

Implementation of Porter Strategy for Paper Company's Business Sustainability during the Covid-19 Pandemic

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Abstract

In the context of the outbreak of Covid-19, production and sales have been influenced greatly. This paper take Paper Company's as the case study of relationship between business sustainability and competitive advantage in a price sensitive market. Through a cost leadership strategy we can analyze the waste paper A5 requirement for brown paper products amid the increasing in raw material. The result of this analysis will prove whether during the pandemic Covid-19 there has been a change in demand for brown paper and will affect the need for raw material. Therefore, this paper helps clarify the concept that a reasonable competitive strategy has a positive effect on the business sustainability.

Keywords

Business Sustainability, Cost Leadership, Paper Company, Covid-19

1. Introduction

In December 2019, a local outbreak of pneumonia of initially unknown cause was detected in Wuhan (Hubei, China), and was quickly determined to be caused by a novel coronavirus (WHO, 2020), namely Severe Acute Respiratory Syndrome- Coronavirus-2 (SARS-CoV-2). The Covid-19 pandemic has spread across the world rapidly which has increased the number of positive case of Covid-19. Indonesia was first detected of Covid-19 on March 2, 2020, when two people were confirmed to be infected by a Japanese national.

The COVID-19 transmission is reported to be directly and indirectly, directly through droplets when coughing, indirectly when someone touches the surface of an object that has a virus and then touching the mouth, nose, eyes before washing a hand. WHO recommends doing physical distancing by keeping a distance and avoiding crowds and using masks (WHO, Covid-19, Geneva; 2020) to prevent and control the pandemic. As a result the governments of the world's largest countries have enforced border shutdown, travel restriction, and quarantine, thus sparking fear of an impending financial recession and economic crises (Yousfi et al 2021).

Many Industries are aware of dramatic impact of Covid-19 on their production and sales are declining. Since the onset of the Covid-19 outbreak, Industries in Indonesia have faced sales challenges including logistical disruptions caused by movement restrictions implemented to slow Covid-19. Further, on paper companies in Indonesia.

The paper company is a trade name of pulp and paper manufacturing company which delivers quality products to meet the growing global demand such as brown paper or kraft paper. Brown paper are biodegradable, recyclable, and environmentally friendly products that are used for packaging in many countries, however during the pandemic the need for brown paper with raw materials was inversely related. In this case, to keep sustainable business, the company are needed to have a business strategy to keep competitive with competitors which is called a competitive advantage. Porter (1980) distinguished three categories of competitive strategies, which are called Generic Competitive Strategies. The purpose of these strategies is to create a long-term competitive advantage and a possibility to outperform competitors in a given industry. Cost leadership helps a company to gain a competitive advantage over competitors in price sensitive markets. Businesses that use a cost leadership strategy will be more profitable than competitors at the same price point.

Based on the above background, this paper will focus on discussing the effect of competitive advantages to business sustainability.

1.1 Objectives

The current situation of the Covid-19 pandemic has a huge impact on business in the industry. In this paper, we want to maintain business sustainability by making arrangements for the procurement of raw materials, namely A5 waste in paper companies. By implementing a cost leadership strategy, the authors hope to maintain the price of brown paper products amid market price sensitivity.

2. Literature Review

2.1 Business Sustainability

Sustainability interpreted intergenerational chain. Expressed in this way, the principles of sustainability are indisputable. Most people want to live as well as their parents and they want their children to enjoy similar opportunities. The same logic applies in business most managers want their business to be at least as profitable as in the past and, ideally, for profits to grow. Based on this logic, business sustainability can be defined as the ability of firms to respond to their short-term financial needs without compromising their (or others') ability to meet their future needs. Thus, time is central to the notion of sustainability (Bansal and DesJardine 2021).

Business sustainability requires organizations to integrate all dimensions of its economic, social and environmental operations. Consistent with this requirement, this integrative logic demonstrates systematic coverage of relevant issues, by embedding society issues proactively into the core business fabric. For example, some organizations adopt practices such as multifunction teams or stakeholder engagement to explicitly incorporate underlying connections across different issues or stakeholder groups. Further, simultaneous decision making ensures the interconnections are well managed. All decisions are multi-directional, involving input across disparate stakeholders, including those that are more financially oriented and those that are more community oriented, as well as stakeholders that are physically or temporally proximate to the organizations (Gao and Bansal 2012)

