Executing Quality Management Tools to Enhance Customer's Journey at a Clothes Laundry Firm

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Abstract

Purpose: This project aims to assess and enhance the customer's journey at a laundry company in Saudi Arabia from when the customer arrives at the parking lot of the laundry store until receiving the services and payment. Design, methodology, approach: A mixed-method approach was employed, in which qualitative data were gathered from focus group interviews and solo interviews, and quantitative data were gathered through the survey. Moreover, Quality Management Tools were used to build the action plan and offer conclusions and recommendations that would enhance the customer's journey and improve satisfaction. Findings: Services quality issues are categorized into five categories: promotions, human resources; services; detergent products, and facilities. House of Quality represents the highest 15 prioritized solutions. These recommended solutions' relative weights range between 9% to 4%. The use of these tools highlights areas for improvement and the root causes of each

issue. The seven quality tools are trustworthy tools to conquer challenges faced by the company and may be effective in improving service quality to positively strengthen organizational performance, customer satisfaction, and success. Originality, value: There are limited studies practically employing the seven Quality Management Tools to enhance customer satisfaction and improve their journey. The Saudi laundry market specifically has a dearth of this type of study. Furthermore, this market has seen rapid growth since it is known as a part of the SME sector in recent few years.

Keywords: Quality Management Tools, Customer Journey

Introduction

The clothes laundry sector has been growing significantly as demographics have changed, and new generations require this kind of service (Interview, 21st Feb 2022). This growth has been linked to the trend of empowering women at work, creating an increase in demand. Dry cleaning, clothes washing, and laundry services are growing in popularity as a cost-effective and convenient alternative for today's busy consumers. It is expected that the working female population will continue to grow in Saudi Arabia and that spending on clothes and cleaning services will increase in the future. It is a common habit for people need to wear clean and neat clothes; therefore, the targeted segment is the entire population. Similar to other industries, the laundry industry has evolved and gradually grown to be an indispensable service, a move that has consequently led to annual revenue yields estimated at $60.88billion (Grand View Research, 2021). Indeed, several sector services, including industrial sectors, have contributed to this growth, as well as a number of social factors, such as the increasing number of single-person households and the rapid pace of urbanization. Globally, it is estimated that the laundry and service industry will reach $75.1billion by the period 2025, a growth of 4.2% CAGR (GIA, 2022). Dry cleaning and laundry services in Saudi Arabia performed as well as expected and experienced an upsurge in demand amid the many challenges that came following the Covid-19 outbreak. Identified as KSA’s largest category in homecare (Report Linker, 2022), laundry services grew exponentially, a trend that has been attributed to rapid urbanization, the urbanization of new markets, and the involvement of women in the workforce.

The chosen firm is a leading laundry brand across the Kingdom of Saudi Arabia. The company has operated in this industry since 1982 with more than 25 branches in one city. The subsidiary company also started a new model in 2017 with 10 branches in one City. In terms of future goals, the company will expand and grow to other main regions and cities; its plan is to reach 20 branches by 2025. From a laundry perspective, numerous studies have been

undertaken, specifically evaluating service quality in laundry-care settings. For example, Amoako (2022) notes that the service environment, of which laundry care is part, holds a strong link between service quality and customer satisfaction. As such, the authors highlight a number of ways through which these businesses can improve service quality in a bid to differentiate service offerings and eventually ensure customer satisfaction. Service quality also has a direct positive effect on consumer loyalty in that high service quality leads to high customer satisfaction, which later leads to their loyalty (Amoako, 2022). With increasing growth opportunities comes increased competition, and the Saudi laundry market has not been spared. However, as Yee, Yeung, and Cheng (2010) point out, optimizing operational processes is a proven method for successfully providing value to customers and meeting, or exceeding, consumer expectations. Among the many methods through which service companies exercise operational optimization is by observing service quality. Considered a critical concept in the service business, service quality has emerged as a critical element used in the evaluation of customer service, specifically used in identifying and closing gaps between customers' normative service expectations and their views of the service's performance (Al-Azzam, 2015). Indeed, with the need to determine or evaluate the performance of a given entity comes the need to quantify or identify attributes that aid in measuring the entity's performance. In this case, the ServsQual dimensions are an effective tool used in measuring service quality. The dimensions hold five specific attributes or dimensions which aid in evaluating functional service quality (Yarimoglu, 2015). Reliability analyzes how well a firm performs a promised service, specifically looking into the firm's dependability and accuracy in delivering services. Some common items evaluated include the timeliness of the service provided and dependability, as well as accuracy linked to record keeping. According to Ramya, Kowsalya, and Dharanipriya (2019), reliability is defined in the context of service quality as the ability to be dependable and accurate when performing a pre-defined service standard. Responsiveness describes a firm's willingness to give customers undivided attention, informing them when things will be done, and responding to requests accordingly (Pakurár et al., 2019). The service quality dimension focuses on staff punctuality, commitment, and punctuality when dealing with customers. Moreover, responsiveness is mostly concerned with assessing a business's desire to assist consumers and deliver a rapid service. Therefore, firms often evaluate their promptness in performing tasks, avoiding excuses or notices of when customers should expect services to be performed or avoiding long queuing scenarios (Al-Azzam, 2015). Tangibles, in terms of service quality, describe a firm's physical facilities and appearance (El Saghier, 2015), specifically referring to the physical representation of a service firm that customers use to evaluate quality. This dimension also influences a

firm's brand image. Tangibles largely entail a look into a firm's physical facilities, equipment, and materials, as well as its representatives Al-Azzam (2015) also emphasizes the importance of including physical ambient conditions, emphasizing how this element demonstrates service providers' care and attention to detail. The assurance dimension is defined as the staff's knowledge, skills, courtesy, and ability to instill trust and confidence among customers (Ramya, Kowsalya, & Dharanipriya, 2019). Job skills, knowledge, accuracy, and courtesy, are among the critical focuses of the assurance service quality dimension. According to Pakurár et al. (2019), assurance involves informing customers and listening to them regardless of defining factors such as age, nationality, and educational level. The empathy dimension is defined by Rashid et al. (2019) in the context of service quality as the resultant respect and affection from personal contact with customers. A service provider should establish policies and procedures to strengthen their relationship with clients, staff, and other interpersonal relationships. Customers should always feel valued and prioritized by a service provider. As such, empathy largely details the need to offer care or individualized attention to clients, which can be manifested as approachability, sensitivity, and efforts to understand customer needs, particularly by becoming more welcoming or providing personal attention to clients' needs. Finally, according to Ahrholdt, Gudergan, and Ringle (2017), satisfaction is defined as the state of a process end in which customers subjectively evaluate perceived benefits drawn from a service. This dimension specifically refers to a cognitive assessment of the extent to which the service delivers and the level of fulfillment gained from the consumption of a specific services.

Since the company seeks to expand over the country, the central aim of this project is to help it to maximize its understanding of the customer needs and wants, listening to them prior to the expansion and aggressive growth. Moreover, the project evaluates and helps to improve the customer journey in the company from the moment of their arrival until they obtain what they need. Therefore, to hear the customers' voices, ensure their satisfaction, and achieve the project objective, this research used a mixed-methods approach, including a qualitative data collection method through focus group interviews and a quantitative data collection method through a survey. The authors then used Quality Management Tools to generate an action plan and formulate decisions and recommendations that would develop the customer journey and increase satisfaction.

Focus Groups

For the focus groups, the authors organized a virtual meeting with three customers and three representatives from the organizations. The focus group lasted for approximately 60 minutes, and the main discussion topic was the

customer expectations regarding the laundry service, which would lead to their satisfaction, covering these areas: Promotions; Human resources; Services; Detergent products; and Facilities inside the stores.

