How to Cite:
Elhabib, M., Abderrahim, B., & Rayen, R. (2024). The impact of inventory management and supply chain on the performance of industrial enterprises: A case study of TAYAL SPA. *International Journal of Economic Perspectives*, *18*(12), 2831–2845. Retrieved from https://ijeponline.org/index.php/journal/article/view/816

The impact of inventory management and supply chain on the performance of industrial enterprises: A case study of TAYAL SPA

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***Abstract*---**In the current economic background, inventory and supply management is critical to maintain the competitiveness of industrial firms. Effective management makes it possible to respond quickly to customer needs while minimizing the costs linked with purchasing, storing and moving products. However, errors in these processes can lead to delays and additional costs. The study conducted on the company TAYAL SPA demonstrates that optimizing inventory and supply management promotes customer satisfaction, improves economic performance and increases profitability. The results highlight the importance of adopting effective logistics strategies to maintain a strong competitive position in the global market.

***Keywords*---**Inventory Management, Procurement, Inventory Optimization, Logistics Processes, TAYAL SPA.

1. Introduction:

In today's competitive world, industrial companies face increasing challenges in maintaining their competitiveness while remaining effective and efficient in keeping up with an economic ecosystem. Among the many aspects that impact its performance, inventory and procurement management plays a critical role. Indeed, good inventory and supply management improves the customer

Submitted: 09 October 2024, Revised: 18 November 2024, Accepted: 24 December 2024

experience while minimizing the various costs associated with the purchase, storage and transportation of raw materials and finished products to the last consumer with the right price, at the right time and in the right place. However, a malfunction in these activities can lead to production delays, additional logistical costs and affect the quality of service provided to customers.

Better inventory management at the level of a firm of an industrial nature offers an adequacy to the needs of the company by optimizing inventories and reducing costs (purchase, storage, transport ...), the optimization of the latter can lead to negative effects on productivity in evidence of errors. Inventory management is a configuration of techniques and tools for a firm's flow management service. The last is involved in the field of obtaining since it answers questions that obtaining managers ask themselves, to know when and how much to supply.

But we also discovery inventory management further downstream in the internal supply chain of an industrial company in manufacturing. Therefore, it is a major correction of logistics where she is interested in the value chain of an organization from raw material inventory management to the distribution stage through the production, quality and packaging processes.

Inventory and supply management plays an essential role in the overall act of industrial companies, directly influencing their competitiveness, effectiveness and ability to meet market demands. A strategic and joined approach to these activities is therefore essential to ensure their success in an increasingly competitive and demanding economic environment. Our research is used to analyze the inventory management and procurement function by analyzing its strategy and its impact on the performance of industries.

The problem we want to solve is the following:
How do operational choices related to stock management and supply affect the competitiveness and adaptability of industrial companies in an ever-changing economic environment?
Through this central question, we seek to understand how good inventory management and procurement has an impact on the performance of an industrial business

To address this issue in depth, we formulate the following secondary questions:

- **Q1:** What are the essential theoretical foundations of inventory management?
- **Q2:** How do industrial companies measure their performance and what are the different types of performance that an industrial company can measure?
- **Q3:** How does inventory management and procurement influence the operational performance of the business?

To conduct our research, we formulated three hypotheses:

- **H1:** Strategic inventory and purchasing management promotes customer satisfaction, which in turn improves the economic performance of industrial companies.

- **H2:** Optimizing inventory management can help industrial companies improve their operational performance.
- **H3:** Efficient procurement reduces production costs and therefore increases the profitability of industrial companies.

Work purpose

This thesis aims to explain the fundamental concepts of stock and supply management and to describe its importance in the performance of industrial companies, while our empirical study aims at the impact of the latter by the company TAYAL SPA. This quantitative study is conducted using a questionnaire, providing the company with valuable information and strategic recommendations to optimize its performance.

Division of Labor

This dissertation is composed of three separate chapters: The first chapter entitled "Generality on Inventory and Procurement Management" aims to present the fundamentals of inventory and procurement management., through the exploration of the different sections, we aim to establish a solid theoretical basis by defining key concepts such as inventory, inventory management and procurement in companies.

