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Increasing The Effectiveness And Efficiency Of Supply Chain Management In Increasing Customer Loyalty B21 Digital Printing

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ABSTRAK

Supply Chain Management (SCM) telah diterapkan di berbagai industri salah satunya di B21 Digital Printing, salah satu digital dan textile printing yang berlokasi di Kabupaten Gresik, Supply Chain Management (SCM) merupakan proses dan aktivitas produksi mulai dari memperoleh bahan baku, proses produksi hingga proses pendistribusian barang ke pelanggan. Adapun yang menjadi kendala disini adalah kurangnya supplier yang memadai dalam menerima permintaan bahan baku, hal tersebut menjadi tujuan utama dalam penelitian yaitu bagaimana cara meningkatkan efektivitas dan efisiensi *supply chain management* dalam mencapai loyalitas pelanggan. Metode yang digunakan dalam penelitian ini adalah penelitian kualitatif deskriptif. Subjek penelitian merupakan informan yang memberikan data penelitian melalui sesi wawancara. Berdasarkan hasil penelitian kualitatif dengan teknik wawancara dan observasi serta data yang penulis kumpulkan dapat disimpulkan bahwa dengan mengembangkan model *supply chain management* yang terstruktur dapat menjaga dan meningkatkan loyalitas pelanggan.

ABSTRACT

Supply Chain Management (SCM) has been implemented in various industries, one of which is B21 Digital Printing, a digital and textile printing facility in Gresik Regency. Supply Chain Management (SCM) is a process and production activity starting from obtaining raw materials and the production process to distributing goods to customers. The obstacle here is the lack of adequate suppliers in accepting requests for raw materials, and this is the primary goal of the research, namely how to increase the effectiveness and efficiency of supply chain management in achieving customer loyalty. The method used in this research is descriptive qualitative research. Research subjects are informants who provide research data through interview sessions. Based on the results of qualitative research using interview and observation techniques as well as data collected by the authors, it can be concluded that developing a structured supply chain management model can maintain and increase customer loyalty.

INTRODUCTION

Quoted from *kompas.com* (2022), the rapid development of technology in this digital era has made new habits such as moving all types of activities online; This can spur Micro, Small, and Medium Enterprises (MSMEs) to compete in order to attract the attention of consumers. People have been encouraged to choose fast, easy and efficient methods in today's digital era. Therefore, MSME business actors must also act more quickly and efficiently in order to be able to keep pace with the times and trends that are currently happening in society. Based on this, MSME business actors must be responsive to change.

One of the economies in East Java is growing well, and this can be seen from the data released by BPS in August 2022, which released that economic growth in East Java was 5.74 percent; this can be seen from the production side, the highest growth occurred in the Transportation Business Field and Warehousing which grew by 22.21 percent. From the expenditure side, the highest growth occurred in the PMTB component, which grew by 7.84 percent. The three business fields in question are the manufacturing industry, with a contribution of 29.03%, agriculture, forestry, and fisheries of 12.80%, and wholesale, retail, and car-motorcycle repair trade, 18.18% (Kurnia, 2018). The processing industry includes the printing, digital media, and graphics industry. According to the Central Bureau of Statistics (2017), the production growth of the micro and small manufacturing industry in the third quarter of 2017 for the printing and reproduction sector of recorded media increased by 14.48% compared to the same period in 2017. then. The industry's growth in the third quarter of 2017 increased by 8.12%. (Dinnata, 2017). The printing industry is still growing in the digital era; even in 2023, the growth of the printing and printing industry will reach USD 47.2 billion worldwide. In Indonesia alone, the publishing industry grew to 14.9%, followed by the growth of the packaging industry, which rose to 13.2%, and the advertising industry to 12.1% (Prihadi, 2017).