Survey

Designing the Survey

The study's instruments were adapted from Parasuraman et al. (1988)'s SERVQUAL dimensions and expanded based on data gathered from focus group sessions. For all items, five-point Likert-scale responses were used, with "1" indicating severe disagreement and "5" indicating strong agreement. Initially, when the questionnaire had been translated into Arabic, both versions were sent to academic colleagues and professionals in order to assess both content and face validity. They were asked to evaluate if the questionnaire questions were clear and rationally presented (face validity) and to express their opinion on whether the items reflected the research variables (content validity). The questionnaire was then sent to the project director feedback for further comments and modification in order to receive clearance for the questionnaire validation and dissemination. Such procedures contribute to the validity and reliability of the questionnaires for the purposes of the study.

Subsequently, a pilot study test was performed to test the questionnaire's reliability and validity (Table 1). To analyze reliability, Cronbach's alpha was used as it is a widely used measure of internal consistency and would be key in determining the questionnaire's reliability (Tavakol, & Dennick, 2011). As a rule of thumb, for reliability statistics, Cronbach's alpha values should be > 0.70 (Hair et al., 2014; Nunnally, 1994). Moreover, the correlation method was implemented to analyze the validity of the questionnaire since it involved looking for relationships between variables. (MacKenzie, 2012). When testing the reliability and validity of the empathy dimension, one item was deleted because its correlation was not significant and caused a decrease in Cronbach's alpha for this dimension from 0.923 to 0.836. Moreover, three items were removed from the additional services dimension because they neither correlated nor significant with the total correlation value. The mean and standard deviation for each item in the survey was tested, which shows the current level of customer satisfaction is 3.98 out of 5. Therefore, customers are relatively satisfied with the current service quality.

Table 1. Measuring the Reliability and Validity of the Questionnaire

Main Factor	Code	Dimension/Question Area	Cronbach's Alpha	Total Correlation
Tangibles	TA1	The company has up-to-date equipment in the branch that I recently visited.	0.873	0.601**
	TA2	In general, the physical facilities in the branch that I recently visited are visually appealing.		0.574**

	TA3	Employees were well-dressed/neat in the branch that I recently visited.		0.642**
	TA4	The facility that I recently visited has a waiting area.		0.650**
	TA5	The waiting time is appropriate and reasonable at the facility that I recently visited.		0.772**
	TA6	There is an adequate and suitable parking space at the facility that I recently visited.		0.559**
	TA7	The air conditioning inside the facility that I recently visited is appropriate and convenient.		0.409*
	TA8	The facility that I recently visited smelled appealing.		0.746**
	TA9	There is appropriate and convenient packaging for clothes when received.		0.832**
Reliability	RE1	The company responds to the customers within the promised timeframes.	0.951	0.820**
	RE2	The company is dependable for cleaning services.		0.902**
	RE3	The company is dependable for ironing services.		.905**
	RE4	The company provides cleaning services within the agreed times of service.		0.875**
	RE5	The company provides ironing services within the agreed times of service.		0.901**
	RE6	The company keeps accurate records about the customer's invoices.		0.846**
	RE7	The services provided on my last visit suited my expectations and needs as a customer.		0.724**
	RE8	Every time that I visit the company's facilities, I receive the same quality service.		0.588**
	RE9	The company provides a special service of washing each customer's clothing separately.		0.808**
Responsiveness	RS1	The company informs customers exactly when the service will be performed.	0.942	0.859**
	RS2	Employees are always ready and willing to help customers.		0.799**
	RS3	Employees welcome and respond to special requirements from the client such as increasing starch folding or hanging clothes.		0.865**
	RS4	Employees respond quickly if something goes wrong to solve the problem, such as missing clothes or wrong pricing for a service provided.		0.882**
Assurance	AS1	The employees are trustworthy.	0.943	0.902**
	AS2	Customers feel safe when dealing with employees.		0.905**
	AS3	The employees are polite.		0.875**
	AS4	Employees respond to customer inquiries with a clear answer.		0.867**
	AS5	Employees advise choosing the appropriate service according to my needs		0.789**
Empathy	EM1	The company gives individualized attention to each customer.	0.923	0.745**
	EM2	The employees give individualized attention to each customer.		0.819**
	EM3	Employees prioritize the needs of the customers.		0.754**

	EM4	The company operates at hours convenient to the customer.		0.819**
	EM5	Employees fully understand the needs of the customer.		0.820**
Additional services	AD1	I wish that the company provided pick up and home delivery.	0.902	0.735**
	AD5	I wish that the company provided cleaning products available for purchase.		0.829**
Satisfaction	SA1	The provided service of laundry and ironing are excellent and professional.	0.953	0.820**
	SA2	I consider this service my first choose.		0.754**
	SA3	My overall experience with the provided service y service satisfies me.		0.819**
	SA4	I recommend this service to people who seek my advice.		0.820**
	SA5	The price of the ironing service is appropriate and suitable for the quality of the service provided.		0.902**
	SA6	The price of the laundry service is appropriate and suitable for the quality of the service provided.		0.905**
	SA7	I am completely satisfied with the company's complaints system.		0.875**
	SA8	I am completely satisfied with the compensation system in the event of loss or damage to clothes.		0.901**

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).

Distributing the Survey

The study population was comprised of customers who use dry cleaning services. The survey was distributed electronically through the online link and a printed QR code was pasted in all the laundry's branches. The survey used a simple random sampling, giving each customer the same opportunity to participate in the questionnaire (Fleiss et al., 2013). 131 complete responses were received and used in subsequent stages.

Customer Journey Map

The Customer Journey Map is a technique for tracking and analyzing customer experience and evaluating the quality of a service or process. The Customer Journey Map is a time-based, linear representation of the main stages that a customer goes through when interacting with a company or service (Mangiaracina & Brugnoli, 1970). Customer experience is primarily a process that begins with a beginning entry point and progresses to an endpoint based on users' intentions, motivations, and goals. This experience flow is divided into key stages using Customer Journey Mapping. Starting with an analysis of the user's behavior, specific goals, intentions, touchpoints, tools, and issues are identified in each stage. Finally, the emphasis shifts to the connections and dynamics that exist among stages (Mangiaracina & Brugnoli, 1970). Figure 1 presents customer experience in laundry, which is structured

into five key stages beginning with the site visiting, the catalog of service browsing and/or request, and the service operational serving, receiving the service selection, and the final checkout process with payment.

Figure 1. Customer Journey Map (Developed by the Authors)