The second chapter entitled "The Performance of Industrial Enterprises" will have as its main objective to present industrialization and industrial enterprises, as well as the fundamental notions of performance. In addition, we explore the indicators and tools used to measure the performance of industrial companies, providing a comprehensive view of this crucial concept in the industrial world. We will extant the company TAYAL, as well as its organization, procurement process and stock management. We will also assess the impact of stock management and procurement on the performance of the company itself through a quantitative survey, showed using a survey.

By combination these elements, we hope that this study would provide a better understanding of the impact of inventory management and procurement on the act of industrial companies and provide valuable insights for decision-makers and practitioners in the arena of industrial management.

Difficulties with finding jobs...
- With data collection
- Emotional obstacles: stress, anxiety…

2. Literature review

As part of the study on inventory and supply management, several academic and professional works contributed to deepen our understanding of these crucial areas. This research offers diverse and enriching perspectives on the impact of supply chain management on business performance, particularly with regard to the adoption of innovative practices and the formalization of processes within SMEs.

The selected works and articles make it possible to identify fundamental elements relating to inventory and supply management, each providing a different but complementary analysis. In particular, Imchi-Levi et al. provide a detailed view of supply chain management strategies, while Ketokivi and Schroeder's paper focuses on the factors influencing the adoption of innovative manufacturing practices. Luc Pellerin's thesis, meanwhile, explores how Quebec SMEs formalize their inventory management practices, an often overlooked but essential aspect in the context of the local economy. These studies, through their methodological and theoretical diversity, form a coherent whole that enriches reflection on inventory and supply management, while offering concrete avenues for improving practices in companies of different sizes and sectors.

Book by: Imchi-Levi, D., Kaminsky, P., and Simchi-Levi, E.: Title: "Designing and Managing the Supply Chain: Concepts, Strategies, and Case Studies" (2008) This book, available by McGraw-Hill, presents an in-depth analysis of supply chain management, drawing on many case studies and experiential analyses. The authors discuss essential concepts such as inventory management, procurement and their direct influence on business performance. The book is particularly useful for understanding the strategies and concepts that underpin effective supply chain management in a variety of industrial contexts.

Article by: Mikko A. Ketokivi and Roger G. Schroeder, entitled "Strategic, Structural Contingency and Institutional Explanations in the Adoption of Innovative Manufacturing Practices" Published in the Journal of Operations Management, Volume 22, Number 1, Pages 63-89, in January 2004
This article highlights the importance of inventory and supply management in the adoption of innovative manufacturing practices. The authors analyze how these practices influence business performance and highlight the strategic role of supply management in improving organizational effectiveness. Their study integrates contextual and institutional factors that affect the adoption of these innovative practices, thus providing a rich theoretical framework for researchers and practitioners in the field.

Thesis by: Luc Pellerin, entitled "The formalization of inventory management activities in Quebec manufacturing SMEs" Thesis defended publicly in January 1997, with a view to obtaining the Doctorate in Management Sciences
Luc Pellerin's thesis focuses on the analysis of the formalization of inventory management activities within a sample of Quebec manufacturing SMEs. The author discovers the impact of this validation on the act of companies and highlights the position of SMEs, especially in the manufacturing area, for the economy of Quebec. The education highlights the specific challenges faced by these firms in terms of inventory management and submits ways to improve the efficiency of these progressions within SMEs.

