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Predictors of Supermarket Performance in a Small Developing Country. The Case of Trinidad

Predictores del desempeño de los supermercados en un pequeño país en desarrollo. El caso de Trinidad

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Abstract

This study examines the factors affecting the performance of supermarkets in a small developing country. The retail industry in Trinidad and Tobago is quite substantial and impactful; however, there is a shortage of research in this area that makes this research necessary.

Using a quantitative, non-experimental, cross-sectional, correlational, and predictive design, data were collected from a sample of 142 supermarkets in Trinidad. Instruments were created for the variables measuring marketing performance, management/leadership, and economic factors, and an instrument for measuring supermarket performance was adapted. A multiple linear regression model was analyzed in which supermarket performance was the dependent variable and the others mentioned were the independent variables.

The multiple linear regression model showed the general management/leadership (ß = .316), and economic factors (ß = .276) variables are significant predictors of supermarket performance. The model explained 39.4% of the variance of the dependent supermarket performance. It is concluded that supermarket management drives efficiency by managing economic factors to establish the most optimal performance.

The final model provided valuable information on the supermarket sector, but the sample used was mainly composed of small and medium-sized supermarkets. Consequently, the model may be limited in its application.

JEL Code: C21, C25, C52

Keywords: supermarket performance, marketing, economy, management, Trinidad

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Resumen

Este estudio examina los factores que afectan el desempeño de los supermercados en un pequeño país en desarrollo. La industria minorista en Trinidad y Tobago es bastante importante e impactante; sin embargo, la falta de investigación en esta área hace que esta sea necesaria.

Utilizando un diseño cuantitativo, no experimental, transversal, correlacional y predictivo, se recolectaron datos de una muestra de 142 supermercados en Trinidad. Se crearon instrumentos para las variables que miden el desempeño de marketing, la gestión/liderazgo y los factores económicos, y se adaptó un instrumento para medir el desempeño de los supermercados. Se analizó un modelo de regresión lineal múltiple en el que el desempeño del supermercado era la variable dependiente y las demás mencionadas eran las variables independientes.

El modelo de regresión lineal múltiple mostró que las variables de gestión/liderazgo general (ß = .316) y factores económicos (ß = .276) son predictores significativos del desempeño del supermercado. El modelo explicó el 39,4% de la varianza del desempeño dependiente del supermercado. Se concluye que la gestión del supermercado impulsa la eficiencia mediante la gestión de factores económicos para establecer el desempeño óptimo.

El modelo final proporcionó información valiosa sobre el sector de supermercados, pero la muestra utilizada se compuso principalmente de supermercados pequeños y medianos. Como consecuencia, el modelo puede estar limitado en su aplicación.

Código JEL: C21, C25, C52

Palabras clave: desempeño de supermercados, marketing, economía, gestión, Trinidad

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Introduction

The supermarket industry globally, is considered to be a huge dynamic growth nexus both in scope and structure and varies drastically based on the country being researched.

For example, as the industry continues to evolve due to pressures from the global economy, competition, and technology, similarities may be observed in some developed countries such as USA and UK. Large store retailer formats are common in the USA, as they are heavily discounted and survive on low profit margins. Typically, consumers prefer premium offerings, including but not limited to organic and all-natural brands. In the UK, consumer preferences have changed with the economic downturn, and new-entrant-competition have intensified (Ibisworld, 2016).

Closer home, in South America, it is seen that shopping at supermarkets is a group effort with families and friends (Mora & González, 2016). Technology also has affected the structure of supermarket

performance. For example, in Australia, there have been major shifts toward e-commerce. In 2019, legal reform was executed, directing regulatory bodies to promote greater transparency and fairness as it relates to pricing. Greater consciousness for the environment was recorded, leading to a total ban on plastic bags. Lastly, the "Grocerant" was introduced which is a food hall within supermarkets through partnerships with food retailers (Euromonitor Australia, 2024).

Even supermarket sizes have taken a hit, as in some territories there has been a surge in smaller units. For example, India has displayed a dominance of smaller retail formats known as Kirana shops which are small family-owned retail stores selling grocery items. So, although there are approximately 9000 established supermarkets in India, there are also over 15 million Kirana shops (Minhas, 2022), where discount searching behaviour is prevalent (Euromonitor India, 2021).