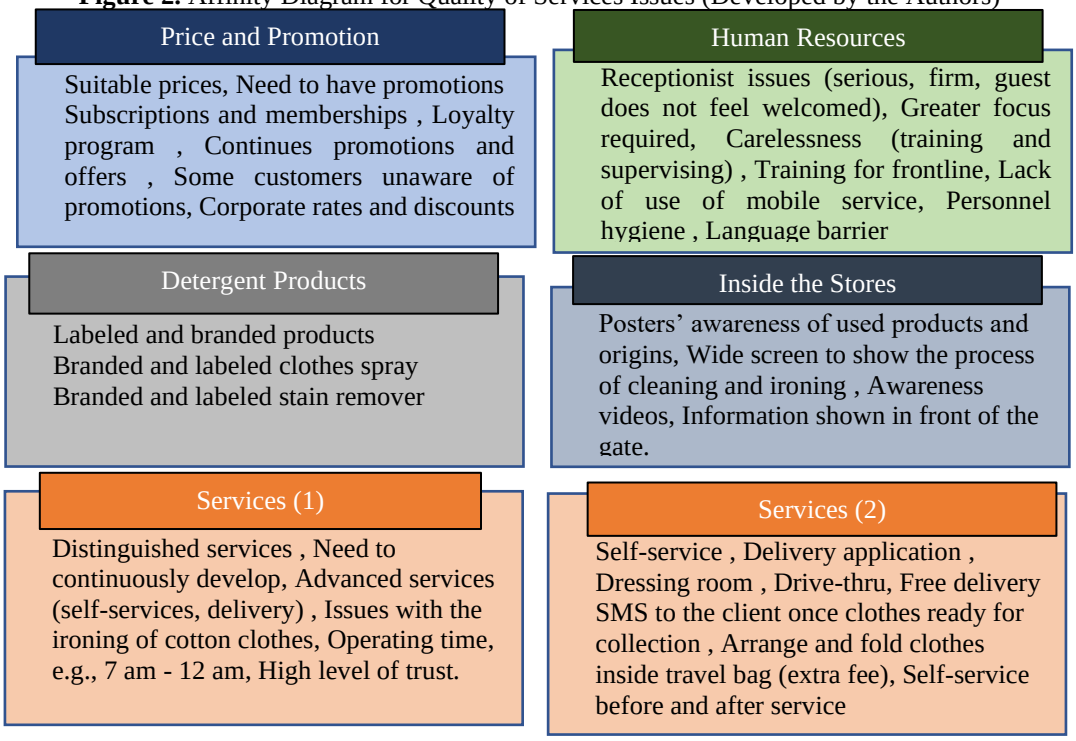
Customer Journey Map						
Stage		Visiting	Requesting	Serving	Receiving	Payment
Responsibility Department	Customer Services					
	HR					
	Operational Service					
	Stock					
	Sales					
	Accounting					
	Top Management					
Customer Feeling						
Overall Rating		3.95	4.03	3.95	4.03	3.97

Quality Management Tools

Affinity Diagram

The affinity diagram is a quality management and planning tool; it is useful in capturing, collecting, categorizing, classifying, and grouping ideas, and brainstorming (language phrases) into commonly shared ones (Widjaja & Takahshi, 2016; Awasthi & Chauhan, 2012; Cheng 2014). This tool helps to understand, organize, realize trends, and avoid duplicates. The information categorized in the affinity diagram is considered a starting point for analysis and input with other tools (Carnevalli & Miguel, 2008). From the focus group, interviews, and questionnaire responses, the outcomes were separated into five groups (see Figure 2):

Figure 2. Affinity Diagram for Quality of Services Issues (Developed by the Authors)



Interrelationship Diagram

The relationship diagram, also known as an interrelationship diagram or network diagram, depicts cause-and-effect relationships that exist between issues. This quality management tool assists the business group in understanding relationships among different aspects of a complex group of factors that influence problem-solving (Marinescu et al., 2010). It begins by drawing the relational connections that appear in the affinity diagram, which necessitates a highly creative process. The following relationships are extracted from the logical relationship between groups in this study see figure 3 below.

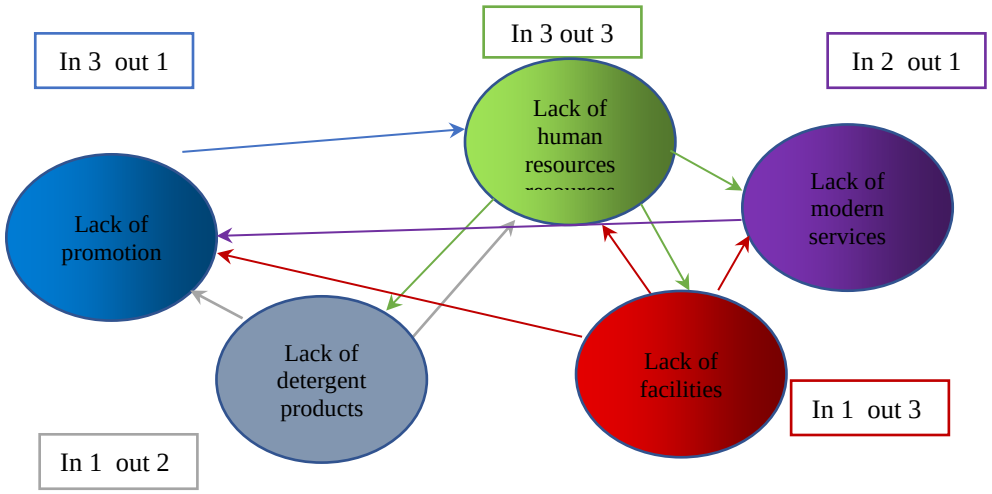


Figure 3. Interrelationship Diagram (Developed by Authors)

Tree Digram

The Tree Diagram, also known as a tree analysis, and analytical tree, or a hierarchy diagram, is just one type of mind map (Jones et al., 2001). Whereas a mind map has a central idea surrounded by branches of related ideas, a Tree Diagram has a diagram that looks like a tree. This method is used to find increasingly fine levels of detail in a complex problem and is beneficial in progressing from generalities to specifics in small steps. The method beings with a single node and branches out to other nodes that represent mutually exclusive decisions or events (Wat et al., 2020).

A Tree Diagram is used when thoroughly evaluating complex processes to achieve the resonance condition in a short period of time or when an organization must investigate whether the root cause produces a specific effect, i.e. the problem to be solved, or weigh the pros and cons of various potential solutions in successfully implementing them (Marinescu et al.,2010). The Tree Diagram for this project is presented in Figures 4a-4e, the diagram has been until it reaches the desired level of detail. The Tree Diagram is a unique approach for grouping ideas and clearly documenting them (Jones et al., 2001; Marinescu et al., 2010). This diagram begins with its "root," which is a central or key idea and is followed by related and derived ideas.

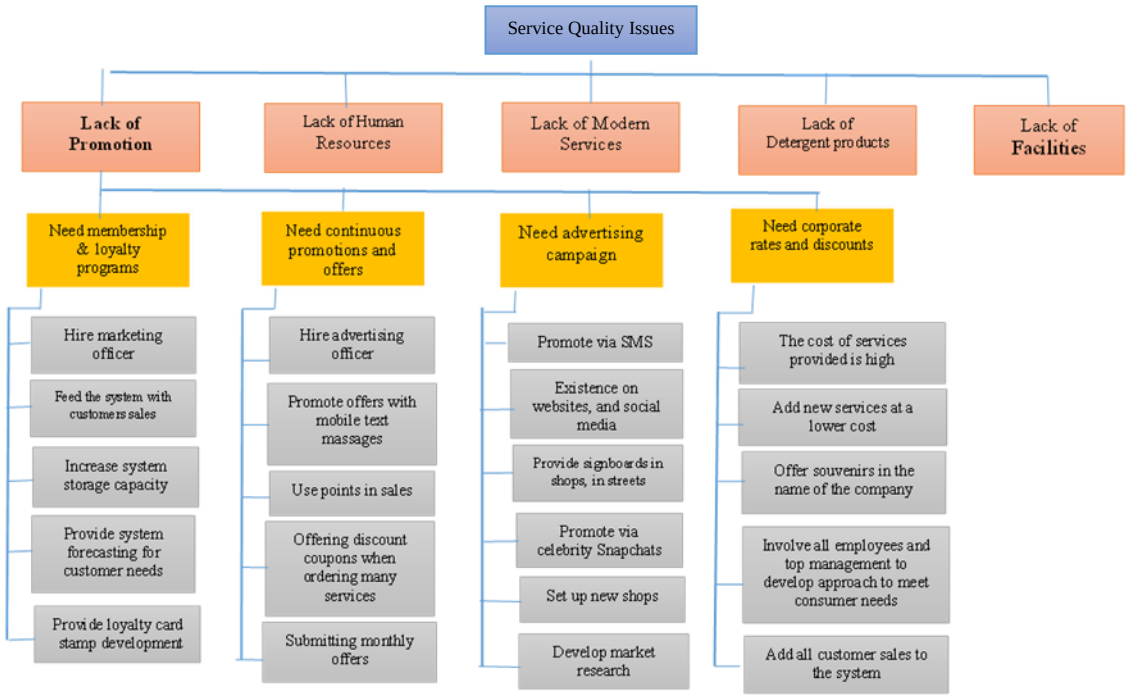


Figure 4a. Tree Diagram for Lack of Promotion Issues (Developed by the Authors)