Stock
"Stock is all the goods or articles accumulated while waiting for a later use closer and which makes it possible to supply the users as and when they need them

without imposing the deadlines and the consequences of a manufacture or a delivery by suppliers. »[1]
"Stock is a quantity of goods accumulated while waiting for use, in order to harmonize an input flow and an output flow whose rhythms are different"[2]
"Inventories are assets made up of merchandise belonging to the company and intended either for future sale or for use in the production of goods intended for sale"[3]
“Inventories are a necessity to counter the random nature of inbound and outbound flows of goods and to obtain better supply conditions. Inventories are dormant assets with economic value, in danger of depreciation. Inventories are a source of expenses that affect production costs. The expenses resulting from the use of resources necessary to obtain and maintain in the company quantities of raw materials, semi-finished products and finished products. »[4]

Stock Management

"Inventory management and a pivotal function in the company, its role is to research the optimum volumes of inventory to ensure optimal supply and meet the needs of timely use. »[5]
"Inventory management is the set of tasks from the simplest to the most complex, necessary for the establishment and implementation of the company's procurement program, the storage of goods, the orientation of sales, in the best economic conditions while avoiding stock-outs and over-stocking"[6]
"Managing stocks means keeping them at an acceptable level that is neither too high nor too low; there is therefore a balance to be observed between general policy and the needs of management. The purpose of this will never be to minimize stocks but to optimize their levels. »[7]

The supply functions
"Supply management is the set of operations that make it possible to make available to a user a good or service not available in the company corresponding to a defined need in terms of quantity and quality in a determined time at a minimum cost"[8]
The "supply" function is located upstream of production in the company's operating cycle. It manages the flow of goods and services in the company. It also provides companies with the raw materials, parts, supplies, tools, equipment and services necessary for their activities under optimal conditions of quality, cost, time and safety.
It works on three types of flows:
- Physical: the product or service provided
- Information: Send and receive physical flow tracking data
- Administration: orders, invoices, delivery notes, receipts, disputes

[1]Marchal ANDRE, Global Logistics, Ellipses edition marketing SA, Paris, 2006, page 169
[2]nightingale A, Gestion économique 2, pilotage: économie d 'entreprise, ed. Foucher 1997, p. 100.
[3]ZERMATI PIERRE.: "Pratique de la gestion de stocks", ed. Dunod (7ème édition), Paris, 2005, Page 56
[4]Briffaut Jean-Pierre, Système d 'information en gestion industrielle, Edition Hermes science publication, Paris, 2000, page 55.
[5]RAMBAUX A-, "Gestion économique des stocks", Edition, DUNOD, 2 nd edition, Paris 1963, P25
[6]BELACEL M. "La Gestion des stocks", Management Edition, Tizi-Ouzou, 1994, Page 5.
[7]ZERMATI P.: "pratique de la gestion des stocks", Edition DUNOD, Paris, 2005, page 63.
[8]Bruel Olivier, "politiques et gestion des procurements", édition, Dunod, Paris, 2014, Page 298.

This supply chain activity maximizes their contribution to business objectives.

3. Methodology

Presentation of the company SPA TAYAL

L'Algerienne des Industries Textiles (TAYAL SPA) is a joint venture established in Algeria in November 2013, created by the C&H Group, E.P.E TEXALG, MADAR Holding, and INTERTAY, a company of the Turkish TAY GROUP. Located in the industrial zone of Sidi Khettab, in Relizane, TAYAL benefits from a strategic location, close to the east-west motorway and major Algerian ports, facilitating supply and export. The multifaceted covers an area of 2.5 million m², of which 1 million m² is previously functional. TAYAL is one of the insufficient integrated complexes in the world, ranging from yarn manufacture to ready-to-wear, with an annual ingesting capacity of 40,000 tons of fibers, and a construction of 30 million ready-to-wear pieces per year. The company goals to position Algeria as a major player in high-quality textiles, with a vision focused on the transfer and development of "Made in Algeria". TAYAL's tasks focus on satisfying the market with excellence textile products, transforming raw materials into yarns, cloths and ready-to-wear garments, while ensuring difficult quality management to chance consumer expectations. As an industry leader, the company goals to increase its market share, content and retain customers, launch novel products and develop exclusivity contracts with novel business associates.