Trinidad's supermarket retail channel has been mirroring the trends of developed markets in tandem with changing consumer behaviours (Gopee Scoon, 2019). With a population of 1.3 million persons, there are approximately 2,473 supermarkets which comprise large chains, medium sized establishments, and small/micro retail formats (Babwah & Associates, 2015). The industry has seen an overall 450% growth over an eleven-year period from 2004 to 2015, which accounted for more than 50% of the Gross Domestic Product (GDP) distribution over the various economic sectors. In 2015, the supermarket industry in Trinidad and Tobago represented 15% of total GDP and 61% of distribution GDP (Logan, 2005; Gonzalez, 2012; Gonzalez, 2016).

While the industry employs many persons, the problem associated with Trinidad and Tobago, and by extension the Caribbean and other developing markets is that there is a shortage of proper research, record keeping and publishing, as it pertains to this sector (Rajic & Dado, 2013). This limitation in knowledge can contribute to an increased failure rate among businesses within the sector, which can have detrimental spin-off effects for the local economy. These effects can include a decrease in GDP, employment rates and could possibly result in major food shortages as seen in Venezuela (Brodzinsky, 2016). If the industry is properly regulated, it can result in inequalities and unfair practices (Butler, 2016). There is, therefore, a rational need to study this channel and understand the contributing factors to its performance and success.

The performance of supermarkets in Trinidad would be the key factor for consideration in this study. There are financial and non-financial indicators that determine the performance of retail establishments (Zuberi & Rajaratnam, 2020). The non-financial indicators ultimately contribute to the financial indicators in the long run. Many factors can directly impact supermarket performance, such as an extensive marketing strategy (Berkhout, 2016), experienced management and influential leadership (Vidic, 2018), operational efficiencies (O'Brien, 2016) and finally, how well the establishment reacts to prevailing economic conditions (Huang et al., 2016). The supermarket industry in Trinidad, having

adopted the trends of developed countries speaks to the impact of managerial and marketing influences. It must also be considered that micro-economic influences impact consumer spending in a developing country like Trinidad. For this reason, the relationship between management capabilities, marketing and economic factors will be explored in relation to supermarket performance in Trinidad.

There seems to be an obvious gap between the current literature, concerning the evolving food market regarding consumer and retail relations in the Caribbean, and the extent to which relevant variables affect supermarket performance in Trinidad (Iton, 2015). In this paper, the primary objective is to examine the extent to which marketing factors, management capabilities/influences and economic factors affect supermarket performance.

As a result of the void in literature, the aim of this paper therefore will be to better understand the key factors on a micro and macro level that can influence supermarket performance, thereby offering guidance to practitioners in the field to better manage their businesses.

Methodology

Research Type, Population and Sample

This quantitative research is exploratory, non-experimental, cross-sectional, correlational, and predictive. The population of interest consisted of 851 supermarket managers in Trinidad and Tobago.

The sampling used in this study was non-probability, intentional, and convenient. A total of 253 supermarkets of different sizes from different geographic areas of Trinidad and Tobago were selected from a general list. The final sample consisted of 151 supermarket managers. However, in the regression analysis we identified 9 faulty responses that were discarded, leaving a sample of 142 participants.

The following inclusion and exclusion criteria were used to choose the participants of this study: only managers who were managing supermarkets in Trinidad and Tobago with more than two years of experience were considered. On the other hand, those participants who did not complete all the questionnaires sent were discarded.

Instruments

An instrument was developed with the aim of collecting data on the variables: Marketing Performance (19 statements), Management/Leadership (14 statements), and Economic Factors (12 statements). The instrument to measure Supermarket Performance (20 statements) consisted of an adaptation of the High-Performance Organization (HPO) framework by Waal (2012). The final questionnaire consisted of 65 statements that were evaluated using a five-point Likert scale, where '1' meant "strongly disagree" and '5' represented "totally agree".