Based on interviews with the owner of B21 Digital Printing, this digital printing company is in great demand by people from various backgrounds, including students, educational institutions, MSMEs, and offices in the city of Gresik, so they have demand for printing needs. Some of the standard products that are usually offered by digital printing businesses are stickers, banners, posters, brochures, and others. Meanwhile, the products offered by B21 are more varied, namely sublime, dtf, stickers, banners, id cards, lanyards, calendars, brochures and many more. Indonesia especially in Gresik. However, even though the competition is quite tight in the digital era, B21 digital printing can anticipate this by providing characteristics that distinguish B21 from other printing businesses, namely fast service at relatively affordable prices. The owner of B21 Digital Printing said that good cooperation is needed here with suppliers so that production activities can run smoothly in line

with the company's vision. Based on previous research by Amin (2022) in digital printing in Tasikmalaya, choosing the right supplier will benefit the company and also increase customer confidence. The smooth running of the supply chain will depend on the performance of the suppliers (vendors or suppliers). The ability to select suppliers is the most important function of all Procurement and supply chain management responsibilities, because it has a significant impact on optimizing the quality, quantity, timeliness and price of goods and services purchased.

According to Epiphanius et al. (2020) said, the Supply Chain is a set of activities related to a network of facilities and distribution options which includes the entire interaction between suppliers, companies, manufacturers, distributors, and consumers who carry out the functions of procuring materials, processing these materials into semi-finished goods and finished goods, and distribution. Finished goods to the customer. The purpose of Supply Chain Management is to create a supply chain that prioritizes customer value. Making suppliers partners is the key to effective supply chain management.

According to Anis et al (2019), the success of Supply Chain Management is its ability to identify and solve problems by Optimizing all business activities in the supply chain structure, where each stakeholder must understand and be able to manage these problems accurately and on time. Based on the research that the researchers have done, several problems can interfere with customer production and sales processes, such as the fulfillment of raw materials.

Where the raw materials here are hampered by the time & distance of delivery that the Supplier sends, the product production process becomes slow and disrupted; another thing is with an increase in customers who are increasingly soaring day by day. However, on the other hand, B21 is experiencing limited suppliers who are fast, precise, responsive, and adequate in receiving orders for raw materials from B21 even though B21 is receiving it while the demand is increasing so that it can have a negative impact or a bad image on B21 service.

Based on the background of these problems, the researchers identified the problems to be studied, namely technology acceleration, product life cycles, and intense competition between companies. This condition forces companies to develop new ways to achieve competitive advantage; it relies on efficiency and productivity across functional areas within the company to be more responsive to consumer needs and market demands. Products delivered to consumers are not only of high quality but also have a fast delivery strategy. Based on company data, there is some dissatisfaction and even disappointment received by customers, whereas according to Naeyhun et al. (2015), one of the reasons consumers become loyal is customer satisfaction. This dissatisfaction is influenced by several factors, ranging from high prices, inaccurate processing time, and poor service. This is also in accordance with the research of Adam et al (2020) which says that digital supply chains have a positive and significant effect

on consumer satisfaction. In addition, in Mellet's research (2018) it was also found that digital supply chains created by online customers had a positive and significant effect on customer satisfaction, which ultimately affected customer loyalty.

LITERATURE REVIEW

Definition of Supply Chain Management

According to Hahn et al. (2020); Haudi et al. (2022), added Supply Chain Management (SCM) is an approach to efficient integration between suppliers (Supplier), factories (manufacturing), distribution centers, wholesalers, retailers (retailers) and final consumers, where products are produced and distributed in the correct quantities. Alternatively, right, the right location and the right time in order to minimize system costs and increase the level of service satisfaction; meanwhile, according to (Radhi & Hariningsih, 2019), the supply chain is a physical network, namely all companies that play a role in supplying raw materials, producing goods, in delivering it to the consumer/end user. Based on the above opinion, it can be concluded that the Supply Chain is a network system in which various activities range from supplying raw materials to sending them to customers or end consumers. Supply Chain Management aims to create a supply chain that prioritizes customer value. Making suppliers partners is the key to effective supply chain management.

Based on the definition above According to (Education, 2019), several components that affect Supply Chain Management need to be considered by B21 as follows:

1. Production, which aims to produce market demand at the right time with sufficient production volume.
2. Inventory, where inventory level acts as a buffer and protects the business from demand uncertainty.
3. Location, decision-making in choosing the optimal location in various facilities, warehouses, and storage.
4. Transportation needs to move inventory from one place to another throughout the supply chain.
5. Information, emphasizing decision-making regarding level requirements in data collection and data sharing.

A. The main objectives of Supply Chain Management (Paoki et al., 2016):

a. Delivery or delivery of products on time to satisfy consumers

b. Reduce costs

c. Reducing time

d. Placing planning activities as well as distribution.