2.2 Supply Chain Management

Supply chain management (SCM) intended separate materials functions to report to an executive responsible for coordinating the entire materials process, and also supply chain management requires have relationships with suppliers. Supply chain management is a concept to "whose primary objective is to integrate and manage the sourcing, flow, and control of materials using a total systems perspective across multiple functions and multiple tiers of suppliers, Supply chain strategy includes: "... two or more firms in a supply chain entering into a long-term agreement; ... the development of trust and commitment to the relationship...the integration of logistics activities involving the sharing of demand and sales data; ... and also Supply chain management potential for a shift in the locus of control of the logistics process (Mentzer et al 2001)

The coronavirus disease of 2019 crisis more than less impact of supply chain management proses: Although the COVID-19 pandemic for example In the USA, the food supply system has evolved over decades from being locally and regionally based, to becoming a global network of relatively few large multinational companies (Roth et al 2008). Although research has addressed environmental and social sustainability within the food supply chain, the underlying focus of cost performance has predominated (Pullman et al 2009) with emphasis on efficiency, predictability and tight control of inventories (Charles 2020). The magnitude of the COVID-19 crisis exposes the fragility of the entire food supply system, providing a rare opportunity for researchers to explore this system and its underlying dynamics in real time. COVID-19 has brought the food supply chain into the public arena as consumers and supply chain organisations react to the crisis. Consumers have reacted by hoarding products in the face of real and anticipated food shortages (Hall et al., 2020; Venuto, 2020). They have dramatically shifted their shopping behaviour to online purchase/delivery options, far outstripping the supply chain's immediate ability to cope (Dunkley, 2020; Smith, 2020). Many consumers are struggling to afford food, given the sudden loss of employment and shifting demand to food pantries (Charles, 2020). Within the supply chain, the sudden shifts in demand and health-related regulations have caused profound disruptions such as farmworkers not being available to harvest crops, the collapse of the food service/restaurant sector and changing working conditions in food processing plants inhibiting productivity (Cagle, 2020; Corkery and Yaffe-Bellany, 2020a; Hall et al., 2020; Yaffe-Bellany and Corkery, 2020). (Mollenkopf and Ozanne 2020).

2.3 Cost Leadership Strategy

Strategy is an important factor for the success of every organization. It is defined as the connection between goals and objectives and specific actions and ways to achieve those planned goals (Nickols 2012). Designing a strategy map is

needed to illustrate the cause and effect relationship company strategy that needs to be analyzed (Nurcahyo et al 2018). Every business has its own business strategy which leads the company towards success and accomplishment. Significant business strategy and organizational performance become a clear strategic vision and serve as the main foundation for subsequent performance (Kurniati and Nurcahyo 2018).

According to Porter (Porter,1980), the competitive position of an industry or sector, depends on three categories: the first strategy is cost leadership strategy, the second strategy is differentiation strategy, and the last is focus strategy. Cost leadership focuses mainly on the production of low-cost products to satisfy price-sensitive customers (Soltanizadeh et al., 2016), specialization in certain products and services, investment in reducing costs with technology and equipment and use of distribution channels to reduce their costs (Brenes et al 2014). Cost leadership strategy allows the company to earn higher profits than average, as the products can be sold at average prices, but the profit margin with lower costs is bigger (Erika Stankevičiūtė et al 2012).

Following a cost leadership strategy allows the organization to offer products and services at lower prices compared to its peers. Such organization is able to sell large quantities at the most competitive prices to its target market (Li & Li, 2008). Through following a cost leadership strategy, an organization should produce products that are standardized with minimal customized modifications. Internationally, many firms were able to benefit from applying low cost leadership strategy that enabled them to gain a competitive advantage such as: Walmart, Carrefour, K-mart in the retail industry and also regionally such Lulu hypermarket.

3. Methods

In order to analyze the effects of the pandemic on business sustainability ,we have made arrangement for the procurement of A5 waste paper goods in paper company's. We break down the company data that consist of the number of monthly goods orders and changes in the market price that occur.

