated by manufacturing flexibility in the business world. To make it simpler for consumers to go about their daily lives, entrepreneurs must make the most of today's technological advancements and applications. People can easily shop online, for instance, while they are occupied with other tasks. Buying and selling transactions in e-commerce are conducted utilizing the market space and marketplace models, respectively.

A market space, often known as an online store, is a location where wholesale and retail goods are bought and sold online. There are only two sources of trading opportunities in a market: the seller and the buyer. The operational idea is that the seller offers the buyer-targeted goods in this market space that are created by the seller.

Marketplace is a meeting place for buyers and sellers who are engaged in online transactions to sell production goods. In other terms, a marketplace is a website with a number of vendors so that customers can select the products they want to purchase from a number of sellers or shops on the website. Indonesian marketplaces include those on Bukalapak, Lazada, and Tokopedia. Companies need to go through a digital marketing transformation in order to enhance revenue and brand awareness as well as turnover and client base.

With the correct digital skills, businesses may collaborate with all B2B, B2C businesses across industries to establish brands, expand market share, and grow consumer loyalty. Tokopedia and other examples. Companies need to go through a digital marketing transformation in order to enhance revenue and brand awareness as well as turnover and client base.

Material and Methods

The types and sources of data used in this study are 14 years of secondary data from 2008 to 2021 obtained from BPS, the Ministry of Industry and, the Jakarta Stock Exchange. In principle, data analysis is carried out descriptively by explaining the description of the analysis of halal food conduct in Indonesia and quantitatively by analyst the market structure of the halal food industry in Indonesia with the following variables:

Minimum Efficiency Scale (MES)

In order to prevent potential competitors from entering the market and becoming genuine competitors, there may be entry barriers at the market's edge. A barrier to entry is anything that lessens the possibility, scope, or speed of their entry (Shepherd, 1990). Entry into the business will become more challenging as assessed by the Minimum Efficiency Scale (MES) and on a greater economic scale.

Growth (G)

According to Bain, Penrose, and others, industry expansion tends to lower entry barriers and concentration levels. Growth may also cause market instability, which would make it simpler for newer, smaller businesses to succeed (Shepherd, 1990). Industrial growth (Growth) refers to the pace of growth of the industrial sector from one year to the next.

Price Cost Margin (CPM) Profitability

In general, performance measurement with PCM. The PCM value is used as the dependent variable because PCM describes the profits of an industry and represents the performance variable itself. There is also internal efficiency (X-Eff) X-efficiency occurs in two main forms (1) in buying more inputs than are necessary, and (2) in low effort level by employees (Shepherd, 1990) in this paper. PCM is selected.

SUMMARY STATISTIC

Multiple Regression Test

Minimum Efficiency Scale (MES)

The following table's Minimum Efficiency Scale (MES) entrance barrier data provides insight into the market structure of Indonesia's food and beverage sector.

Table 1. Portion of each CR4 Large Company 2008-2021

Year	Indofood SM	Mayora Indah	Ultra Jaya	Indosari	MES
2008	0,83	0,65	0,32	0,07	1,90
2009	0,89	1,06	0,36	0,10	2,43
2010	4,66	1,62	0,76	0,13	7,19
2011	2,90	1,46	0,32	0,12	4,81
2012	4,02	1,46	0,39	0,16	6,04
2013	2,88	1,44	0,41	0,18	4,92
2014	3,24	0,12	0,03	0,17	3,57
2015	3,17	0,13	0,05	0,15	3,51
2016	2,12	0,14	1,9	0,15	2,47
2017	2,27	0,11	2,43	0,13	2,56
2018	2,36	0,12	7,19	0,13	2,67
2019	2,45	0,15	4,81	0,16	2,66
2020	2,76	0,19	6,04	0,19	2,85
2021	2,92	0,18	4,92	0,21	3,25
Average	2,67	0,63	3,57	0,14	3,63

Market-structure-related interpretation Minimum Perfect competition: $CR4 = 0$. $0 < CR4 < 40$ monopolistic competition or low-effective competition $40 \leq CR4 < 60$ Medium to lower Loose oligopoly or monopolistic competition 60 to $CR4 \geq 90$ medium to high Tight oligopoly or a dominant corporation fringe with competition $CR4 \geq 90$ High Dominant Firm with Effective Monopoly (Near Monopoly) or Competitive Fringe Maximum m Perfect monopoly: $CR4 = 100$.

According to the aforementioned data, the number of CR4 Company's products in the last 14 years has ranged from at least 1.90% in 2008 to the highest of 7.19% in 2010 to 2.67% in 2018. Indofood SM alone, with an average of 2.67, Mayora 0.635, Ultra Jaya 3.57, and Indosari 0.14, have the biggest percentage of each CR4 in Indonesia. The average CR4 is just 3.63%.

