

LAUNDRY LINEN RENTAL FINANCIAL PLANNING WITH RFID TECHNOLOGY AT PT. THINK CLEAN LAUNDRY

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Abstract

This study aims to examine the application of Radio Frequency Identification (RFID) technology in the laundry and linen rental services offered by PT. Think Clean Laundry. The use of RFID is explored as a solution to improve inventory management efficiency and reduce errors in recording, particularly for clients in hospitals, hotels, industries, and transportation. The research employs qualitative methods, focusing on in-depth understanding and analysis of the phenomenon. Data was gathered through observation and interviews to understand the implementation of RFID technology in linen tracking and operational procedures. The results indicate that RFID technology significantly accelerates laundry processes, minimizes the risk of lost items, and improves service quality by enabling real-time tracking and inventory control. Moreover, the company's adherence to Standard Operating Procedures (SOPs) ensures high-quality service, timely pick-up and delivery, and optimal linen stock management, ultimately leading to increased customer satisfaction. In conclusion, the study confirms that RFID technology in laundry services enhances operational efficiency and customer satisfaction. The implications suggest that other businesses in the laundry sector could benefit from adopting RFID to streamline their operations, reduce human errors, and stay competitive in a technology-driven industry.

Keywords: RFID, Operational Planning

Introduction

PT. Think Clean Laundry is a trusted linen and laundry rental service provider. With a commitment to provide the best solution for customer cleanliness and comfort needs. With the company's vision of becoming a leading innovative and technological laundry and linen rental service provider in the industry with reliable, professional and environmentally friendly resources (Niu & Zhou, 2018). And the company's mission is to Present laundry and linen rental services that make it easy for customers to manage their laundry needs efficiently, Integrate RFID technology to manage linen inventory efficiently, minimize the risk of loss and increase linen availability, Establish close partnerships with customers to improve service availability, and support mutual growth, Continue to innovate in technology and laundry processes to improve efficiency and reduce environmental impact (Nnakwu & Borlund, 2017), Responsive to customer needs and committed to providing a satisfying customer experience, Become a linen provider that has high quantity and quality according to customer expectations (Holopainen, 2017). From the vision and mission in line with the company's services that provide various types of quality linen, including bed sheets, towels, and uniforms, etc. for hospitals, hotels, manufacturing, and transportation accompanied by RFID Technology. PT.Think Clean

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Laundry serves convenient pick-up and delivery, ensuring linen arrives on time. The implementation of RFID linen rental laundry services can be done with a cooperation contract with customers so that customers are easy in operating the use of linen that is ready and clean and meets the number of 3 par needs. Linen and clothing will be processed using the best technology and cleaning materials, with attention to detail to maintain quality. After the washing process, each item will be checked and neatly packed before being returned to the customer. In washing using environmentally friendly products and efficient practices to reduce environmental impact. PT. Think Clean Laundry will be opened in areas near the Bekasi Regency industrial area (Cikarang, MM 2100 and other industrial areas) which are central areas Bekasi Regency industry with a land area of 1200M and a building area of 750M . PT. Think Clean Laundry also processes its waste with the Biotechno IPAL system (Shin & Eksioğlu, 2014). In the linen washing process, a clear production process flow is required starting from picking up and receiving linen, sorting linen, disinfecting linen, washing, drying, ironing, folding and packing to shipping. In carrying out the production process, it must be effective and efficient so that the results of PT. Think Clean Laundry's linen washing get good quality, namely clean, fragrant, stain-free, and not torn. In line with the vision of PT. Think Clean Laundry to become an innovative and leading laundry and linen rental service provider in the industry by empowering reliable employees, optimizing facilities, and connecting linen to create a clean, efficient, and high-quality environment.

Stages Establishment Business

For start a business, so businessman must look for form business Which will in established, the form of the laundry business is a Limited Liability Company (PT), with the name PT. Think Clean Laundry. The establishment of this limited liability company began with the creation of a Deed company establishment before a Notary in accordance with the Laws of the Republic of Indonesia Number 40 of 2007. In addition to making a company deed of establishment, it is necessary to take care of permits required to carry out activities *RFID Linen Rental and Laundry* business (Niu & Zhou, 2018) (Greshko & Kharabara, 2017).