Organisation and procurement process at TAYAL

Through our internship at TAYAL, a varied textile firm, we had the chance to learn in depth about supply and inventory management. TAYAL covers a varied range of doings, from yarn production to cloth and apparel manufacturing, allowing us to discover the complexity of the supply chain. The development starts with the supply of raw materials, such as ordinary fibers (such as cotton) and synthetic fibers (polyester, viscose), then continues with the manufacture of yarns, their texturing, coloring and quality control. Next, the yarns are transformed into fabrics by intertwining or knitting, and treatments such as final are applied to improve their characteristics. Garment manufacturing is done in numerous stages, including cutting, assembly and demanding quality control. Inventory management is important to ensure smooth production and optimal customer satisfaction. TAYAL efficiently manages its stocks of rare materials by monitoring their level, ensuring their quality at each reaction, and storing them in appropriate conditions. For semi-finished and finished goods, a real-time tracking system optimizes stocks and ensures a fast response to market demands. The company customs advanced technologies, such as ERP software and RFID, to track products at every phase of their lifecycle. In addition, TAYAL places specific emphasis on sustainability, by means of environmentally friendly materials and diminishing its environmental effect. Finally, the company takings a responsible inventory management method, with strategies to manage unsold objects and enhance resources, thus ensuring effective and environmentally friendly production.

Analysis of Survey Result

a. The survey and the prospective study:

A survey is a methodical approach to collect information, data or evidences on a specific topic in instruction to analyze them and draw conclusions. It can be conducted in various fields such as social sciences, scientific research, marketing or public health. Surveys take different forms, such as questionnaires, interviews, direct observations or analyses of existing data. The main objective is to better understand a phenomenon, identify trends or evaluate opinions and behaviours. As part of this, we conducted a study within the TAYAL company over 28 days, after obtaining management approval for the use of an employee questionnaire, which demonstrates the company's commitment to improving its work environment.

b. Study approach

The prospective study approach conducted within the TAYAL company was based on a rigorous and methodical methodology. We have taken a systematic approach to collecting relevant and reliable data. This approach involved the use of a questionnaire. The main objective was to provide the company with valuable information and strategic recommendations to optimize its performance.

c. Scope of application

Since our questionnaire focuses specifically on the aspects of inventory and procurement management, we deliberately chose to interview several key departments within the company. These include:

- **Stock Department:** Responsible for the day-to-day management of stock levels, product currents and storeroom organization.
- **Purchasing department:** responsible for choosing suppliers, negotiating supply contracts and ensuring the quality of products established.
- **Planning Service:** the development of active strategies and in the coordination of activities associated to inventory and procurement management.
- **Sales Department:** Responsible for Customer Relationship Management, Customer Satisfaction and Demand Management.

By surveying these different departments, our goal is to gather detailed and comprehensive information on practices, challenges and performance in these key areas, in order to gain a comprehensive view of the impact of inventory and procurement management across the business.

d. The survey population:

The parent population can be described as the grouping of all the elements holding the relevant information to achieve the objectives of a specific study. Our survey, meanwhile, focused on a specific section of this population, called the sample, in order to obtain representative data to draw generalizable conclusions about the entire population.

Determining the size of a sample is like deciding how many people to interview to get representative results. Three main criteria influence this choice:

- The cost of the survey.
- How accurate is accurate?
- Confidence in the results:

As part of our survey, the sample size was 34 people, representing 88% of the total.

For the administration of our questionnaire, we have chosen the "face to face" mode. This decision was taken because of the many advantages it offers, especially in terms of credibility, reliability and speed in obtaining answers.

Practical study result

a. The validity of the questionnaire:

The validity of the measurement tool and the study variables is tested through a set of coefficients, tests and indicators, the most important of which are the following:

Normality test

In order to know the appropriate test method for the study and the appropriate program, we need to pass a Natural Distribution test as a sample And this Defect asymmetry and platitude (Hair et al., 2010) for follow-up Data Distribution naturally asymmetry Whether confined between -2 and +2 and coefficient platitude between -7 and +7.

Table 1: Normality Test

Variable	Asymmetry	Flatness problem
for the right price;	864	1,024
quantity	666	-430
Of appropriate quality	789	0.576
From the appropriate source	1 210	2,061
appropriate point.	1,127	1,614
The Management of Stock	1,451	2,645

Source: Output of SPSS V 28

According to the table, the data monitored Natural Distribution because asymmetry of the variables under study varies between -1.451 and -0.666 and the flatness coefficient varies between -0.430 and 2.645.