The process of creating the instruments used in the study is summarized below:

Defining key concepts: Clear definitions were established for all important factors, including

marketing performance, management styles, economic influences, and supermarket effectiveness.

Breaking down the factors: Each key factor was further broken down into specific aspects or dimensions. Experts were consulted to ensure that these aspects accurately captured the intended concepts.

Expert review: Once the survey was drafted, industry professionals reviewed it for clarity, relevance and appropriateness to the target audience.

Final instrument: The final survey consisted of six sections: General Instructions, Demographic Questions, Marketing Performance (19 statements), Management/Leadership (14 statements), Economic Factors (12 statements), Supermarket Performance (21 statements, adapted from the HPO framework).

Marketing Performance

To measure marketing performance, 19 items were drafted. Firstly, the value of KMO was analyzed, which was equal to .861, with significant Bartlett's sphericity (χ^2 = 864.053, df = 66, p < .001). These results indicate that the data is appropriate for conducting factor analysis. Prior to factor analysis, item 17 was recoded. Subsequently, exploratory factor analysis was conducted using the principal axis method and promax rotation. Seven items were eliminated for having factor loadings below 0.3. The resulting 12 items were grouped into three factors (see Table 1), which together explained 57.48% of the variance of marketing performance, and the reliability measured by Cronbach's alpha was .880.

The first factor (F1), named Accessibility and Convenience, consisted of 4 items (MP8, MP9, MP2, and MP3) with a factorial loading of between .886 (MP8) and .490 (item MP3). The Cronbach's alpha score of this factor was .844, which was satisfactory.

The second factor (F2), named Product Information, was comprised of 3 items (MP1, MP18, and MP14) with a factorial loading of between .647 (MP1) and .513 (MP14). The Cronbach's alpha score of this factor was .695, which was close to the threshold of 0.7.

The third factor (F3), named Shopping Experience, was made of 5 items (MP4, MP19, MP6, MP5, and MP15) with a factorial loading between .752 (MP4) and .408 (MP15). The Cronbach's alpha score of this factor was at an acceptable level of .828.

Tabla 1

Exploratory Factor Analysis of Marketing Performance

Items	Factor		
	1	2	3
MP8. The location of this store is a key reason for its success compared to our competitors	.886		
MP 9. This store is strategically located near to the customers we target	.810		
MP 2. Prices in this store are comparable to other stores	.549		
MP 3. Prices are a good reflection of quality	.490		
MP 1. Price tags of merchandise in store are visible at all times		.647	
MP 18. In-store lighting facilitates customer shopping experience in this store		.609	
MP 14. Point-of-sale materials are easily noticeable from anywhere in-store		.513	
MP 4. In-store announcements of any type can be heard anywhere within the store			.752
MP 19. In-store music facilitates customer shopping experience in this store			.741
MP 6. Advertising of discounts through various medium e.g. newspapers are important to our customers			.595
MP 5. Loyalty programs are an important part of our marketing program			.462
MP 15. The store layout allows customers to move around without challenges			.408
Cronbach´s alfa	.844	.695	.828

Note. F1: Accessibility and Convenience, F2: Product Information, F3: Shopping Experience

Management/Leadership

To measure Management/Leadership, 14 items were drafted, of which three were removed due to low levels of communality. The remaining 11 items were grouped into three dimensions: (a) Customer Strategies (5 items: ML13, ML1, ML10, ML11, and ML14), (b) Human Resources (3 items: ML7, ML5 y ML6), and (c) Supply Chain Management (3 items: ML3, ML4, and ML8).

The value of KMO was analyzed, which had a value of .779, close to .8. Bartlett's sphericity was significant (χ^2 = 1385.876, df = 55, p < .001). Both values indicate that the data is appropriate for factor analysis. Exploratory factor analysis was conducted using the principal axis method and promax rotation, with eigenvalues greater than one, which grouped the 11 items into three factors (see Table 2), which together explained 73.51% of the variance. The scale achieved a Cronbach's alpha value of .877, indicating a high internal reliability of the instrument.