Licensing Which must taken care of grouped become 2 part, that is permission company and operational permits required by PT. Think Clean Laundry in the linen rental laundry service business. To start a business, in addition to licensing, it is also necessary to do preparation before start activity wash linen that is find land and build buildings For carry out linen washing management activities and so on. (see table 6.1)

Table 1. Timeline Establishment PT. Think Clean Laundry

| NO | Item | Time Line Time/month | | | | | | | | | |
|----|--------------------------------|----------------------|---|---|---|---|---|---|---|---|----|
| | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 |
| 1 | Factory search | | | | | | | | | | |
| 2 | Factory Purchase | | | | | | | | | | |
| 3 | Business licensing | | | | | | | | | | |
| 4 | Factory renovation | | | | | | | | | | |
| 5 | Preparation of production site | | | | | | | | | | |
| 6 | Purchase of Tools | | | | | | | | | | |
| 7 | Employee recruitment | | | | | | | | | | |
| 8 | Training | | | | | | | | | | |
| 9 | Distributor search | | | | | | | | | | |
| 10 | Fleet Purchase | | | | | | | | | | |

Operation Goals and Objectives

Table 2. Operational Goals and Objectives

| Short Term Goals and Objectives | | |
|----------------------------------|---|---|
| No. | Objective | Target |
| 1. | 100% RFID tags are equipped with a chip containing a unique number that cannot be duplicated. | Integrating RFID technology to efficiently manage linen inventory, minimizing the risk of loss and increasing linen availability. |
| 2. | Have Standard Operating Procedures (SOP) | To be a linen provider that has high quality and environmentally friendly raw materials according to customer expectations. |
| 3. | Improve laundry quality, create laundry quality and apply it to customer laundry to increase customer satisfaction. | Establishing cooperation with Hospital, Hotel, Transportation relations, manufacturing, and industry in Jabodetabek (estimated 15 customers in a year) |
| 4. | Ensuring linen stock supplies are met | Providing linen stock according to customer needs of 30 pieces (1 customer needs 3 pieces) |
| 5. | Ensure timely <i>pick-up and delivery of linen to customers</i> | Providing operational vehicles for <i>pick-up and delivery</i> while paying attention to regular maintenance for operational vehicles. |
| Medium Term Goals and Objectives | | |
| No. | Objective | Target |
| 1. | Adding production equipment such as washing machines and dryers | Increase customer satisfaction so that we can expand cooperation with Hospital and Hotel relations. Transportation, manufacturing and industry in Jabodetabek (estimated 25 customers in a year) |
| 2. | Monitoring and evaluation of SOP implementation | Minimize calculation costs, calculation time, and calculation errors with an accuracy level of 99 % and carry out regular maintenance for machines, production equipment and operational vehicles, as well as replacing <i>spare parts</i> (if necessary) |
| 3. | Ensuring linen stock supplies are met | Providing linen stock according to customer needs of 75 pieces (1 customer needs 3 pieces) |
| 4. | Adding operational cars for <i>pick up and delivery services</i> | Opening <i>drop points</i> in Jakarta and Tangerang areas |
| 5. | Providing the best service to ensure customer <i>retention</i> | Conducting surveys on how customers behave in various types of environments, making it easier to provide services to all customers. |
| Long Term Goals and Objectives | | |
| No. | Objective | Target |
| 1. | Review and develop SOPs in accordance with conditions and regulations. | Rejuvenating RFID chips and linen that is no longer suitable for use , rejuvenating machines, production equipment and operational vehicles |
| 2. | Providing the best service to ensure customer <i>retention</i> | Maintaining and improving the quality of linen washing |
| 3. | Ensuring linen stock supplies are met | Providing linen stock according to customer needs of 150 pieces (1 customer needs 3 pieces) |
| 4. | Extending permits related to factory operations | Maintaining the sustainability of company operations and customer trust |
| 5. | Increase operational service capacity to meet more customer needs | Opening new branches outside Jabodetabek (Bandung and Majalengka) |

Research Method

This study uses a qualitative method (Flick, 2022). Qualitative methods are scientific approaches that aim to understand the meaning, interpretation, and context of the phenomena being studied. This approach emphasizes in-depth description, understanding, and analysis that focuses on qualitative rather than quantitative aspects.