Quality test of variables and data:

Table 2: Variable quality

Variable	**Cronbach's alpha**	**Omega Test**	**KMO**	**Sig**	**Decision**
for the right price;	817	0.909	0.825	0.000	High
quantity	784	0.860	685	0.000	High
Of appropriate quality	0.765	0.782	0.700	0.000	High
From the appropriate source	0,880	0.884	0.854	0.000	High
appropriate point.	0.814	0.908	0,820	0.000	High
The Management of Stock	0,871	0,934	0.756	0.000	High

Source: Output of SPSS V 28

The values of the Cronbach alpha coefficient are all high, indicating a strong internal consistency between the measured variables, which reinforces the reliability of the measurements. The decisions associated with each variable are

mainly "High", suggesting that the measures (price, quantity, quality, etc.) meet established criteria. However, Omega's test reveals that while reliability is high for most variables, “appropriate quality” is rated as “Medium”, potentially requiring improvements. In terms of overall reliability, the results are positive, except for the appropriate quality. The Cronbach Alpha and composite reliability tests confirm the stability and internal consistency of the questionnaire axes. The KMO test also shows satisfactory sample adequacy, with a value greater than 0.5 and close to 1, indicating that the sample size is appropriate for analysis.

a. Descriptive analysis
Analyze the personal data of the sample

Table 3: Analyze the personal data of the sample

Variables		**Frequency**	**Percentage**
Gender	Man	26	76.47
	Woman	8	23:53
Age	Less than 25 years	1	2.94
	26 to 35 years	22	64/71
	55 years	11	32-35
Level of education	Patent or less	4	11.76
	Further Education leaving certificate	3	8.82
	Higher technician	1	2.94
	License	11	32-35
	Master	15	44.12
Years of Experience	Less than a year	4	11.76
	1-3 years	5	14.71
	3 -5 years	11	32-35
	Later than 5 years	14	13:41
Position held	Stock manager	12	35.29
	Manager	5	14.71
	Logistics supervisor	12	35.29

Source: Output of SPSS V 28

Analysis of the statistical data shows that the sample is mainly composed of men (76.47%), surpassing the number of women (23.53%). In terms of age groups, the majority of individuals (64.71%) are between 26 and 35 years old. In terms of level of education, most individuals hold a master's degree (44.12%), followed by those with a bachelor's degree (32.35%). Regarding the number of years of experience at TAYAL, the largest proportion (41.18%) of individuals have more than 5 years of experience, while the other categories are equally distributed. In terms of occupied positions, most individuals occupy the positions of "Stock Manager" and "Logistics Supervisor", each representing 35.29% of the sample, while 14.71% occupy an unspecified position.

b. Hypothesis testing

Finally, the structural model makes it possible to verify the research hypotheses. The following tables present the causal model as well as the values relating to the standardized coefficients estimated by single and multiple regression.
In addition, the results of these tables make it possible to verify the significance and importance of the causal links between internal communication and employee motivation through its practices. In order to validate the research hypotheses.

H1) Strategic inventory and purchasing management promotes customer satisfaction, which in turn improves the economic performance of industrial companies.

Hypothesis H1 states that "Strategic inventory and purchasing management promotes customer satisfaction, which in turn improves the economic performance of industrial companies".
1. Summary of models:

Table 4: Summary of models

Model	R	R: Both.	Adjusted R-two	Estimate Standard Error
1	TO	537	507	40215

a. Predictors: (Constant), Customer Satisfaction, Strategic Inventory Management
Source: Output of SPSS V 28

Correlation coefficient (r)
The correlation coefficient (R) has a value of 0.732, indicating a medium to strong positive relationship between the independent variables and the dependent variable.
Coefficient of determination R^2
The coefficient of determination (R^2) is 0.537, meaning that 53.7% of the variation in economic performance can be explained by the model-independent variables.
Standardized Coefficients
- Standardized coefficients indicate the relative strength of each variable in the model.
- Strategic inventory and purchasing management (0.447) as well as customer satisfaction (0.370) have moderate to strong positive effects on economic performance.