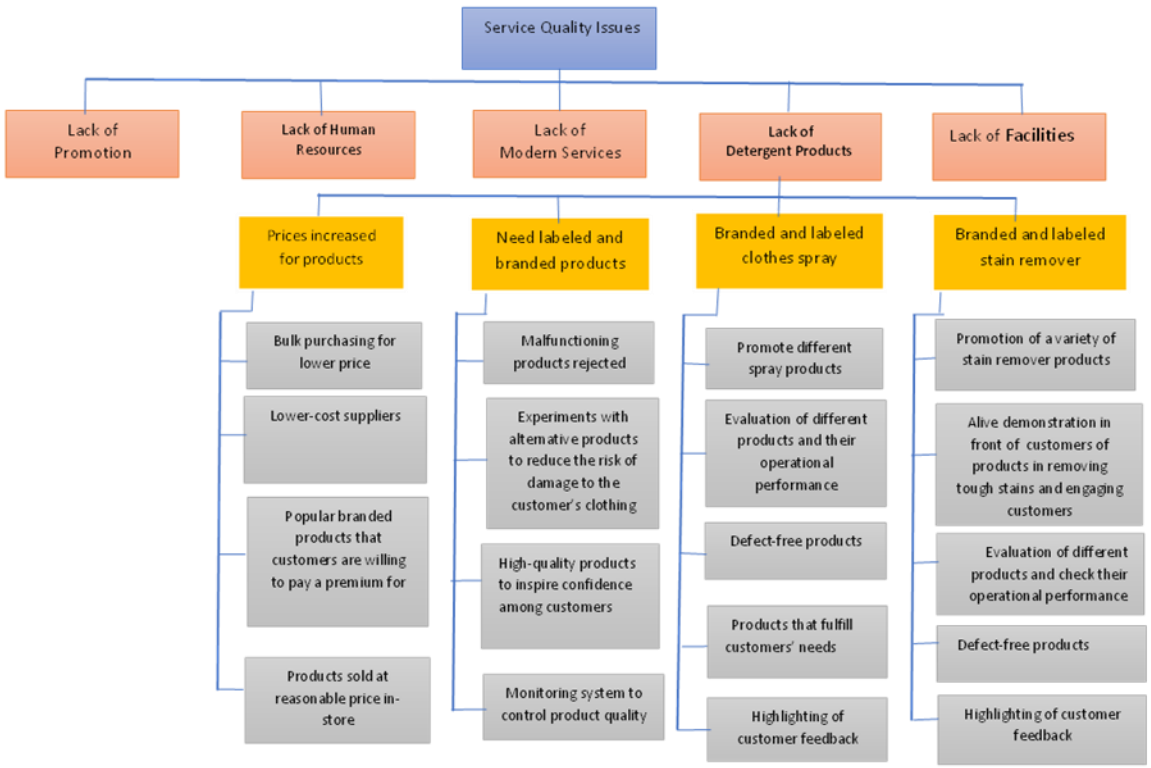
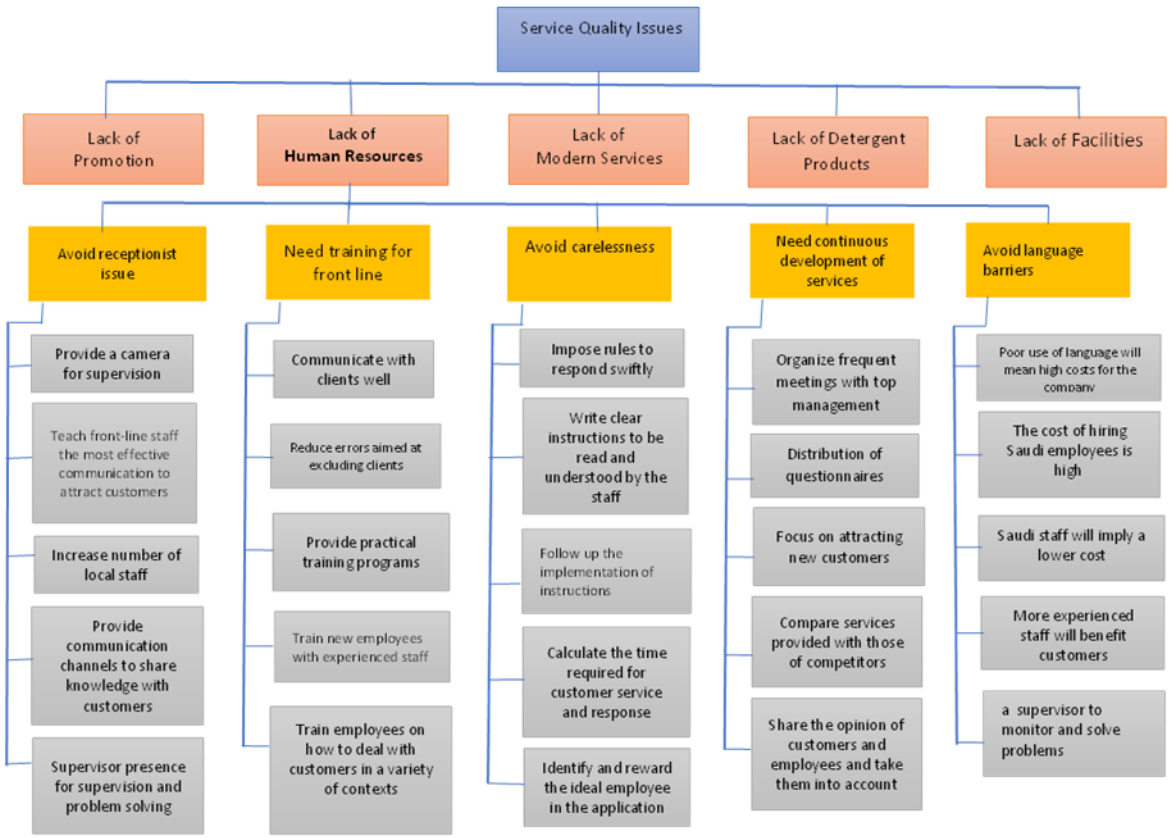


Figure 4b. Tree diagram for Lack of Detergent Products (Developed by the Authors)



4c. Tree Diagram for Lack of human resources (Developed by the Authors)