Product Design

Product design is the process of designing a product including physical and functional aspects to be sold by a business to its customers. Product design follows digital technology, namely linen equipped with RFID. RFID technology is used to make it easier for customers to calculate and minimize losses (Nugroho et al., 2023). Digital technology is used to increase the productivity of employees or members of the organization. When compared to working manually, the use of digital technology is considered more efficient and effective. The data and information produced are very accurate because they can be used for analysis and decision making quickly and precisely.

A digital culture enables members and the organizations that support them to grow, develop and innovate quickly, and adapt to meet the needs of their customers (Wahyuningtias & Nugroho, 2023) (Rahmat et al., 2019). The design of linen products is made of good, soft and thick materials accompanied by RFID technology. The material of linen is durable and not easily torn, the color does not fade quickly. The washing results are also clean and of high quality. Each linen has an RFID tag so that it makes it easier to count and minimize the loss of linen. Linen with this RFID tag is one of the technologies used to make it easier for customers to count and minimize loss. With RFID technology, it will attract customers to use linen with the chip because it makes it easier for daily operations with customers. According to (Fadlilah, 2019) When technology is easy to use, users will feel more comfortable and want to use the system, in contrast to when technology is difficult to use, users will feel reluctant to use the system.

Channel Process Production

Following is channel process linen washing:

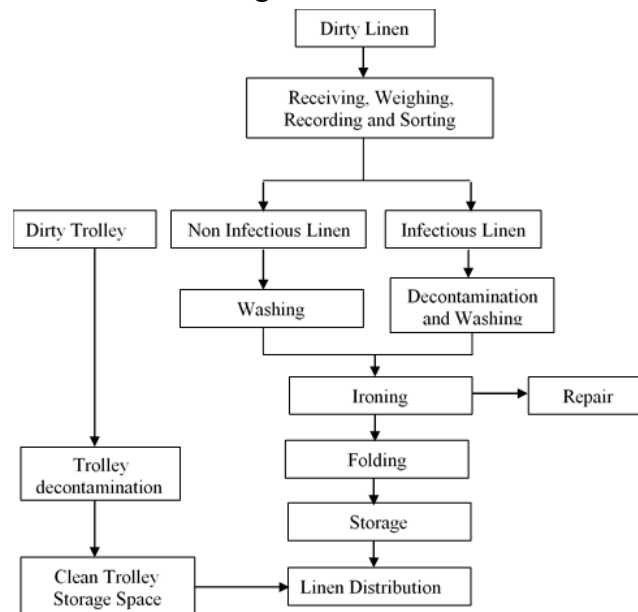


Figure 1. Channel Process Linen Washing

The washing process begins with the preparation stage (planning), namely determining the amount of linen to be washed on that day, preparing the detergent ingredients and the amount needed, and arranging the workforce that will handle this process. The next stage is washing, starting from receiving dirty linen, separating it by name in a plastic bag, weighing, and disinfecting infectious linen. Non-infectious linen goes directly into the washing process using a washing machine that has been prepared, followed by the drying stage. Disinfected linen is also dried. After being clean and dry, both infectious and non-infectious linen go into the ironing, packing, and counting stages. Finally, the linen is stored in a storage cabinet with clean room conditions, a temperature of 22°C–27°C, and a humidity of 45%–75%.

Flow of Goods/Services

The following is the flow of goods and services at PT. Think Clean Laundry:

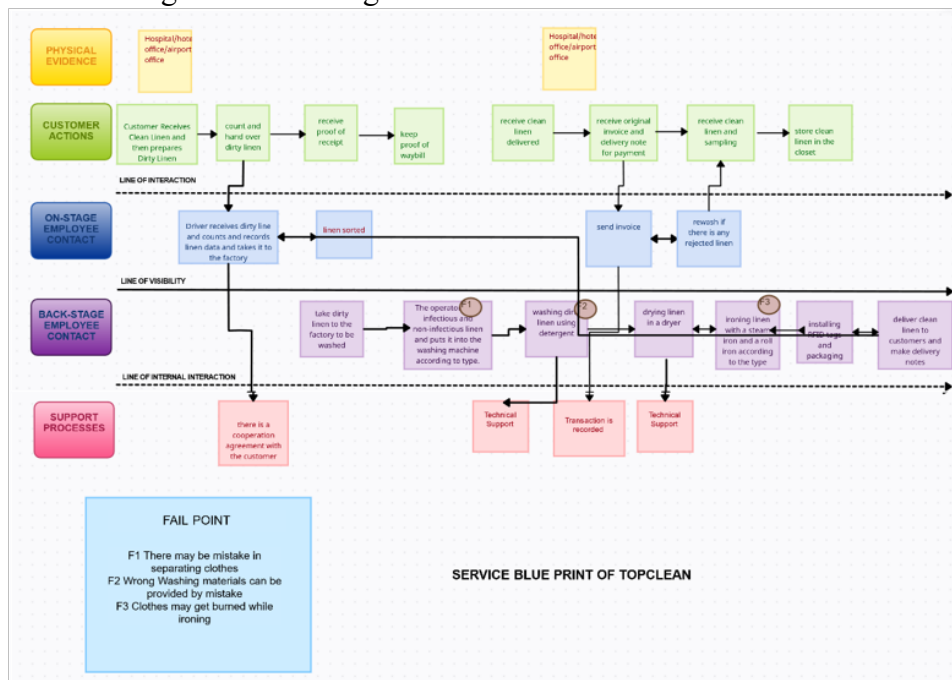


Figure 2. Service Blueprint

The production process begins when the linen is sent by the supplier to PT Think Clean Laundry. After arriving, the linen will go through a quality check to ensure that it meets the standards set. Service quality is essential in order to grow and survive as a service provider organization must be able to provide quality services and have high value for customers, to meet customer needs and be able to provide better services than competitors (Hadi & Indradewa, 2019). After meeting the requirements, the linen will be stored in the warehouse. When the washing is about to begin, the linen is taken from the warehouse and washed. After the washing is complete, a quality control is carried out which includes cleanliness, odorless, and free from damage. The linen is then packed and stored in the clean linen warehouse before being distributed to customers according to orders. After the delivery is complete, the dirty linen collection process will be carried out if there is any the next day. Dirty linen is transported in a closed vehicle, then weighed and separated between infectious and non-infectious. The process continues with washing, drying, ironing, packing, and re-storing in the clean linen warehouse, followed by checking the quantity and suitability before being sent back to the customer.

Process Technology

The product is designed using high-quality materials that are soft and have long-lasting colors. Linen produced to order will be equipped with logos and RFID tags. The superior quality of linen will provide comfort when used by consumers. RFID will make it easier to count linen and reduce the risk of loss. RFID technology will also speed up the process of picking up dirty linen from customers and increase operational efficiency.

Management Chain Supply



Figure 3. Management Chain Supply

Operational management, quality and supply chain are needed in realizing a plan (Sitanggang et al., 2023) (Hugos, 2024) From Figure 6.12 it can be seen that the raw material supply chain is an important thing in production, where cheap raw materials and good quality will determine the price product and quality of a product. The source of raw materials for PT.Think Clean Laundry comes from local production, so it is easily available at an affordable price.

To anticipate the shortage of raw materials, PT . Think Clean Laundry will purchase raw materials. from several *suppliers*, not only depending on one *supplier*. PT. Think Clean Laundry has a cooperation agreement with *suppliers* so that the price of raw materials is stable. Washing linen rental produced by PT. Think Clean Laundry is the result of cooperation between several industrial customers in the Cikarang and Jabodetabek areas.