Because MES was carried 10%, the level of competition was extremely intense, and barriers to market entry were very low (only 3.63%), it can be inferred from the MES calculation above that the halal food industry in Indonesia experienced monopolistic competition from 2008 to 2021.

Growth

Table 2. Growth of the Indonesian Halal Food Industry 2008-2021 (Million Rupiah)

Years	Sales	Growth	% Growth
2008	438044	0	0

2009	446558	8514	1,94
2010	444762	-1796	-0,4
2011	647344	202582	45,54
2012	718677	71333	11,01
2013	830050	111373	15,49
2014	1096695	266645	32,12
2015	1212638	115943	10,57
2016	1623948	411310	33,91
2017	1905191	281243	17,31
2018	1976531	71340	3,74
2019	2093949	117418	5,94
2020	2103646	9697	0,46
2021	2187937	84291	4,01
Average	1.266.141	124992	12,97

Based on the aforementioned statistics, Indonesia's halal food business has grown at a rate of IDR 438,044 million each year for the last 14 years, reaching IDR 2.187.937 million in 2021. 2010 saw a decrease of 0.40%, and 2011 saw the largest gain at 45.54%. Indonesia's halal food market has had erratic growth, with an average growth rate of 12.97%. The halal food industry's growth pattern is generally on the decline.

Price Cost Margin (PCM)

Table 3. PCM of Indonesian Halal Food Industry 2008-2021 (Million Rupiah)

Years	Sales	Labor Costs	PCM
2008	438.044	10.456	2,38
2009	446.558	11.457	2,56
2010	444.762	11.952	2,68
2011	647.344	20.284	3,13
2012	718.677	21.167	2,94
2013	830.050	23.338	2,81
2014	1.096.695	29.001	2,64
2015	1.212.638	30.748	2,53
2016	1.623.948	44.908	2,76
2017	1.905.191	47.728	2,50
2018	1.976.531	43.201	2,18
2019	2.093.949	48.334	2,31
2020	2.103.646	50.665	2,41
2021	2.187.937	53.337	2,43
Average	1.266.141	31.898	2,59

Industry performance is analyst by looking at the Price Cost Margin (PCM) profitability indicator, the Halal Food Industry in the last 14 years 2.38% in 2008 was relatively stable until 2021 at 2.43%. The lowest PCM was 2.18% in 2018 and the highest was 3.13 in 2011 with an average rate of 2.59%. PCM in 2021 experienced a slowdown (brought to average).

Results and Discussion

The halal food industry in Indonesia has developed at a rate of IDR 438,044 million each year for the past 14 years, reaching IDR 2.187.937 million in 2021, according to the aforementioned figures. The highest increase, at 45.54%,

was in 2011, while 2010 had a decline of 0.40%. The halal food market in Indonesia has experienced inconsistent growth, with an average growth rate of 12.97%. The growth pattern of the halal food sector is often declining.

Classic Test

1. Data normality

Table 4. PCM, MES and Growth Data Normality Test

Variable	Jarque-Berra	probability	P>0,05
CM	0,636225	0.727521	Normal
MES	2,827681	0,243207	Normal
Growth	2,793850	0,247356	Normal

If PCM, MES, and Growth are more than 0.05, it can be assumed that the three residual variables are normally distributed, and the normal distribution can then be used by the analyst.

Autocorrelation Test, second

There is no autocorrelation issue, according to the Durbin Watson (DW) autocorrelation test, which yielded a result of 1.689426.

Test for Heteroskedasticity

Table 5. Heteroskedasticity

Heteroskedasticity Test: Breusch-Pagan-Godfrey			
F-statistic	0.321708	Prob. F(2,11)	0.7315
Obs*R-squared	0.773641	Prob. Chi-Square(2)	0.6792
Scaled explained SS	0.319087	Prob. Chi-Square(2)	0.8525

There is no Heteroskedasticity issue if the Brush Pagan Godfrey Obs*R-squared 0.773641 and Prob. Chi-Square (2) 0.6792 are both more than 0.5.

4. Multicollinearity test

Table 6. Variance Inflation Factors

Variance Inflation Factors			
Date: 07/03/23 Time: 12:08			
Sample: 1 14			
Included observations: 14			
Variable	Coefficient Variance	Uncensored VIF	Centered VIF
C	0.008769	7.472082	NA
MES	0.000532	6.986761	1.007718
GROWTH	6.14E-06	1.906506	1.007718

VIF, or Variance Inflating Factor When the cantered VIF variables MES = 1,007718 and Growth = 1,007718 are all divided by 10, it is argued that neither variable has a Multicollinearity issue (Gujarati and Porter 2013).