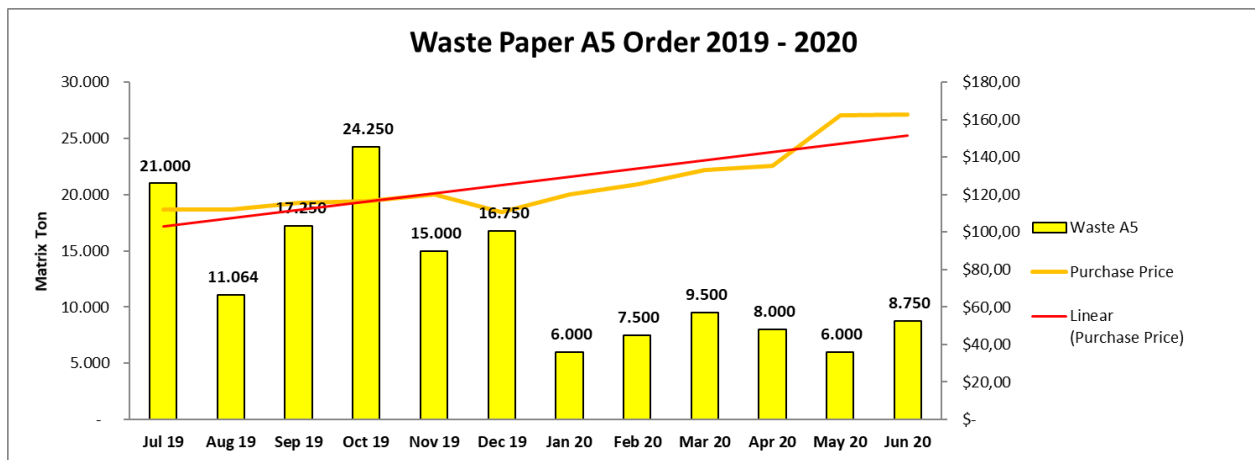


Figure 1 Waste Paper A5 Order

As shown in figures 1 above, it can be seen that changes in the market price fluctuate with a tendency to increase up to 200% after 6 months of the Covid-19 pandemic. Regarding the 5 basic principles of Porter's strategy, paper companies have a strong relationship between procurement activities in terms of the power of suppliers. The fundamental goal of the power of suppliers is how the company is not too influenced by the main supplier, by having many alternative sources that can still meet needs. Scarcity to limit regulation during the pandemic is the main challenge for paper companies in meeting these goals.

Based on the data above, apart from price changes, the percentage of orders also shows a significant difference in the timeframes before and after the pandemic. We compared the 6 months before the pandemic and the 6 months during the initial period of the pandemic, which could then be analyzed by making a model formula with Excel in defining the effect, to the result of the strategy carried out by paper companies which refers to the profitability and succession rate of procurement. We extract related data for the analysis and discussion.

4. Data Collection

To get the purpose of the research, document reviews and case studies from companies that produce brown paper are used. Document review is used to support relevant information from data that will be processed to fit the operations that occur in the industry without changing existing facts and recorded as a track record of the research object. This will also make it easier for researchers to be able to use existing data without the need to conduct additional surveys to obtain them. Furthermore, a case study is carried out to fully understand what things are interconnected in the production process in the company. It is useful not to rule out some strategic factors and also to get appropriate results from the companies that are the research area.

Table 1 and Table 2 below are the data obtained for the need for brown paper raw material orders from paper companies from imported and local sources within 6 months before the pandemic and 6 months during the pandemic.

Table 1 The Source of Needs for Ordering Waste A5 Local & Import 2019

Month	Lokal Qty	Impor Qty	Lokal (%)	Impor (%)
Jul 19	3.159	4.636	41%	59%
Aug 19	2.790	4.730	37%	63%
Sep 19	3.122	5.233	37%	63%
Oct 19	2.856	5.603	34%	66%
Nov 19	3.966	5.316	43%	57%
Dec 19	3.254	4.931	40%	60%

Table 2 The Source of Needs for Ordering Waste A5 Local & Import 2020

Month	Lokal Qty	Impor Qty	Lokal (%)	Impor (%)
Jan 20	11264	6918	62%	38%
Feb 20	10768	6214	63%	37%
Mar 20	12051	6662	64%	36%
Apr 20	10240	7206	59%	41%
May 20	12292	6838	64%	36%
Jun 20	14864	6586	69%	31%

5. Results and Discussion

Brown paper is a product produced by a paper company with one of the raw materials used is A5 waste which comes from local and imported sources. This brown paper product is usually used as packaging for food or other goods by buyers. During the pandemic Covid-19, the level of demand for brown paper increase. This increasing is due to regulations in many countries to lock down in controlling the transmission of Covid-19, so that many people took advantage of online purchases.

From several strategic options of porters, the paper companies in this paper have a interest to maintaining their their product price by using a cost leadership strategy. This is because the brown paper business is a large market share, but also has a fairly high price sensitivity. The continuity of the paper company business continues to look for ways to survive during a pandemic without increasing prices but still meeting demand. By implementing this strategy, paper companies make arrangements for the main raw material procurement activities consisting of imported raw materials and local raw materials.