B. Benefits of Supply Chain Management (Galinesia, 2017):

a) Tangible Benefits Tangible (tangible) benefits such as reduced inventory, increased productivity, reduced IT costs, improved marketing management, and increased revenue.

b) Intangible Benefits (intangible) Benefits that are intangible (intangible) such as continuous improvement processes, standardization, fast and flexible customer responses, and business performance.

C. Functions of Supply Chain Management (SCM) (Galinesia, 2017)

1. Physical SCM, buying merchandise and selling it to end consumers or customers.

2. SCM as market mediation, ensuring that what is supplied by the supply chain reflects the aspirations of the end customer or consumer.

Definition of Customer Loyalty

Jeremia and Djurwati (2019) say loyalty is a process. At the end of the process, satisfaction affects perceived quality, which can impact loyalty and intentions for certain behaviors from a customer—quoted from Yuliana & Hidayat (2018). experts put forward several characteristics of loyal customers, including making repeat purchases, making repeat orders or repurchasing the same product offered by the company, and recommending company products to other people here. The company gets free marketing from customers through mouth-to-mouth communication regarding these products to other people; then, consumers do not easily switch to competing products because they have obtained customer satisfaction. They are not easily attracted to offers of similar products from competitors.

Based on the results of the description of the characteristics that experts have put forward by the research that researchers conducted at B21 Digital Printing, where researchers found that the loyalty shown by B21 Digital Printing customers corresponds to these characteristics, this is shown by customers. Make repeated purchases of every B21 Digital Printing product, such as Banners, Stickers, Notes, jerseys, and others; even in these purchases, they always buy in large and quite large quantities. Apart from that, many B21 Digital Printing customers

recommend products from B21 Digital Printing because, in addition, to sound quality, the service provided is friendly as well as fast quality, causing many B21 Digital Printing customers to recommend B21 Digital Printing products colleagues, family or their companies to order and buy products at B21 Digital Printing with good quality and service. Fast and efficient creates a sense of comfort that makes customers or consumers not easily switch to other printing products.

Relationship Between Supply Chain Management and Customer Loyalty

According to TS Muslim (2017), Good Supply Chain Management is vital to achieve a more efficient integration of suppliers, manufacturers, distributors, retailers, and customers. Goods are produced in the right quantities, at the right time, and in place to achieve the system cost at an absolute minimum. Supply chain management can overcome inventory problems to make products available and fit for consumption. Besides that, according to Zikmund (2017), things that can influence consumer loyalty are experience with the company (History with the company), satisfaction (Trust), Ease (Choice reduction and habit), and emotional bonding (Emotional Bonding), which is evident by the company's experience that B21 has been running for 11 years and has been in the digital printing world for a long time. Increase marketers to increase customer loyalty. Besides that, satisfaction becomes a one-factor influencing loyalty because B21 Digital Printing provides excellent product quality at affordable prices and fast service. It creates a sense of trust among B21 Digital Printing customers or customers which proves the quality of products and fast service so that a sense of trust and provide convenience for customers because they can order online with some of the things mentioned above will provide a sense of emotional bond that makes customers feel comfortable ordering products at B21 Digital Printing. The existence of consumer loyalty can help companies improve Sales of products every day and the emergence of opportunities for these products to be used by others.

Based on two opinions regarding SCM and loyalty, it can be translated into controls carried out to control inventory from shortages and overproduction, supply, and demand. Unlocking these products will cause consumers to complain about not providing the goods they want, and the company will lose revenue, indirectly making the brand's image of the goods wrong. As a result, consumers become less loyal to consuming these goods, and the most severe negative impact is even more consumers accidentally talking by word of mouth to other consumers not to make purchases at the retail. The advantages of having raw material supplies will also cause losses for producers, ranging from high storage costs and damage to goods due to being stored for too long. On the other hand, retail also plays a vital role in building customer loyalty which can increase marketing in markets where people will interact directly with end consumers. In

addition, retail also connects end users with sellers who provide merchandise. Given this role, it is the retailer's responsibility to analyze the wants and needs of customers.