The first factor (F1), named Customer Strategies, showed factorial loadings between .967 (ML13) and .586 (ML14). The Cronbach alpha score of this factor was .911. The second factor (F2), named Human Resources, exhibited factorial loadings between .922 (ML7) and .747 (ML6). The Cronbach alpha score of this factor was .863. Finally, the third factor (F3), named Supply Chain Management, with a factorial loading of between .992 (ML3), and .567 (ML8). The Cronbach alpha score of this factor was acceptable at .861.

Tabla 2

Exploratory Factor Analysis for Management/Leadership

Items	Factor		
	1	2	3
ML13. Warehouse management system/inventory control system to improve cost reduction	.967		
ML1. Effective integrated warehouse management/inventory control system	.912		
ML10. Automated tools for order processing	.894		
ML11. Compatible communication information system	.776		
ML14. We have a structured approach in dealing with customer complaints	.586		
ML7. Personnel are always eager to provide service		.922	
ML5. Personnel highly trained in customer service		.822	
ML6. Personnel are always courteous		.747	
ML3. Satisfactory level of trust among supply chain members			.992
ML4. Various ways to improve the supply chain function in our stores			.959
ML8. Building the company's brand			.567
Cronbach´s alfa	.911	.863	.861

Note. F1: Customer Strategies, F2: Human Resources, F3: Supply Chain Management

Economic Factors

To measure the Economic Factors variable, a scale with 12 items was designed. One of these items was removed due to low levels of commonality and three were recoded. The 11 items were grouped into two dimensions: (F1) Customer Behavior (7 items: E1, E2, E3r, E4r, E5, E6r and E7), and (F2) Retailer Adaptation (4 items: E8, E9, E11 and E12).

The Kaise-Meyer-Olkin (KMO) test was performed to evaluate the suitability of the data for factor analysis and a value of .854 was obtained, indicating good internal consistency. In addition, Bartlett's sphericity test was significant (χ^2 = 1188.919, df = 55, p < .001).

An exploratory factor analysis was carried out using the principal axis method with promax rotation, preserving those items with eigenvalues greater than one (see Table 3). The two resulting factors explained 67.08% of the variance and the reliability measured with Cronbach's alpha was equal to .744.

Tabla 3

Exploratory Factor Analysis for Economic Factors

	Factor	
Items	**1**	**2**
E6r. My customer base has decreased	.917	
E1. Consumer spending in my store has not been affected	.876	
E5. The frequency of shopping trips has remained unchanged	.868	
E7. My business operation was not affected at all	.823	
E2. Customers continue to buy products they like	.806	
E4r. Customers shopping carts have not been reduced	.775	
E3r. Customers focus only on value for money	.590	
E12. We have increased our marketing activities to retain customers		.926
E11. We have tried to seek out new business opportunities that never existed before		.824
E8. We have modified product lines to help our customers cope with the recession		.792
E9. We have tried to cut costs as effectively as possible		.686
Cronbach´s alfa	.927	.881

Note. F1: Customer Behavior, F2: Retailer Adaptation

Supermarket Performance

To measure the Supermarket Performance variable, a scale with 21 items was created, of which five were eliminated due to low communalities. The remaining 16 items were grouped into three dimensions: (F1) Differentiation and Innovation (7 items: S2, S4, S1, S9, S5, S3 and S16), (F2) Employee-Centric Leadership (7 items: S8, S21, S7, S10, S14, S15 and S6), and (F3) Employee-Centric Leadership (2 items: S11r and S13r) (see Table 4).

The Kaise-Meyer-Olkin (KMO) test was performed, which obtained a value of .895. In addition, Bartlett's sphericity test was significant (χ^2 = 1572.130, df = 120, p < .001).

An exploratory factor analysis was carried out using the principal axis method with promax rotation, preserving dimensions with eigenvalues greater than one. The three resulting factors explained 62.67% of the variance, with a reliability measured with Cronbach's alpha equal to .921.