This procurement activity arrangement is carried out to maintain the availability of the main raw material, namely A5 waste during the pandemic. A factor of concern in this procurement activity is the significant difference in import prices before and during a pandemic. Based on figure 1, the procurement of imported raw materials before the pandemic reached an average of 15,700 tons per month, while during the pandemic it tends to decrease more with an

average order of 7,400 tons per month, this is due to reduced material availability due to restrictions on activities in various countries during the pandemic. It is inversely proportional to the demand for brown paper, as the data available in figure 2 shows that there is an increase in demand during the pandemic. With regard to that matter, the company makes arrangements for procurement or import orders before the pandemic to be used as safety stock in the current situation table 3.

With the demand for A5 waste before the pandemic, the price in average \$ 115 of imported raw materials has a suitable match to cover production costs, so that the average order demand can be made higher than the need for imported brown paper raw materials. Meanwhile, during a pandemic, with many obstacles in government regulations and high enough raw material prices, import orders for 6 months were getting lower.

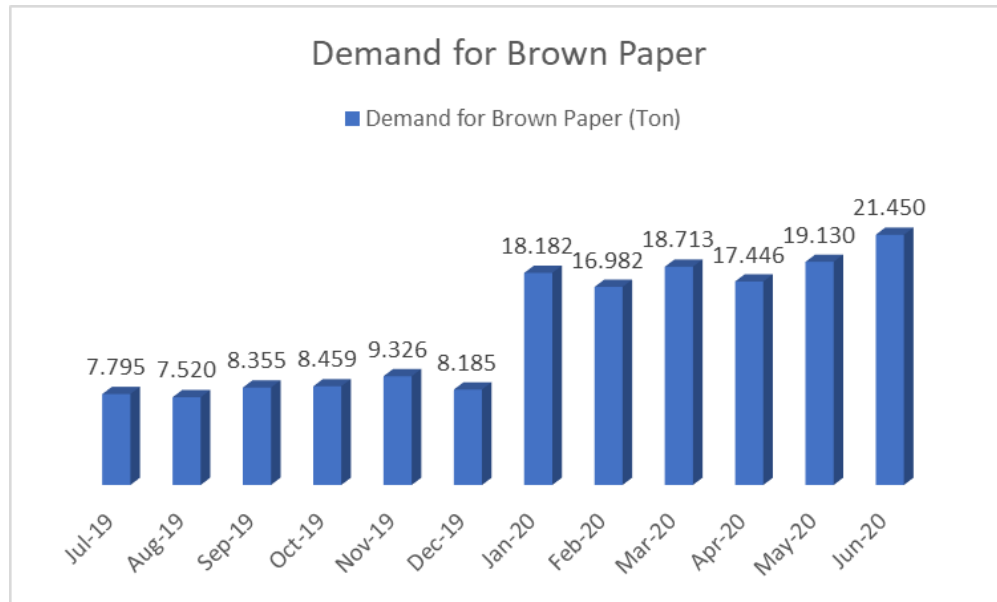


Figure.2 Demand for Brown Paper

Table 3 Comparison between Demand and Order Waste A5 Import

Month	Beginning	Order Raw Material (waste A5 import)	Demand for brown Paper	Safety Stock
Jul-19	36.774	21.000	7.795	49.979
Aug-19	19.909	11.064	7.520	23.453
Sep-19	12.847	17.250	8.355	21.742
Oct-19	21.047	24.250	8.459	36.838
Nov-19	24.737	15.000	9.326	30.411
Dec-19	22.707	16.750	8.185	31.272
Jan-20	13.879	6.000	18.182	1.697
Feb-20	10.712	7.500	16.982	1.230
Mar-20	13.787	9.500	18.713	4.574
Apr-20	16.131	8.000	17.446	6.685
May-20	19.206	6.000	19.130	6.076
Jun-20	18.834	8.750	21.450	6.134

Through figure 3 we can see that the actual need for ordering waste A5 imported based on demand before the pandemic is an average of 5.000 tons per month (60%) while in figure 4, It can be seen that the actual demand for ordering Waste A5 import based on demand after the pandemic is an average of 6.700 tons per month (40%). This can be ascertained

that during the Covid-19 pandemic there was a gap between ordering waste A5 and the demand for brown paper, so the function of the safety stock was very much needed.