RESEARCH METHODS

According to Sugiyono (2018), The method used is a descriptive qualitative method based on the post positivist philosophy (phenomenology, to be exact), which is used to research in scientific conditions where the researcher himself is the instrument, data collection techniques, and qualitative analysis that emphasize meaning. The qualitative research methodology aims to analyze and describe phenomena or research objects through social activities, attitudes, and perceptions of people individually or in groups (Raharjo et al, 2022). The research subjects here are informants who go through interview sessions with research subjects here, namely business owners, suppliers, and also customers of B21 Digital Printing, so that researchers can collect data by applying a purposive sampling technique. In determining the informants, the researchers considered the share and position of the business owner in the production and management of B21 Digital Printing.

This research was conducted qualitatively because external and internal analysis required in-depth interviews to find out the condition of B21 companies so that competitive strategies could be formulated appropriately. Sources of data used in this study are:

Primary data is obtained from in-depth interviews with business owners at digital printing companies. In contrast, the second data used is secondary data obtained from written documentation sources such as internet library sources or journals that have data correlated with research. The secondary data used in this study are company profiles, company information, and data related to company activities. In this study, the selection of informants used a purposive sampling technique. The triangulation test used is source triangulation.

There are three data analysis techniques used using data reduction. This stage will collect interview data for later reduction and choose the main things related to the research. Furthermore, the presentation of the data after being reduced through interview transcripts, the data will be concluded using standard language. Moreover, finally concluding and checking its validity using the Source Triangulation technique.

RESULTS

Based on the observations and interviews with B21 Digital Printing owners, it found that several customers expect to be able to obtain products with benefits at an acceptable price level. To realize these consumer desires, each company tries optimally to use all assets without

reducing product quality or standards set; from several studies, one of which is David (2017), it can be concluded that the order of supplier criteria is quality, price, and delivery time. The customer's wishes can be fulfilled by the quality and adjusting prices to the needs. The selection of suppliers is crucial because suppliers play a role in the availability of raw materials with available raw materials so that the production process runs smoothly.

No	Supplier	Material Type	Address
1	Supplier 1	Raw materials for indoor & outdoor stickers	Surabaya
2	Supplier 2	Textile Raw Materials	Surabaya
3	Supplier 3	T-shirt raw materials	Gresik
4	Supplier 4	Ink raw materials	Surabaya
5	Supplier 5	Paper raw materials	Surabaya
6	Supplier 6	Outdoor raw materials	Surabaya

Table 1 Data Supplier B21 Digital Printing

Data analysis

The desired supplier characteristics of B21 Digital Printing

Based on the results of an interview with the owner of the B21 Digital Printing business on December 2, 2022, it can be classified into several benchmarks for the characteristics of B21 Digital Printing in deciding to choose a supplier.

Researcher: Are there criteria for selecting suppliers to meet the needs of B21 Digital Printing?

Business Owners: For criteria tailored to our needs, it must be based on the company's tagline, 'We Work Faster,' so we choose suppliers whose work systems are also fast in one set. Second, they must be responsive, meaning they understand all the needs and desires of B21 Digital Printing, including responsiveness in serving every order, because a sound communication system must be established between suppliers and us. Third, we adjust the quality & price because prices are competitive; even though the price difference is negligible between suppliers, we still prioritize affordable prices with good quality, then time because getting goods to B21 Digital Printing takes time so the closest distance will take precedence will also affect shipping costs or costs. The suppliers prioritize who is closer and are included in the qualifications for fulfilling B21 Digital Printing raw materials.

Based on the criteria mentioned by the business owner, it does affect B21 Digital Printing in determining effectiveness and efficiency in supply chain management because, indeed, the customer needs of B21 Digital Printing itself are fast and demanding; that is what influences B21 Digital Printing to choose suppliers who are quick to respond in meet every order requirement from B21 Digital Printing.

Constraints in the supply of raw materials from suppliers

Researcher: What are the obstacles often experienced in supply chain management at B21 Digital Printing? What solutions are implemented to overcome these obstacles?

Business Owner: If the problem with SCM is more often the uncertainty of customer demand and supplier uncertainty in some of the items available at B21 Digital Printing, sometimes when there is much stock, there is little demand, and vice versa if the solution here is to update material stocks on a weekly and monthly basis to anticipate that uncertainty.