Tabla 4

Exploratory Factor Analysis for Supermarket Performance

Items	Factor		
	1	2	3
S2. In the supermarket, processes are continuously improved	.934		
S4. The supermarket continuously innovates the things it does well	.929		
S1. The supermarket has adopted a strategy that sets it clearly apart from other supermarkets	.822		
S9. The supermarket is performance driven	.771		
S5. Management frequently engages in a dialogue with employees	.745		
S3. In the supermarket, everything that matters to performance is explicitly reported	.669		
S16. Employees want to be inspired to accomplish extraordinary results	.359		
S8. Management welcomes change		.923	
S21. The supermarket maintains good and long-term relationships with all stakeholders		.905	
S7. Management allows employees to make mistakes		.823	
S10. Management is trusted by all employees		.761	
S14. Employees look up to management		.670	
S15. Employees want to be held responsible for their results		.583	
S6. Employees are always involved in important processes		.477	
S11r. Management applies fast decision making			.843
S13r. Management is decisive with regards to non-performers			.775
Cronbach´s alfa	.908	.909	.728

Note. F1: Differentiation and Innovation, F2: Employee-Centric Leadership, F3: Deliberative Decision-Making

Results

Demographic data of the sample

Table 5 describes the demographic data of the 142 participants. According to this table, 54.9% of the participants manage independent supermarkets. Most of the supermarkets are small (45.8%), with a covered area of less than 10,000 square feet. Additionally, a significant portion (42.3%) is in the central region of Trinidad; has 2 cash registers (31.7%); and has been in the market for less than 24 years (24.6%). Of the total participants, 54.9% serve in the capacity of a manager. Finally, 30.3% of the participants have experience in the supermarket industry of between 1 to 7 years.

Tabla 5

Demographic Data

Variables	n	%
Type of Supermarket		
Chain	35	24.6
Independent	70	49.3
Chinese	37	26.1
Total	142	100.0
Square feet of the Supermarket		
Up to 10,000 square feet	65	45.8
10,000 to 20,000 square feet	60	42.3
More than 20,000 square feet	17	12.0
Total	142	100.0
Location of Supermarket		
West	16	11.3
East	55	38.7
Central	60	42.3
South	11	7.7
Total	142	100.0
Number of Cash Registers		
1	39	27.5
2	45	31.7
3 to 4	24	16.9
More than 4	34	23.9
Total	142	100.0
Years of Existence		
1 to 6	39	27.5
7 to 11	33	23.2
12 to 24	35	24.6
More 24	35	24.6
Total	142	100.0

Variables	n	%
Respondent´s Role		
Supervisor	33	23.2
Manager	78	54.9
Owner	31	21.8
Total	142	100.0
Number of years the manager has been working in the supermarket industry		
1 to 7	43	30.3
More 7 to 15	39	27.5
More 15 to 22	26	18.3
More 22	34	23.9
Total	142	100.0

Arithmetic Means of the Variables

Table 6 presents descriptive statistics for the variables and dimensions relevant to the supermarket analysis. The table shows the following measures: mean, standard deviation, skewness and kurtosis.

Tabla 6

Descriptive Statistics

Variables/Dimension	*M*	*DE*	Skewness	Kurtosis
Economic Factors	2.59	0.61	0.37	1.39
Customer Behavior	2.05	0.93	1.11	0.41
Retailer Adaptation	3.54	1.03	-0.48	-0.59
Management/Leadership	3.21	0.92	0.35	-0.75
Customer Strategies	3.20	1.23	-0.02	-1.14
Human Resources	4.16	0.87	-0.76	-0.27
Supply Chain Management	2.29	1.39	0.67	-0.98
Marketing Performance	3.22	0.81	0.63	-0.33
Accessibility and Convenience	3.93	0.72	-0.27	-0.32
Product Information	3.77	0.97	-0.60	-0.37
Shopping Experience	2.33	1.14	0.95	-0.16
Supermarket Performance	3.30	0.68	-0.10	-0.41

Null Hypothesis Test

Two null hypotheses were tested, which are as follows:

$H0_1$: The level of Marketing Performance, Management/Leadership, and Economic Factors are not significant predictors of Supermarket Performance, perceived by supermarket managers in Trinidad in the year 2019.