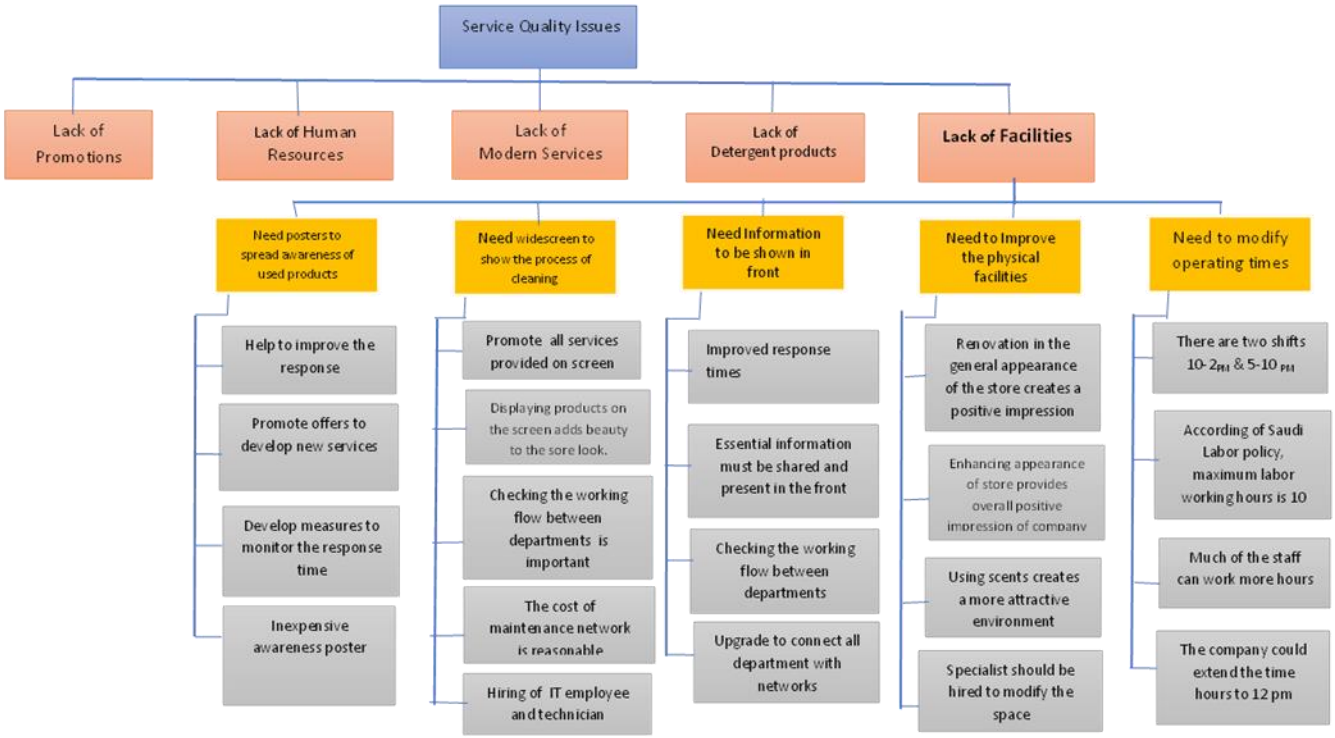
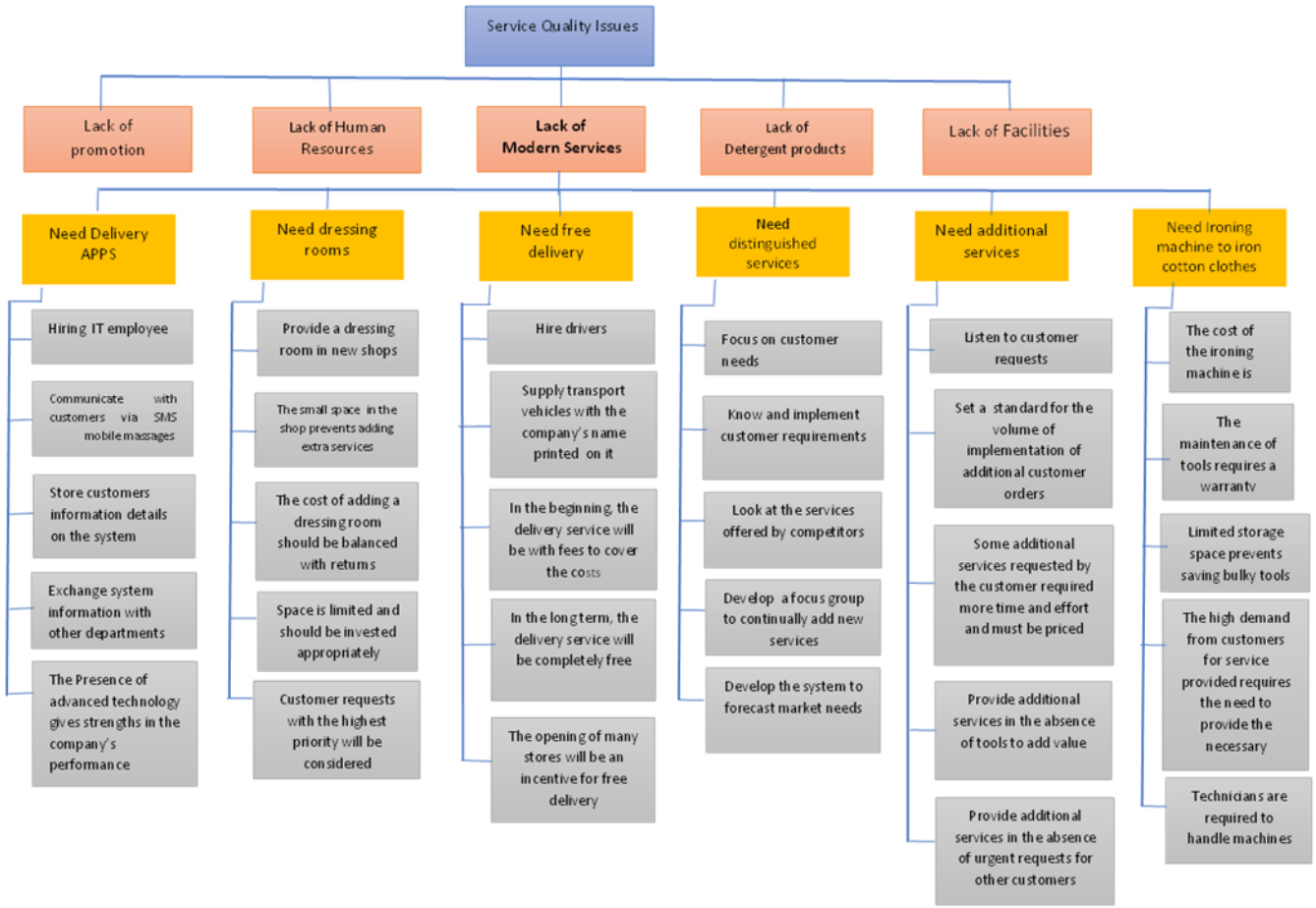


Figure 4d. Tree Diagram for Lack of Facilities (Developed by the Authors)



4e. Tree Diagram for Lack of Modern Services (Developed by the Authors

Process Decision Program Chart (PDPC)

The process decision program chart (PDPC) is a new management planning tool that systematically identifies what might go wrong in a plan under development. Countermeasures are developed to prevent or offset those problems. PDPC involves either revising the plan to avoid the problems or being ready with the most effective response when a problem occurs (Popescue & Gîrboveanu, 2017).PDPC is a new management planning tool that systematically detects what may go wrong in a plan being developed as the process decision program chart (PDPC). Efforts are made to minimize or mitigate these issues, and preventing issues is easier using PDPC than dealing with them after they have already occurred. There are two primary purposes for PDPCs, namely documenting the steps necessary to complete a process and conducting an effect analysis (Popescue & Gîrboveanu, 2017). A rigorous investigation of the process and what may go wrong is the objective of PDPC. This project management tool is useful in the DMAIC Improve phase before executing a plan and is useful in the analysis following process mapping to confirm the grasp of the current status (Levesque & Walker, 2007). PDPC charts, as a six-sigma tool, are not used on every project because they may not be necessary and require time and work to implement. PDPC is recommended when one, in the near future, starts a new procedure. PDPC is also important when one is working on a vast complex project (Mizuno & Bodek, 2020).The PDPC chart hosts solutions to the issues listed in the tree diagram as seen in Figures 5a-5e. The solutions are in the green boxes, and the possible drawbacks are in yellow followed by another green box for the solution to the drawback.