The reason the Supplier becomes a permanent partner in supplying raw materials to B21

Researcher: How long have been working as a supplier at B21 Digital Printing?

Supplier 1: In B21, he was a supplier about ten years ago

Supplier 2: I have only been a supplier here for the last few years

Supplier 3: From the first year I was founded, I have been supplying goods at B21; it has been a long time

Researcher: Are there any problems in supplying materials to B21 Digital Printing?

Supplier1: Certainly, there are usually delivery problems; for example, B21 ordered on Friday afternoons while my store has a holiday on Saturdays, which makes the delivery date; in that

case, we usually negotiate with the owner of B21 Digital Printing to rearrange the delivery schedule if it is tight with the deadline it will be sent directly with another expedition Supplier 2: Yes, usually it is because there is no one-way delivery or the requested material is not ready yet, so if you do not wait together, the shipping fee is usually more than usual. the customer

Supplier 3: There have been problems several times in recent years because the orders arrived in large quantities and increased than usual, so it took more time to prepare the materials; like it or not, the materials could not be picked up on the same day

Reasons for Customer B21 not being loyal to B21

Furthermore, based on the description and data above shows several characteristics and reasons for suppliers to continue to supply B21 raw materials. However, on the other hand, researchers also try to conduct interviews with B21 customers or consumers who support increasing customer loyalty at B21 Digital Printing. The following are the results of interviews with several researchers. Customers:

Researcher: How many times have you made an order at B21?

Mr C (21 years): I have printed here several times

Sis P (26 years): It has been a long time since I opened my business, five years, so it cannot be count

Mr. S (43 years): I am a new customer; I have only printed here five times since August

Sis W (30 years): This is the second time

Mr D (17 years): I have printed three times in B21

Researcher: What impression did you get while printing at B21 Digital Printing?

Mr C (21 years): The prints here are good, and the service is fast; the only downside is that some employees are mean and seem unfriendly, making me uncomfortable.

Sis P (26 years): To be honest, in B21, in terms of quality, speed is also good, but I was a little disappointed because when I ordered a banner, the color was not the same as before.

Mr. S (43 years): I used to print cloth, and it took two days to finish quickly; printing here is indeed more expensive than elsewhere, maybe because it is faster, so we also pay for time.

Sis W (30 years): I have printed here twice for business. I have never felt disappointed. The service here is also good when picking up goods and getting a bonus prayer from the guard.

Sis D (17 years): The staff here are friendly, and the details and the printing process are fast and can be waited for; it helps me in meeting assignment deadlines; they are friendly in service but not friendly to students' pockets

Based on interviews conducted by researchers, it can see that there are good impressions that affect their loyalty, but there are still some evaluations that must be overcome to maintain customer loyalty. According to Tatoglu et al., (2016). The benefits of effectiveness and efficiency in supply chain management include reduced total cycle time, better service, and higher responsiveness to consumer needs. Supply chain management has a positive and significant influence on customer loyalty. Because customer loyalty starts from the satisfaction of the SCM carried out by a company. Companies are required to be able to manage and implement SCM well because the level of customer satisfaction is the primary goal. If the product produced gives the impression of dissatisfaction, it will tarnish the name of the industry, and the level of customer satisfaction will decrease.