$H0_2$: The level of the dimensions of Marketing Performance (F1: Accessibility and Convenience, F2: Product Information, F3: Shopping Experience), Management/Leadership (F1: Customer Strategies, F2: Human Resources, F3: Supply Chain Management), and Economics (F1: Customer Behavior, F2: Retailer Adaptation) are not significant predictors of Supermarket Performance, perceived by supermarket managers in Trinidad in the year 2019.

Null Hypothesis Test 1

The enter method was used to test the H01. First, the assumptions of multiple linear regression were tested: residual independence (Durbin-Watson = 1.502), residual normality, noncollinearity (FIV between 1.283 and 2.202), homoscedasticity (with cloud-like error dispersion) and linearity.
Once the assumptions of the multiple linear regression model were met, it was concluded that the data were suitable for analysis.

In H01, the level of Marketing Performance, Management/Leadership, and Economic Factors were considered as predictors. The criterion variable or dependent variable was Supermarket Performance.

The linear regression results showed that the best predictive model includes Management/Leadership (ML) and Economic Factors (EF) (F (3,138) = 31.548, $p < .001$, R = .638, R^2 = .407, $R^2adj.$ = .394), which explain 39.4% of the variance of Supermarket Performance.

Significant standardized beta values (ß) show the effect of independent variables on the criterion variable. Thus, the Management/Leadership (ML) variable obtained a ßst value equal to .316 (p = .001), and the Economic Factors (EF) variable a ßst value equal to .276 ($p < .001$).

The prediction equation was constructed with the non-standardized beta values, which is as follows: Supermarket Performance = 1.249 + .316 (ML) + .276 (EF).
These results allow us to reject the null hypothesis and conclude that the level of Management/Leadership and the level of Economic Factors are significant predictors of the level of Supermarket Performance, according to the perception of supermarket managers in Trinidad in 2019.

Null Hypothesis Test 2

After checking the regression assumptions, we analyzed whether the dimensions of Marketing Performance, Management/Leadership, and Economic Factors are significant predictors of Supermarket Performance level.

Linear regression, using the enter method, showed that the model is significant (F (11,130) = 16.560, p < .001, R = .706, R^2 = .499, $R^2adj.$ = .469) and explains 46.9% of the variance of the Supermarket Performance level.

The results show that the predictive dimensions were Customer Behavior (ßst = 228, p = .001) and Retailer Adaptation (ßst = .295, p < .001) belonging to the Economic Factors variable; and the Human Resources dimension (ßst = .292, p < .001), belonging to the Management/Leadership variable. The prediction equation, constructed with non-standardized beta values, was as follows: Supermarket Performance = .408 + .168 (Ec_F1) + .197 (Ec_F2) + .229 (ML_F2).

These results allow us to reject the null hypothesis and conclude that two dimensions of the Economic Factors (Customer Behavior and Retailer Adaptation) variable and one dimension of the Management/Leadership (Human Resources) variable are significant predictors of the level of Supermarket Performance, according to the perception of supermarket managers in Trinidad in 2019.

Supplementary Analysis

In the competitive world of retail, supermarket performance can be affected by a variety of factors, not the least of which is the size of the store. To understand how performance varies by store size, a ONEWAY ANOVA analysis of variance has been performed, followed by multiple comparisons using Tukey's post hoc test with three size categories based on square footage (sq ft): less than 10,000 square feet, 10,000 to 20,000 square feet, and more than 20,000 square feet.

The ANOVA reveals that there are significant differences in supermarket performance between the groups (F (2, 139) = 7.725, p = .001). Larger stores (over 20,000 sq ft, M = 3.88) typically have better returns than smaller stores (less than 10,000 sq ft, M = 3.11; between 10,000 and 20,000 sq ft, M = 3.36).

Also, through the ONEWAY ANOVA analysis, it was found that another factor that significantly affects the performance of supermarkets is the number of cash registers (F (3, 138) = 10.304, p < .001). Tukey's post hoc comparisons indicate that supermarkets with the highest number of cash registers (more than 4 registers, M = 3.78) have higher yields than the other groups with fewer registers (one register, M = 3.04; and 2 registers, M = 3.12).