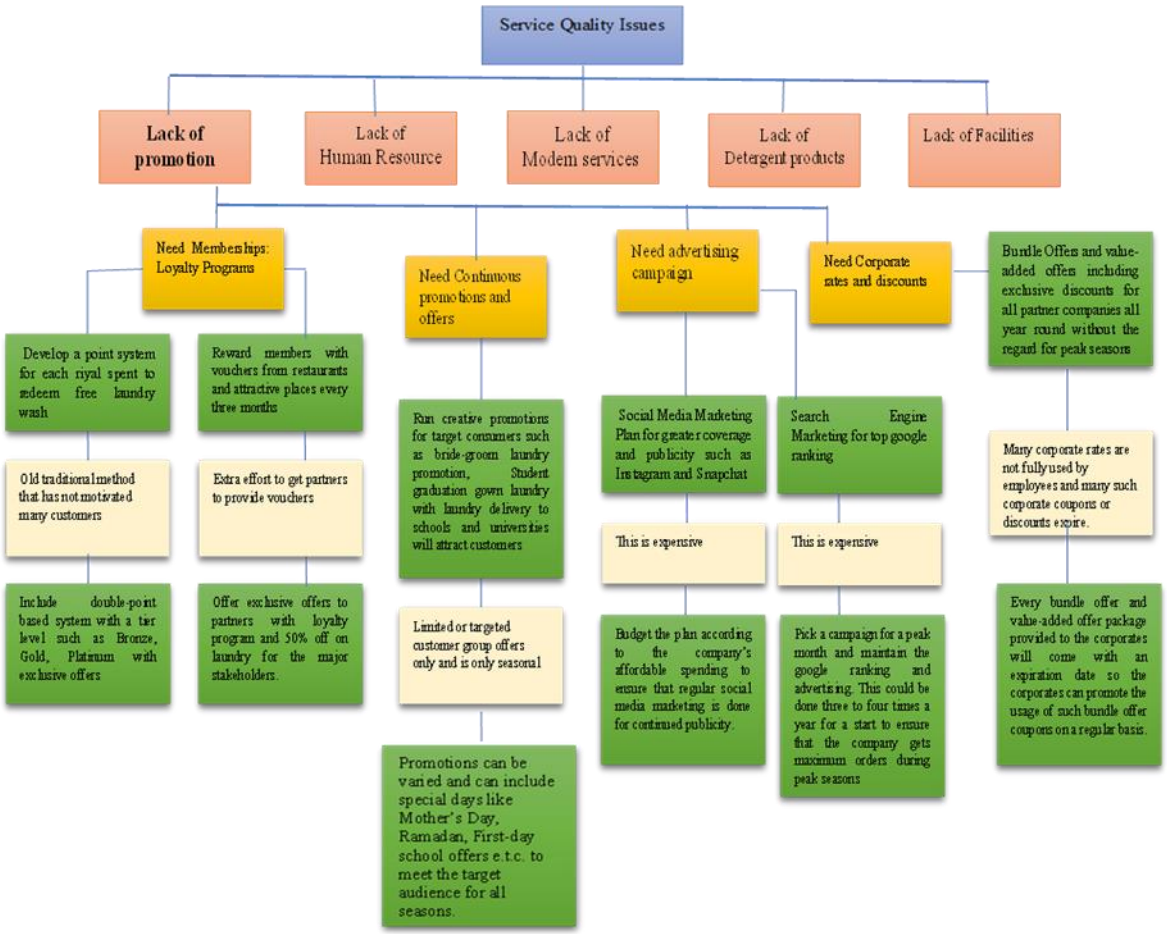


Figure 5a. PDPC Lack of promotions (Developed by the Authors)

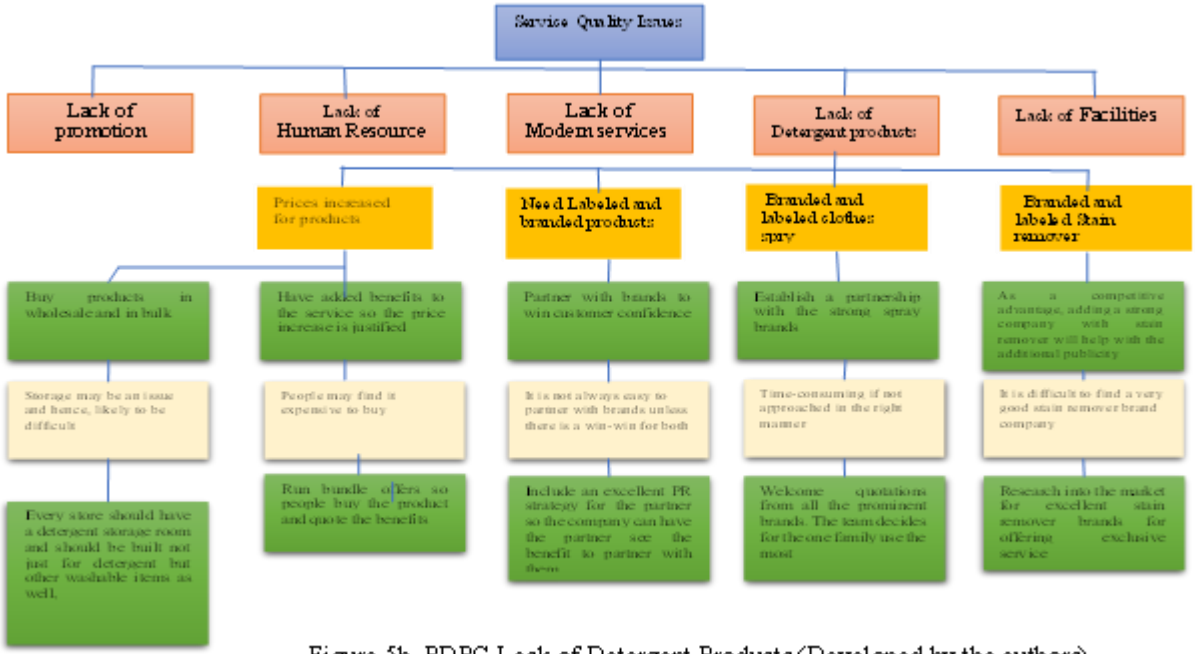


Figure 5b. PDPC Lack of Detergent Products (Developed by the authors)