2. Analysis of Variance (ANOVA):

Table 5: Analysis of variance

Model		Sum Squares	of ddl	Mean Square	F	Sig.
1	Regression	5,804,740	2	2,902	17 945	B
	of Student	5,014	31	0.162		
	Total	€10,818	33			

a. Dependent variable: economic performance

b. Predictors: (Constant), Customer Satisfaction, Strategic Inventory Management
Source: Output of SPSS V 28

- The F-value is 17.945 with a p-value close to zero, indicating that the constructed model is statistically significant in explaining the relationship between the independent variables and the dependent variable.

3. Regression Coefficients Including:

Table 6: Regression coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Standard Error	Beta		
1	Constantly	548	591		927	361
	stock management	494	170	0.447	2.900	007
	Customer satisfaction	335	139	370	2,400	023

a. Dependent variable: economic performance
Source: Output of SPSS V 28

- The non-standardized regression coefficients indicate the expected increase of the dependent variable (economic performance) with an increase of one unit of the independent variable, keeping all other variables in the model constant.
- It is clear that there is a significant increase in economic performance with the increase in strategic inventory and purchasing management and customer satisfaction.

In conclusion, this analysis confirms the validity of the H1 hypothesis, showing that strategic inventory and purchasing management, as well as customer satisfaction, have a positive impact on the economic performance of industrial companies.

H2) Optimizing inventory management can help industrial companies improve their operational performance.

To analyze the results of the H2 hypothesis "Inventory management optimization can help industrial companies improve their operational performance", we will look at the results of the statistical model that includes measures of R, R-square, adjusted R-square, estimation standard error, ANOVA and coefficients.

1. Summary of

Table 7: Summary of models

Model	R	R: Both.	Adjusted R-two	Estimate Standard Error
1	TO	465	449	,46996

a. Predictors: (Constant), inventory management
Source: Output of SPSS V 28

R (correlation coefficient) : 0,682. This value indicates a moderate to strong positive correlation between inventory management optimization and improved operational performance. The closer this value is to 1, the stronger the correlation.

R-Squared: This means that 46.5% of the variance in operational performance can be explained by inventory management. This is a fairly significant indicator, but it also shows that other factors not included in the model could influence operational performance.
Adjusted R-Squared: This value adjusts the R-square taking into account the number of predictors in the model. The fact that it is close to the R-square indicates that the addition of variables does not unduly influence the model's explanation of the variance in operational performance.
- Standard error of estimate: 0.46996. This measure shows the average dispersion of observations relative to the regression line. The lower this value, the more accurate the prediction.

2. Analysis of Variance (ANOVA)

Table 8: Analysis of variance

Model		Sum of Squares	ddl	Mean Square	F	Sig.
1	Regression	6,151	1	6,151	-$27,850	B
	of Student	7 068	32	221		
	Total	13.219	33			

a. Dependent variable: operational performance
b. Predictors: (Constant), inventory management

Source: Output of SPSS V 28

- Sum of squares (Regression): 6.151. This reflects the variation explained by the regression.
- F: 27,850. The value of F indicates whether the model is statistically significant. Here, with an F-value of 27.850 and a significance (Sig.) of 0.000, the model is very significant, meaning that inventory management has a significant effect on operational performance.
- Sig.: 0.000. This p-value of less than 0.05 indicates that the results are statistically significant, thus validating the assumption that inventory management has an impact on operational performance.

Coefficients of regression.

Table 9: Coefficients

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Standard Error	Beta		
1	Constantly	174	682		255	800
	stock management	8.34	158	682	-5,277	0.000

a. Dependent variable: operational performance

Source: Output of SPSS V 28

- Constant: The constant (0.174) with a meaning (Sig.) of 0.800 suggests that when inventory management is at 0, operational performance will be at the constant level, but this relationship is not statistically significant.