Table 3. Suppliers

| No | Supplier Type | Supplier Name |
|----|---------------|---|
| 1 | Linen Fabric | 1. PT. Panca Textile |
| | | 2. PT. H89 Jakarta |
| | | 3. PT. Moiztex |
| | | 4. PT. Buana Talimas Textile |
| | | 5. PT. Mitra Mulia Textile |
| 2 | Chemical | 1. PT. Freshlab |
| | | 2. PT. Chalisa Detergent And Chem Laundry |
| | | 3. PT. Laundry Fragrance Center |
| | | 4. PT. PT. Hikam Jaya Abadi |
| | | 5. PT. Anugrah Cemerlang |

Planning and Inventory Control

All production materials of PT. Think Clean Laundry come from local production, so that inventory planning and control can be done easily. To anticipate the shortage of linen and chemicals, so done monitoring *fast-moving* and *slow moving* raw materials. For *fast moving* raw material inventory, inventory control is carried out every 2 (two) weeks, while for *slow moving* raw material inventory, inventory control is carried out every 1 (one) month.

Management Quality

PT. Think Clean Laundry follows ISO 9001: 2015 quality management (quality management) quality production). According to (Basu, 2014) (Hidayat et al., 2024) Quality management is done in several ways. There are 3 things that are calculated quality in service delivery, namely product quality, infrastructure and facility quality, customer service quality is measured using a survey. In carrying out quality management PT. Think Clean Laundry, production linen start with linen quality testing received by PT. Think Clean Laundry, and test results production *quality control* with conduct sampling and swab testing of linen in accredited and registered laboratories. Linen materials purchased and received by PT. Think Clean Laundry must comply with SNI standards. Wastewater from laundry production will be processed in the Wastewater Treatment Plant (IPAL) and before being discharged into the environment, samples will be taken to be tested in the laboratory once a month, so that it is safe and does not pollute the environment.

Operational Cost Projection

PT. Think Clean Laundry's operational costs are divided into 3 parts, namely pre-operation costs operational, cost asset, and cost operational. Cost asset consists of office asset costs and production asset costs.

Table 4. Costs Pre-operational

| No. | Cost Pre-operational | Total (Rp.) |
|---------------------------------|---|----------------------|
| 1 | Building Purchase | 1,850,000,000 |
| 2 | Renovation Building | 50 0,000,000 |
| 3 | Procurement of wastewater treatment plant | 300,000,000 |
| 4 | Licensing | 65,000,000 |
| Total Cost Pre-operative | | 2,715,000,000 |

Before starting a business, the company must prepare pre-operational costs to prepare the office and warehouse, which should use its own property. This property will be used for operational activities and office activities. In addition, the company also needs to take care of permits related to company permits and operational permits.

Laundry Linen Rental Financial Planning with RFID Technology at PT. Think Clean Laundry