In addition, the ONEWAY ANOVA analysis provided information showing that the age of the supermarket produces statistically significant differences in its performance (F (3,138) = 3.234, p = .024). The age of the supermarket was categorized into quartiles: (1) from 1 to 5.75 years, (2) from 5.76 to 11 years, (3) from 11.01 to 24.25 years, and (4) more than 24.25 years. Tukey's post hoc comparisons indicate that the performance of older supermarkets (group 4, M = 3.57) is higher than newer ones (group 1, M = 3.10).

Finally, the last factor analyzed that affects the performance of the supermarket is the number of years that the manager has worked in the supermarket industry (F (3,138) = 7,756, p = .024). Seniority in the category was categorized by quartiles: (1) from 1 to 7 years, (2) more than 7 years to 15 years, (3) more than 15 years to 22 years, and (4) more than 22 years. Tukey's post hoc comparisons indicate that there are significant differences between groups 1 and 3 (and between groups 1 and 4), with the performance of supermarkets with managers who work longer in the supermarket sector (group 3, M = 3.71; group 4, M = 3.47) being higher than those with fewer years in it (group 1, M = 3.01). Significant differences were also observed between group 2 (M = 3.18) and group 3 (M = 3.71).

Discussion and Conclusion

This Study confirmed that Management/Leadership and Economic Factors are predictors of, and contributors to supermarket performance in Trinidad.

The results of this study are in line with those obtained by Castillo Díaz and Roman Huamani (2022), who found that the leader's behavior had a positive impact on the work performance of administrative employees in supermarkets in Lima, Peru. Research conducted in the Netherlands in 50 supermarkets highlighted the impact of leadership on financial performance and organizational climate (Koene et al., 2002). In addition, a study conducted in Indonesia found that leadership style significantly influences employee performance in a branch of a retail chain, emphasizing the importance of leadership over employee productivity (Fitrianti & Ubaidillah, 2023). These findings emphasize the importance of leadership in predicting supermarket performance.

In today's world, leaders with the ability to adapt to changing economic conditions and make informed strategic decisions play a critical role in improving the performance of their companies. Strategic leadership positively influences company performance by fostering adaptability to evolving markets, technological advancement, and consumer preferences (Chen et al., 2022; Meng, 2022).

Therefore, we can conclude that based on perceptions of supermarket management in Trinidad, management/leadership and economic factors are predictors of supermarket performance. Therefore, if supermarket management does not adapt to the prevailing economic conditions, the supermarket's performance will be negatively affected.

Application

This study places the responsibility on supermarket management to fully understand their target audience and therefore adapt their offers to the prevailing conditions. This can be in the form of value-added offers, discounts and new product offers.

When considering the individual constructs, specific implications emerge for the management of supermarkets in Trinidad. For example, supermarket management should pay attention to their supply

chain effort to improve supermarket performance. This includes effectively managing stock levels to ensure adequate and available supply for customers. Management must also involve and motivate its staff members, who in turn will seek the interest of the establishment, thus positively impacting performance and production.

Limitations and research directions

In fact, the supermarket industry has experienced many shocks during the Covid-19 pandemic, some of which resulted in panic buying. This study draws data from that period, in which unusual trends in supermarket stock movements and shopper behavior may have been observed (Treadgold & Reynolds, 2020). Since then, there could be new purchasing behaviors in households, for example with much more options to cook at home than before. This opens new areas of research on new consumer trends since COVID. In general, according to some researchers, such as Iton (2015), there is a shortage of research in the food industry in developing countries. This indicates the need to possibly replicate this study for other retail formats in different developing country jurisdictions. A key limitation is that the issuance of the instruments occurred at the beginning of the Covid-19 pandemic before supermarkets were disrupted in many ways. Without a doubt, the industry would have evolved a lot since COVID, thus offering an opportunity to replicate this Study in a post-pandemic context.

The findings can be considered limited as the feedback and conclusions that were formulated were based solely on management perceptions. Owners/managers may have a myopic view of their establishment, thus dramatically distorting results. There may be another limitation because most of the sample taken came from smaller supermarkets. Please note that the challenges experienced between smaller establishments compared to larger ones can vary dramatically. Therefore, the outcome of this research may have been biased to reflect the challenges experienced with smaller supermarkets only.

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