- Inventory management: The coefficient for inventory management is 0.834 with a significance of 0.000, indicating a strong and significant relationship. This means that for each unit of improvement in inventory management, operational performance increases by 0.834 units, while accounting for the other variables in the model

The results support the H2 hypothesis, showing that better inventory management is significantly associated with improved operational performance of industrial companies. However, it is important to note that other factors not included in this model could also influence operational performance. It would therefore be beneficial for companies to not only focus on inventory management but also look at other aspects of their operations for overall improvement.

H3) Efficient procurement reduces production costs and therefore increases the profitability of industrial companies

1. Template Summary

Table 10: Summary of models

Model	R	R: Both.	Adjusted R-two	Estimate Standard Error
1	TO	584	0.571	.33910

a. Predictors: (Constant), Procurement

Source: Output of SPSS V 28

Correlation coefficient (r)

The correlation coefficient (R) has a value of 0.764, indicating a positive relationship between procurement efficiency and the dependent variable (profitability of industrial enterprises).

. Coefficient of determination R^2

The coefficient of determination (R^2) is 0.584, which means that 58.4% of the variation in profitability of industrial enterprises can be explained by the efficiency of the supply.

. Standardized Coefficients

- The standardized coefficient for procurement efficiency (0.764) indicates a significant positive effect on the profitability of industrial enterprises.

2. Analysis of Variance (ANOVA):

Table 11: Sample size

Model		Sum Squares	of ddl	Mean Square	F	Sig.
1	Regression	5 163	1	5 163	44,897 USD	B
	of Student	3 680	32	0.115		
	Total	8 842	33			

a. Dependent variable: business profitability

b. Predictors: (Constant), procurement

Source: Output of SPSS V 28

- The F-value is 44.897 with a p-value close to zero, indicating that the model is statistically significant in explaining the relationship between procurement efficiency and business profitability.

3. Regression Coefficients Including:

Table 12: Regression coefficients

	Unstandardized Coefficients		Standardized Coefficients		
Model	B	Standard Error	Beta	t	Sig.
1Constantly	1,338	444		3,012	0.005
Procurement	760	113	-764	6,701	0.000
a. Dependent variable: business profitability					

Source: Output of SPSS V 28

- The non-standardized regression coefficient for procurement efficiency (0.760) indicates the expected increase in business profitability with the improvement of one unit of procurement efficiency.
In conclusion, these results confirm the H3 hypothesis, demonstrating that supply efficiency has a significant impact on the profitability of industrial companies, by reducing production costs.

Conclusion:

This study allowed an in-depth examination of the multinational company TAYAL, focusing specifically on its procurement process and inventory management of its products. We also developed a practical case as part of our research work, where we used the SPSS statistical tool to analyze the results of a questionnaire survey, distributed to company staff. This methodology was essential to obtain reliable and in-depth data, thus making it possible to validate the hypotheses proposed in our study.

The results obtained from the analyses clearly confirmed that strategic inventory and purchasing management is a crucial lever to improve customer satisfaction, which translates into enhanced economic performance. Indeed, optimized inventory management not only makes it possible to respond more effectively to customer needs, but also to improve operational performance by reducing stock-outs and improving the fluidity of internal processes. A well-orchestrated supply, on the other hand, plays a key role in reducing production costs, ensuring better synchronization between raw material supply and production, and avoiding surpluses or shortages.

In addition, efficient procurement contributes to increasing the profitability of industrial enterprises. By improving inventory and finding management processes, TAYAL can not only reduce direct costs associated to excess inventory, but also minimize hidden costs related to production delays or inventory management mistakes. The profitability of the company is thus increased, allowing the company to better place itself in a competitive market.

In conclusion, this study highlights the crucial position of strategic inventory and procurement management to confirm the competitiveness and sustainability of companies, particularly in the industrial area. The results obtained confirm that rigorous and well-structured inventory and supply management practices are key factors in improving the economic, operational and profitability performance of companies like TAYAL. These results also highlight the need for industrial companies to continue to invest in logistics process optimization strategies to remain globally competitive.

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