| No | Item | Year 0 | | | Year 1 | | | Year 2 | | | Year 3 | | | Year 4 | | | Year 5 | | |
|----|----------------------------|--------|-------------|----------------------|--------|-----------|-------------------|--------|-----------|-------------------|--------|-----------|--------------------|--------|-----------|-------------------|--------|-----------|--------------------|
| | | Qty | Harga | Jumlah | Qty | Price | Amount | Qty | Price | Amount | Qty | Price | Amount | Qty | Price | Amount | Qty | Price | Amount |
| 1 | Washing machine | 2 | 123.000.000 | 246.000.000 | | | | | | | | | | | | | | | |
| 2 | Drying Machines | 2 | 25.000.000 | 50.000.000 | | | | | | | | | | | | | | | |
| 3 | Decontamination Machines | 1 | 85.000.000 | 85.000.000 | | | | | | | | | | | | | | | |
| 4 | Roll Linen Ironing Machine | 1 | 95.000.000 | 95.000.000 | | | | | | | | | | | | | | | |
| 5 | Steam Iron | 2 | 3.700.000 | 7.400.000 | | | | | | | | | | | | | | | |
| 6 | Large Shelves | 2 | 2.160.000 | 4.320.000 | | | | | | | | | | | | | | | |
| 7 | Computers | 1 | 6.000.000 | 6.000.000 | 1 | 6.000.000 | 6.000.000 | | | | | | | | | | | | |
| 8 | Printer | 1 | 2.000.000 | 2.000.000 | 1 | 2.000.000 | 2.000.000 | | | | | | | | | | | | |
| 9 | Packing Tables | 1 | 3.000.000 | 3.000.000 | | | | | | | | | | | | | | | |
| 10 | RFID System Tools | 2 | 33.000.000 | 66.000.000 | | | | | | | | | | | | | | | |
| 11 | RFID Scanner Tool | 2 | 1.700.000 | 3.400.000 | | | | | | | | | | | | | | | |
| 12 | RFID Tags | 375 | 1.248.000 | 468.000.000 | | | | 38 | 1.248.000 | 47.424.000 | 56 | 1.248.000 | 69.888.000 | 75 | 1.248.000 | 93.600.000 | 94 | 1.248.000 | 117.312.000 |
| 13 | Scales | 2 | 2.200.000 | 4.400.000 | | | | | | | | | | | | | | | |
| 14 | Generators | 1 | 180.000.000 | 180.000.000 | | | | | | | | | | | | | | | |
| 15 | Water Pumps | 1 | 20.000.000 | 20.000.000 | | | | | | | | | | | | | | | |
| 16 | Operational Vehicles | 1 | 200.000.000 | 200.000.000 | | | | | | | | | | | | | | | |
| 17 | Box Vehicles | 1 | 250.000.000 | 250.000.000 | | | | | | | | | | | | | | | |
| 18 | Office Desks | 2 | 400.000 | 800.000 | | | | | | | | | | | | | | | |
| 19 | Meeting Tables | 1 | 1.000.000 | 1.000.000 | | | | | | | | | | | | | | | |
| 20 | Operator Seats | 4 | 100.000 | 400.000 | 6 | 100.000 | 600.000 | | | | | | | | | | | | |
| 21 | Office Chair | 6 | 400.000 | 2.400.000 | 4 | 400.000 | 1.600.000 | | | | | | | | | | | | |
| 22 | Gloves | 10 | 25.000 | 250.000 | | | | | | | | | | | | | | | |
| 23 | Apron | 10 | 95.000 | 950.000 | | | | | | | | | | | | | | | |
| 24 | Helmets | 3 | 65.000 | 195.000 | | | | | | | | | | | | | | | |
| 25 | Boots | 10 | 75.000 | 750.000 | | | | | | | | | | | | | | | |
| 26 | Masks | 3 | 150.000 | 450.000 | | | | | | | | | | | | | | | |
| 27 | Hydrant Boxes | 2 | 2.500.000 | 5.000.000 | | | | | | | | | | | | | | | |
| 28 | APAR (3 kg) | 5 | 348.000 | 1.725.000 | | | | | | | | | | | | | | | |
| 29 | 50 liter trash bins | 3 | 300.000 | 900.000 | | | | | | | | | | | | | | | |
| 30 | Trash Cans 25 liters | 10 | 130.000 | 1.300.000 | | | | | | | | | | | | | | | |
| | Total | | | 1.706.640.000 | | | 10.200.000 | | | 47.424.000 | | | 433.198.000 | | | 93.990.000 | | | 120.257.000 |

Figure 4. Asset Procurement Costs

Before a activity business production done, naturally need do a number of preparation, especially preparation equipment office And equipment production And equipment supporters such as fleets, production support facilities and so on. then the company need emit funds investment beginning, For needs office And equipment production.