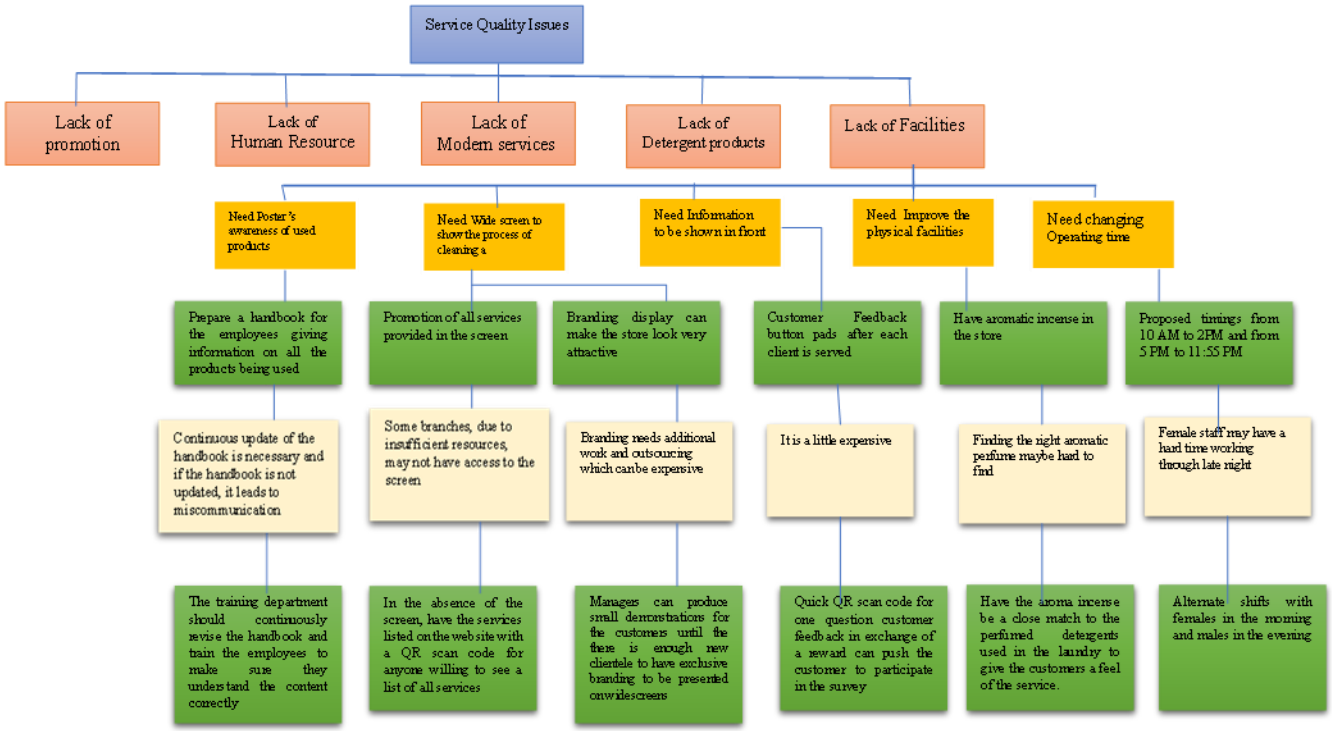


Figure 5c. PDPC Lack of Facilities (Developed by the Authors)

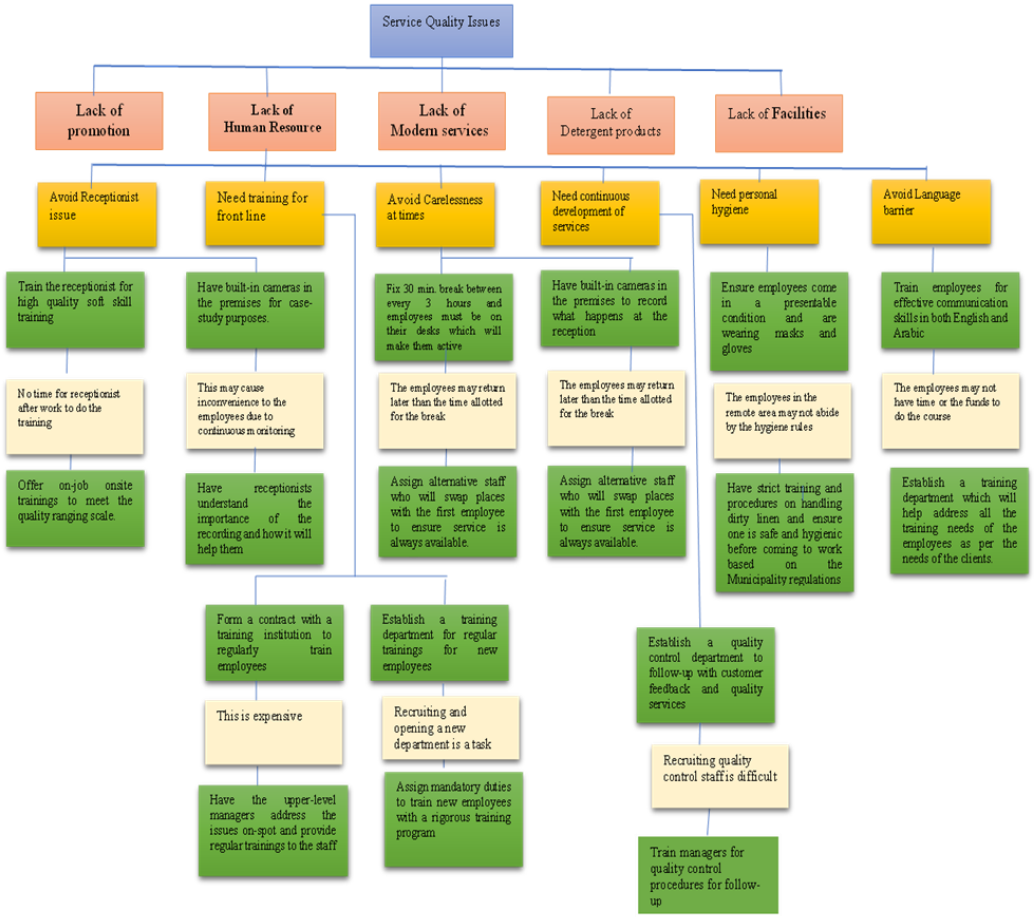


Figure 5d. PDPC Lack of Humen resorcues (Developed by the Authors)

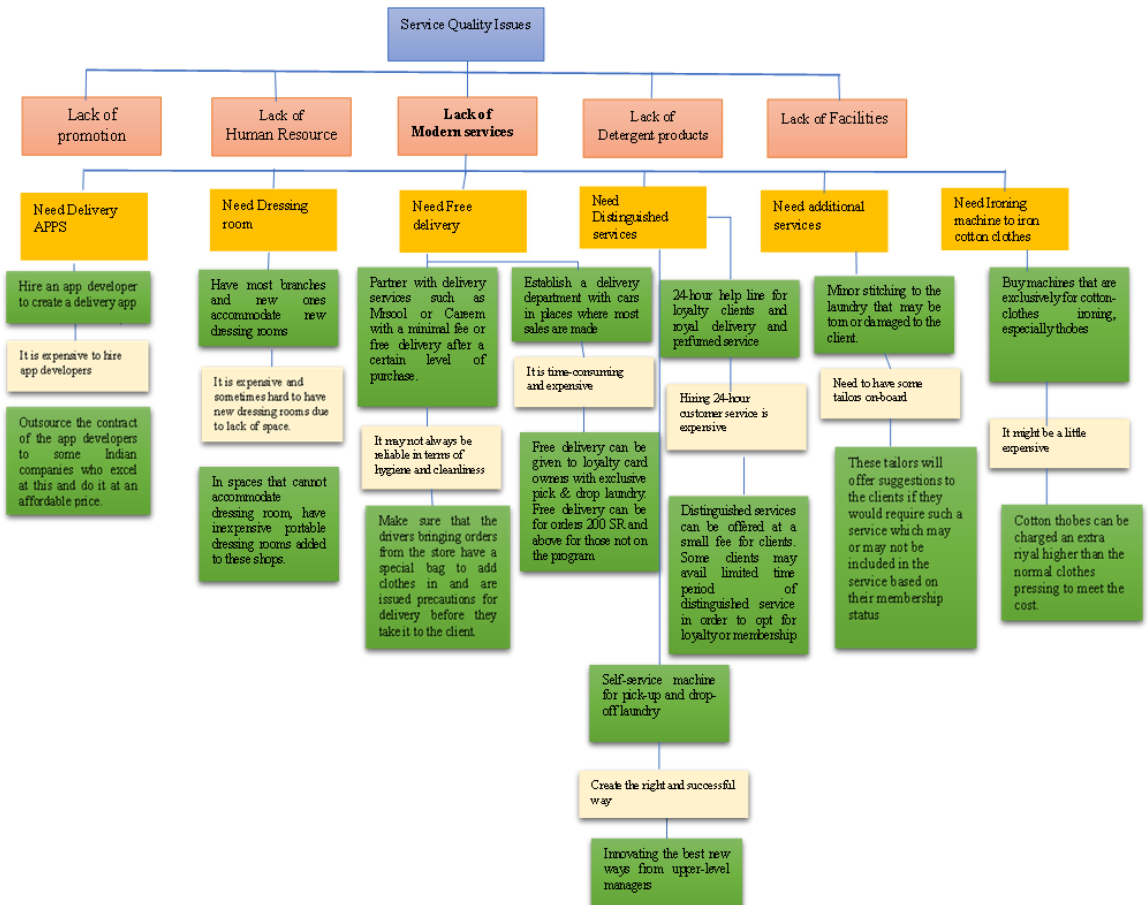


Figure 5e. PDPC Lack of modren services (Developed by the Authors)

Matrix Diagram

A Matrix Diagram is defined as a new management planning tool used for analyzing and displaying the relationships among data sets. The Matrix Diagram presents the relationship between two, three, or four groups of information (ASQ.org). The connection between two, three, or four groupings of information is shown by a Matrix Diagram (Madigan, 1993). This diagram may also provide information on the relationship between distinct people or metrics, such as the strength of the link. It is possible to create six different-shaped matrices, depending on how many groups must be compared: L; T; Y; X; C; and roof-shaped. This diagram outlines all the aspects of the PDPC diagram and rates them in terms of value and relationship for each of the initiatives wherein they are rated based on their strong, medium, weak, or no relationship, allowing the authors to determine which tenants are important. See Tables 4a-4e.