5. Regression Test

Table 7. Coefficient of Regression MES and Growth to PCM

Dependent Variable: PCM				
Method: Least Squares				
Date: 07/03/23 Time: 12:03				
Sample: 1 14				
Included observations: 14				
Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	2.095263	0.093641	22.37550	0.0000
MES	0.095493	0.023076	4.138268	0.0016
GROWTH	0.011303	0.002479	4.560047	0.0008
R-squared	0.790637	Mean dependent var		2.590000
Adjusted R-squared	0.752571	S.D. dependent var		0.257682
F-statistic	20.77019	Durbin-Watson stat		1.689426
Prob (F-statistic)	0.000184			

t - test

Growth to CMP t count (4,56 > t table (1.96) p 0.0008 0,05 and Partially MES to PCM t count (4.13) > t table (1.96) It may be said that MES and Growth factors have a substantial impact on PCM due to their partial probity.

F - test

According to the study's findings, there was a strong correlation (75%), or R Squares 0.790637 Adjusted Squared 0.752571, between the independent factors and the dependent variable after the data was processed using the Views 9 application. Therefore, it can be said that every regression variable is reliable, accurate, and realizable

R- Squared

The combined effect of MES and growth has a considerable and advantageous impact on PCM. 20.77 > 4.96 p 0.000184 0.05, R Squares 0.790637, and Adjusted R-Squared 0.752571 are the findings of the F probability test. 75% of PCM is impacted by the MES and Growth variables together, and the remaining 25% is impacted by other variables. According to the test's findings, the Minimum Efficiency Scale (MES) and Growth factors work together to considerably increase Price Cost Margin (PCM).

6. Regression

$$PCM = \beta_0 + \beta_1 MES + \beta_2 G + \varepsilon_i$$

Where:

$$PCM (Y) = 2.095263 + 0.095493 + 0.011303 + e$$

Constance (a) 2.095263

MES (x1) = 0.095493

Growth (x2) = 0.011303

From the multiple regression equation, it can be described as follows:

If there are no additional MES and G variables (equal to 0), then the total PCM = 2.10%.

If MES increases by 1%, the number of PCMs increases by 0.10%

If Growth increases by 1%, the PCM will increase by 0.01%.

Conclusion

1. The largest firm in Indonesia has an average market share of 0.32%, and CR4 averages 3.63% in Indonesia's monopsony market for halal foods.
2. With an average annual growth rate of 12.97%, the local Indonesian halal food industry is generally stationary (less developed). Although there are many food enterprises in Indonesia, their combined production is still quite tiny. As a result, if this industry is to grow, it will need to cooperate and look for new markets abroad.
3. The CR4 Price Cost Margin performance of the Indonesian Halal Food Industry has an average normal profit rate of 2.59%. This low level of profit suggests a competitive market.

4. Using market space and marketplace as two different sorts of buying and selling transactions in e-commerce. Through the use of many new digital marketing strategies, the internet changed the way that things are marketed.
5. With the correct digital skills, businesses may collaborate across industries and B2B and B2C enterprises to establish brands, expand market share, and boost consumer loyalty. Determines the marketing strategies that will be employed. Prospects, analysis, and adoption of other successful businesses are factors taken into account while developing a plan.

Discussions

1. The Indonesian food industry should be governed by rules that make it simple for export-oriented goods and halal products. The number of companies is too great, and newcomers can easily enter the market, creating a very high level of competition. This recommendation goes especially for the Ministry of Industry and Trade.
2. As the largest Muslim nation in the world, Indonesia has a comparative advantage when it comes to exporting high-quality, halal food products to other nations. The government offers advice at trade shows, and the industry offers the widest possible range of products for the Indonesian halal food industry.
3. There are many companies in Indonesia, even though they have gone public but all of them are small, so that the company's performance is not optimal, it is suggested that several large companies including those that have gone public mergers, multi company, innovation and the use of high technology so that the cost efficiency can ultimately compete with other food companies in other countries in the international world.
4. Indonesia, the most populous Islamic nation on earth, has the potential to produce halal food, not only for exports and imports but also to promote marketing expansion in other nations by undergoing digital marketing transformation to boost sales and branding of goods or services.
5. Indonesian halal food products joint venture can collaborate with businesses selling to consumers and businesses selling to other businesses in a variety of markets and industries to establish brands, expand market share, and boost client loyalty and value with the correct digital skills.

ACKNOWLEDGEMENT

The authors declare no conflict of interest. Funding for this research is done with their own funds.

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