| Biaya Operasional | | Year 1 | Year 2 | Year 3 | Year 4 | Year 5 | Total |
|--|-----------|--------------------|--------------------|--------------------|--------------------|--------------------|----------------------|
| Operational Costs Building Maintenance | Rp | 48.000.000 | 52.800.000 | 57.600.000 | 62.400.000 | 67.200.000 | 288.000.000 |
| Machine Maintenance | Rp | 60.000.000 | 63.000.000 | 90.000.000 | 90.000.000 | 120.000.000 | 423.000.000 |
| Electricity & Air Solar | Rp | 132.000.000 | 145.200.000 | 160.440.000 | 172.640.000 | 182.740.000 | 793.020.000 |
| Generator | Rp | 30.000.000 | 50.000.000 | 60.000.000 | 60.000.000 | 60.000.000 | 260.000.000 |
| Stationery | Rp | 21.600.000 | 23.760.000 | 25.920.000 | 28.080.000 | 30.240.000 | 129.600.000 |
| Telephone and Internet | Rp | 12.000.000 | 13.200.000 | 14.400.000 | 15.600.000 | 16.800.000 | 72.000.000 |
| Vehicles (BBM and Service) | Rp | 24.000.000 | 26.400.000 | 43.200.000 | 43.200.000 | 48.000.000 | 184.800.000 |
| Research and Development Costs | Rp | 12.000.000 | 12.000.000 | 15.000.000 | 22.500.000 | 33.750.000 | 95.250.000 |
| Riset and Development Cost | Rp | 23.000.000 | 25.300.000 | 27.600.000 | 29.900.000 | 32.200.000 | 138.000.000 |
| Insurance (Operational Vehicles and Box Ca | Rp | 15.000.000 | 16.500.000 | 30.000.000 | 30.000.000 | 37.500.000 | 129.000.000 |
| Insurance (Fire and Natural Disasters) | Rp | 30.000.000 | 33.000.000 | 36.000.000 | 40.000.000 | 46.100.000 | 185.100.000 |
| Other Costs | Rp | 36.000.000 | 39.600.000 | 43.200.000 | 46.800.000 | 50.400.000 | 216.000.000 |
| Total Operational Costs | Rp | 443.600.000 | 500.760.000 | 603.360.000 | 641.120.000 | 724.930.000 | 2.913.770.000 |

Figure 5. Operating Costs

| Description | Unit | Price | Year 0 | | Year 1 | | Year 2 | | Year 3 | | Year 4 | | Year 5 | | Total | |
|-------------------------------|-----------------------|---------|--------|--------------------|--------|--------------------|--------|--------------------|--------|--------------------|--------|--------------------|--------|--------------------|--------|----------------------|
| | | | Qty | Amount | Qty | Amount | Qty | Amount | Qty | Amount | Qty | Amount | Qty | Amount | Qty | Amount |
| Laundry Disinfectant | Jerry Can (25 liters) | 740.000 | | | 60 | 44.400.000 | 66 | 49.617.000 | 69 | 51.837.000 | 72 | 54.057.000 | 75 | 56.277.000 | 342 | 256.188.000 |
| Bleaching/Whitening | Jerry Can (25 liters) | 310.000 | | | 36 | 11.160.000 | 40 | 12.601.500 | 41 | 13.159.500 | 43 | 13.717.500 | 45 | 14.275.500 | 205 | 64.914.000 |
| Blood Stain Remover | Jerry Can (25 liters) | 740.000 | | | 24 | 17.760.000 | 26 | 20.313.000 | 28 | 21.201.000 | 29 | 22.089.000 | 30 | 22.977.000 | 137 | 104.340.000 |
| Neutralizer/Sour | Jerry Can (25 liters) | 740.000 | | | 36 | 26.640.000 | 40 | 30.081.000 | 41 | 31.413.000 | 43 | 32.745.000 | 45 | 34.077.000 | 205 | 154.956.000 |
| White Linen Fabric Material | meter | 9.000 | 11.227 | 101.039.400 | 16.840 | 151.559.100 | 18.524 | 166.724.460 | 19.366 | 174.302.415 | 20.208 | 181.880.370 | 21.050 | 189.458.325 | 95.987 | 964.964.070 |
| Green Linen Fabric Material | meter | 9.000 | 1.792 | 16.128.000 | 2.688 | 24.192.000 | 2.957 | 26.620.650 | 3.091 | 27.830.250 | 3.226 | 29.039.850 | 3.360 | 30.249.450 | 15.322 | 154.060.200 |
| Colored Linen Fabric Material | meter | 9.000 | 1.680 | 15.120.000 | 2.520 | 22.680.000 | 2.772 | 24.957.450 | 2.898 | 26.091.450 | 3.024 | 27.225.450 | 3.150 | 28.359.450 | 14.364 | 144.433.800 |
| Total | | | | 132.287.400 | | 298.391.100 | | 330.915.060 | | 345.834.615 | | 360.754.170 | | 375.673.725 | | 1.843.856.070 |

Figure 6. Material Costs Baku

In running the company's operational activities, it is important to predict the costs that may arise in a certain period. PT. Think Clean Laundry projects costs for the next five years, including a prediction of a 5% increase in raw material costs each year. PT. Think Clean Laundry adjusts the cost projections with inflation increases to manage cash flow effectively.