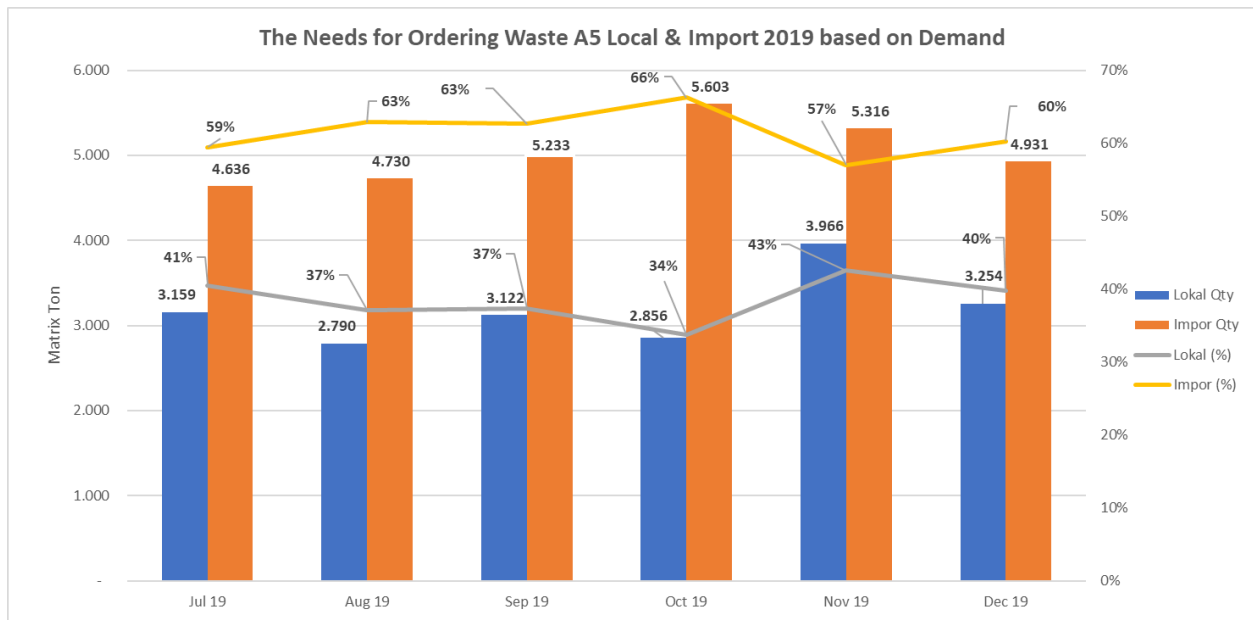


Figure 3 The Needs for Ordering Waste A5 Local & Import 2019 based on Demand

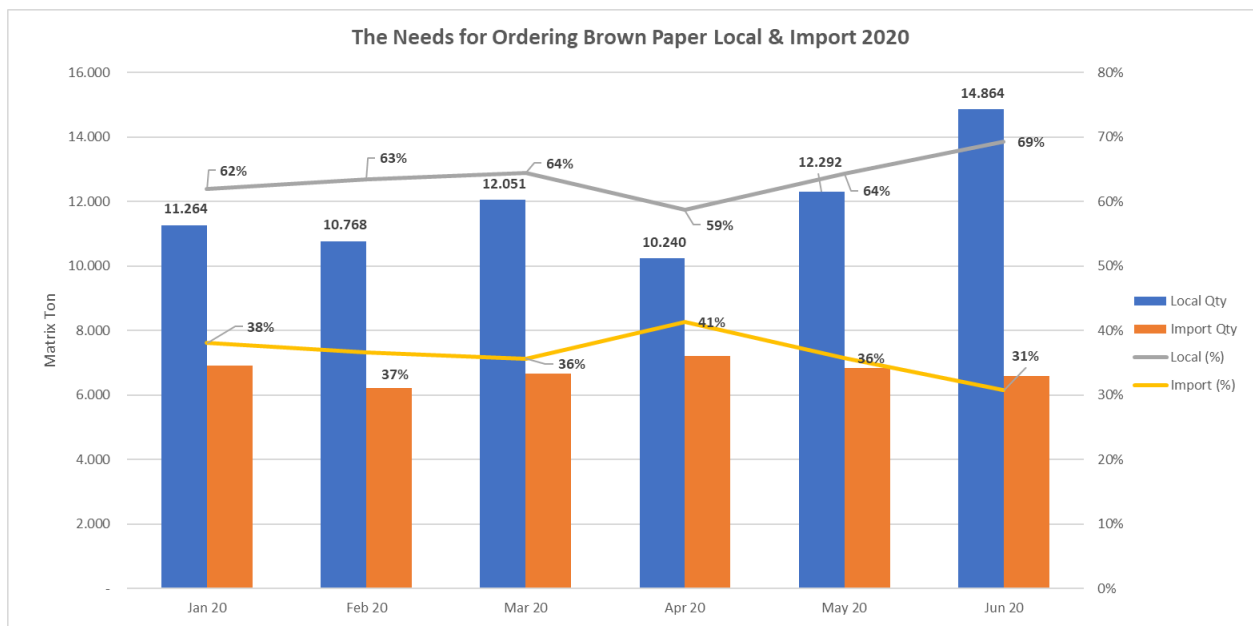


Figure 4 The Needs for Ordering Waste A5 Local & Import 2020 based on Demand

The application of the cost leadership strategy in paper companies has a positive effect on the selling price of brown paper. In figure 5, it can be seen that paper companies can sell these products at low prices in a large market share. In this case, the company made efficiency in procuring imported raw materials which were known to have increased prices due to the Covid-19 pandemic by making arrangements for the procurement of A5 waste raw materials.

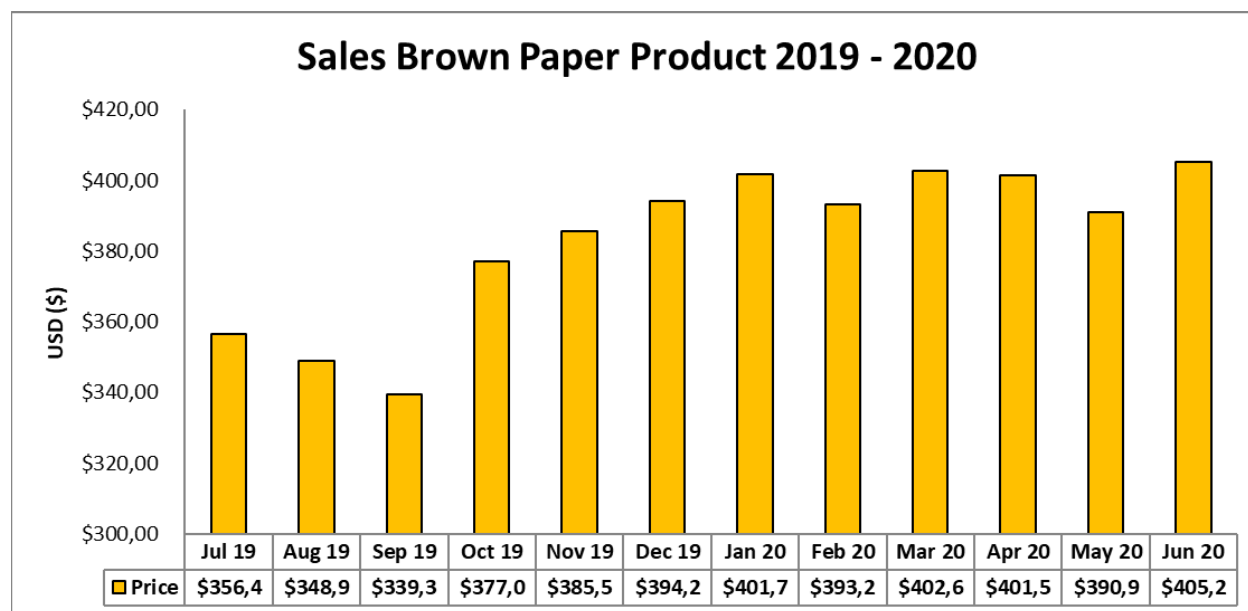


Figure 5 Sales Brown Paper Product

5.1 Proposed Improvements

Through the results of this discussion, for future research the authors suggest the paper company's can utilize waste paper from internal companies, so that they can reduce procurement costs and add local waste sources.

6. Conclusion

Based on the results analyzed, the A5 waste procurement arrangements have an effect on business sustainability. The strategy chosen in this case is cost leadership in which the company will maintain product prices amid rising raw material prices during a pandemic Covid-19. For this reason, the company provides a safety stock of raw materials that were ordered before the pandemic to overcome the increasing demand for brown paper products during the pandemic. The orders for imported raw materials prior to the pandemic were increased more than the actual required. So that the company can still provide brown paper products for customers who need it.

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Biographies

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