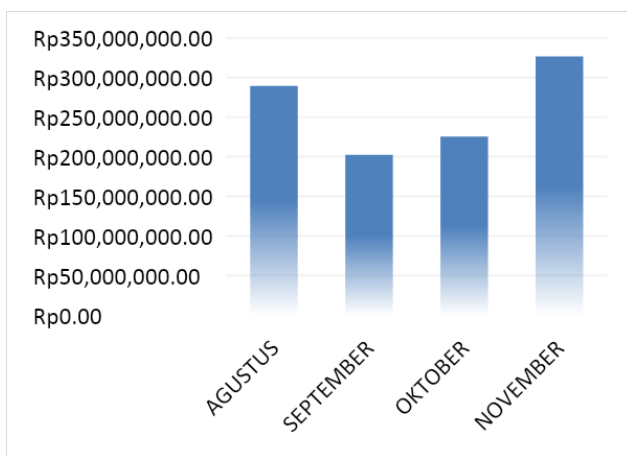


Figure 1 B21 Digital Printing Sales Data

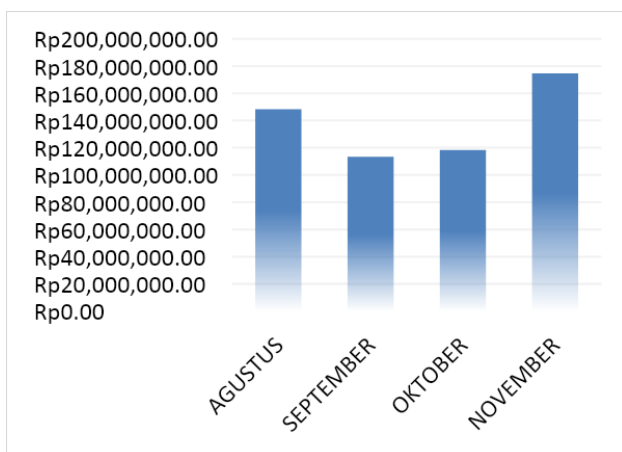


Figure 2 B21 Digital Printing Profit Data

Supply chain management efficiency, summarized from several works of literature, consists of knowledge sharing, information sharing, coordination, flexibility, visibility, and transparency. Each of these factors is explained as follows:

1. Minimize the operational time in the supply chain structure to increase efficiency (Madani and Rungsisawat, 2019).
2. Organizational ability to process information quickly can be used for better decision-making (Janaki 2018). Sharing information will enable applicable information sharing among stakeholders so that products can reach consumers quickly and precisely.

Coordination between stakeholders plays a vital role in integrating each member so that it leads to improvement.

CONCLUSION & SUGGESTION

Based on the explanation in the previous chapter, it can be concluded that:

The relationship between Supply Chain Management and customers to reach marketers and create customer loyalty needs to be considered, such as increasing product variety and fast, responsive, and friendly service. Being able to meet customer needs even though they have an unreasonable deadline, B21 must be able to fulfill them so that not to disappoint customers by procuring supply chain management that meets the customer's desired criteria.

That way, the customer feels valued and served well, and he will be able to attract sympathy from customers to buy or order products at B21 and create loyalty between customers. However, several factors affect the effectiveness and efficiency of supply chain management, which has been summarized from several works of literature, consisting of knowledge sharing, information sharing, coordination, flexibility, visibility, and transparency. Each of these factors is explained as follows:

1. Minimizing operational time in the supply chain structure to increase efficiency (Madani and Rungsisawat, 2019).
2. Organizational ability to process information quickly can be used for better decision-making (Janaki 2018). Sharing information will enable helpful information sharing among stakeholders so that products can reach consumers quickly and precisely.
3. Coordination between stakeholders is essential in integrating each member, leading to increased effectiveness and efficiency. So with so many levels, coordination becomes crucial in providing effective and efficient services for consumer satisfaction (Pathak 2019).
4. Flexibility is a supply chain capability in a dynamic environment to provide products and services on time and at a low cost (Kshetri, 2018).
5. The availability of broad information covers the entire supply chain and, in a short time, can create better control and management (Kache and Seuring, 2017)

At the end of this study, suggestions that can be conveyed to B21 business owners are:

1. It provides a proper and sufficient Warehouse or Warehouse as a place to store goods or raw materials so that it is easy to choose raw materials according to needs.
2. Have anticipation if suppliers cannot meet B21 needs by increasing supplier relations in various cities to fulfill the desire for customer needs.
3. Establish good cooperation between suppliers because this will make it easier for B21 to meet their fast-paced needs.
4. Having a backup such as a schedule where raw materials must be ordered because if you wait for the raw materials to run out, you will experience a shortage of raw materials, which results in being hoarded by the paper mafia or printing materials so that they have very high price spikes.
5. Providing friendly online and offline services makes customers comfortable and increases loyalty.
6. Provide promos every month or in certain months, such as free design services or price discounts, to provide a sense of satisfaction among customers.

Give good directions to the customer about the price set by B21, such as "at this price, and then the printing process can be taken quickly and immediately. With the price of design services, the consumer will get 3x revisions before the printing process takes place". Giving directives correctly, excellently, and organized will make the customer understand that the price given by B21 is commensurate with the quality and fast turnaround time.

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