Result and Discussion

Understand the meaning, interpretation, and context of the phenomena being studied. This approach emphasizes in-depth description, understanding, and analysis that focuses on qualitative rather than quantitative aspects.

Product Design

Product design is the process of designing a product including physical and functional aspects to be sold by a business to its customers. Product design follows digital technology, namely linen equipped with RFID. RFID technology is used to make it easier for customers to calculate and minimize losses (Nugroho et al., 2023). Digital technology is used to increase the productivity of employees or members of the organization. When compared to working manually, the use of digital technology is considered more efficient and effective. The data and information produced are very accurate because they can be used for analysis and decision making quickly and precisely.

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Conclusion

PT.Think Clean Laundry can operate well and develop with a well-organized system. The existence of strategic and spacious land makes it easy to adjust the flow according to applicable regulations so that related permits can be obtained. Quality management with good quality, high technology, appropriate production flow and pick Free up and delivery is the advantage of a laundry industry. The better the operational plan, the easier it will be to serve customers and create laundry quality.

BIBLIOGRAPHY

- Basu, R. (2014). Managing quality in projects: An empirical study. *International Journal of Project Management*, 32(1), 178–187.
- Fadlilah, S. (2019). Faktor-faktor yang berhubungan dengan kualitas hidup pasien hemodialisis. *Jurnal Kesehatan*, 10(2), 284–290.

- Flick, U. (2022). *An introduction to qualitative research*.
- Greshko, R., & Kharabara, V. (2017). The Stages Of Establishment And Development Of Financial Management. *The USV Annals of Economics and Public Administration*, 17(1 (25)), 112–117.
- Hadi, D. P., & Indradewa, R. (2019). The service quality effect on corporate reputation, customers satisfaction, and loyalty. *Journal of Multidisciplinary Academic*, 3(3), 51–56.
- Hidayat, A., Ruli, R., Firrizqy, R., Gimbastian, M., Ramadhan, M. I., Lathif, N., Yanuar, R., Syarifudin, F., & Mahendra, M. R. (2024). Analysis Of The Implementation Of Quality Management Of Employee Performance And Organizational Culture. *Jurnal DIALEKTIKA: Jurnal Ilmu Sosial*, 22(1), 20–28.
- Holopainen, P. (2017). *Luxury Standards and Customer Perception of a Tanzanian Yatch Company*.
- Hugos, M. H. (2024). *Essentials of supply chain management*. John Wiley & Sons.
- Niu, G., & Zhou, Y. (2018). Financial literacy and retirement planning: evidence from China. *Applied Economics Letters*, 25(9), 619–623.
- Nnakwu, A. C., & Borlund, C. (2017). *Incorporating CSR with Corporate Strategy: A Case Study of Electrolux Professional Laundry*.
- Nugroho, S. H., Bando, A., & Nugroho, A. (2023). Strategic Review Of Digital Technology Transformation Towards The Era Of Digital Culture. *Journal Asro*, 14(04), 4–10.
- Rahmat, F., Rahmat, S. T. Y., Rhian, I., & Semerdanta, P. (2019). The role of service quality and customer Satisfaction: a case study for applications of Go-Food. *Russian Journal of Agricultural and Socio-Economic Sciences*, 91(7), 263–269.
- Shin, S., & Eksioğlu, B. (2014). Effects of RFID technology on efficiency and profitability in retail supply chains. *Journal of Applied Business Research*, 30(3), 633.
- Sitanggang, M., Syah, T. Y. R., Iskandar, M. D., & Hamdi, E. (2023). Analisis Penerapan Manajemen Operasional Pada Digital Bank For Kids (Dex Junior). *Journal of Economic, Business and Engineering (JEBE)*, 5(1), 100–108.
- Wahyuningtias, A. H., & Nugroho, S. H. (2023). The Influence Of Transformational Leadership And Person-Organizational Fit On Innovative Work Behavior Through Knowledge Sharing Behavior In Formal Education Units. *Jurnal Pamator: Jurnal Ilmiah Universitas Trunojoyo*, 16(1), 190–204.

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