Table 3. Matrix Diagram Symbol Value

Symbol	•	○	▼	
Value	9	3	1	
Relationship	Strong	Medium	Weak	No relationship

Table 4a. Matrix Diagram for Lack of Promotion

Lack of Promotion	A point system for each riyal spent	Rewards for members with vouchers	Creative promotions	Social media marketing plan	Search Engine Marketing	Bundle offers and value-added offers
Membership and Loyalty Programs	•				▼	•
Continuous promotions and offers	▼	○	•	•	•	•
Advertising campaign		•	○	•	•	•
Corporate rates and discounts	•	○	○	▼		○

Table 4b. Lack of Human Resources

Lack of Human Resources	Training for receptionist	Built-in cameras	30-minute break every three hours	Employees in presentable clothes	Training employees for effective communication	Quality control department to follow up with
Avoid receptionist issues	•	•	•	•	•	•
Training for front line	○			•	•	▼
Avoid carelessness at times	○	•	•	▼	○	•
Continuous development of services	•				•	•
Personal hygiene		•		•		○
Avoid language barrier	•	•		▼	•	•

Table 4c. Lack of Modern Services

Lack of modern Resources	Hiring app developer	build new dressing rooms	Partnership with delivery services	A delivery department with cars in places	24-hour helpline	Minor stitching service	Machine exclusively for cotton clothes	Self-Service machine
Need delivery apps	•		•	○				•
Need dressing room		○				○		
Need free delivery			○	•	▼			•
Need distinguished services	•	○	○	•	•	○	•	•
Need additional services	○		○	○	•	•	•	•
Need ironing machine						○	•	

Table 4d. Lack of Detergent Products

Lack of Detergent Products	Buying of products in wholesale	Services with added benefits	Partnerships with brands to win	Partnerships with strong spray bran	Partnership with a strong stain-removing company,
Price increase for products	•	○			
Labelled and branded products	•	•	•	•	•
Branded and labelled clothes spray	•	•	•	•	•
Branded and labelled stain remover	•	○	▼	▼	•
Additional services	•	○		▼	

Table 4e. Lack of Facilities

Lack of Facilities	Handbook for employees	Promotion of all services on disply	Branding display	Customer feedback button	Aromatic incense in the store	extended opening hours
Posters to promote awareness	•	•			•	
Widescreen to show the process of cleaning	•	•	○	•	▼	
Information to be shown in front of the store	○	○	○	•	○	•
Improved physical facilities	○	○	•	○	○	•
Changed operating times	○	○	▼	○		•

Prioritization Matrix

A Prioritization Matrix is a useful technique for identifying which problems are the most important to work on solving first. The use of appropriate tools is critical to project success. Another kind of matrix is the Prioritizing Matrix. When used in conjunction with specified criteria, this matrix is known as a Criterion or Priority Matrix. This business analysis tool enables people and project teams to objectively assess possibilities, allowing them to identify some aspects like: Which initiatives are of the utmost importance? Which of these provides the greatest value to the firm? Which of them has the highest prospects of success? So, when it is utilized effectively, this approach is dependable conflict management and resolution strategy that also serves as a more efficient means of choosing projects on which teams must concentrate their efforts (Tovar-Perilla et al., 2018). Tables 5a and 5b show the Prioritization Matrix and its rankings. Moreover, the tables are divided into technical requirements listed vertically along with the importance

score and ranking. The overall importance score is on the bottom, in terms of which the tasks are to be prioritized for the departments or teams to work on.

Table 5a. Prioritization Matrix Ranking

Customer needs (CN)	Technical requirements (TR)																		
	Importance 1-5	TR1: Develop a point system for each riyal spent to redeem the free laundry	TR2: Reward members with vouchers from restaurants and attractive places often	TR3: Run creative promotions such as bridge-groom, students etc	TR4: Social media marketing plan for Instagram and snapchat for greater publicity	TR5: Bundle offers or value-added offers for companies	TR6: Staff trainings for soft skills and language	TR7: Built-in cameras to record reception situations	TR8: Ensuring employees to come in proper uniforms and masks	TR9: Partner with services such as Careem for delivery	TR10: 24-hour helpline for loyalty clients and perfumed delivery service	TR11: Minor stitching to the tom or damaged laundry on client' s request	TR12: Buy machines exclusive for cotton clothes ironing	TR13: Prepare a handbook for employees for used products tutorial	TR14: Branding on widescreen display	TR15: Customer feedback buttons	TR16: Aromatic incense in the store	TR17: Partner with brands for detergents, stains and spray.	TR18: Self-Service machine for drop-off and pick-up.
CN1: Loyalty programs	3	9	9	3	3	0	0	0	0	0	9	3	0	0	0	9	0	0	3
CN2: Promotions & Offers	5	3	3	9	9	0	3	0	0	0	3	0	3	3	0	0	0	0	3
CN3: Creative Advertising campaigns	3	0	0	9	9	9	0	0	0	0	0	0	0	0	3	0	0	0	9
CN4: Corporate rates and Discounts	4	9	9	3	1	9	1	0	0	0	9	3	1	3	0	3	0	0	3
CN5: Training for Employees	5	0	0	0	0	0	9	9	9	9	0	3	0	9	0	3	0	0	3
CN6: Personal Hygiene	4	0	0	0	0	0	9	9	9	1	0	0	0	0	0	9	9	0	0
CN7: Overcoming language barriers	4	0	0	0	0	0	9	9	0	0	9	0	0	9	0	0	0	0	0
CN8: App Development	4	0	0	0	3	0	0	0	0	0	1	0	0	0	0	3	0	0	9
CN9: Distinguished & Additional Services	5	9	3	9	3	0	0	9	0	9	9	9	0	9	9	9	9	0	9
CN10: Special ironing machine for cotton clothes	3	1	0	1	9	3	3	3	0	0	0	0	9	0	3	0	0	0	1
CN11: Branded detergents and sprays	5	0	0	0	0	3	0	0	0	0	0	0	0	9	9	1	3	9	1
CN12: Posters for Product Awareness	4	1	3	9	9	9	9	9	0	9	0	0	0	3	9	0	3	9	9
CN13: Large screens for visual marketing	4	0	0	0	0	0	3	0	0	9	1	0	0	3	9	3	0	9	9
CN14: Improving physical facilities such as set-up and furnishing	4	0	0	0	3	0	3	3	0	9	0	0	3	3	3	3	0	1	9
CN15: Add dressing room to all branches	5	0	0	0	0	0	1	3	3	9	0	1	1	3	3	9	3	0	0
Score (importance rating)		**130**	**106**	**177**	**187**	**108**	**210**	**234**	**96**	**247**	**167**	**86**	**63**	**249**	**207**	**221**	**123**	**121**	**260**

Table 5b. Prioritization Matrix Ranking

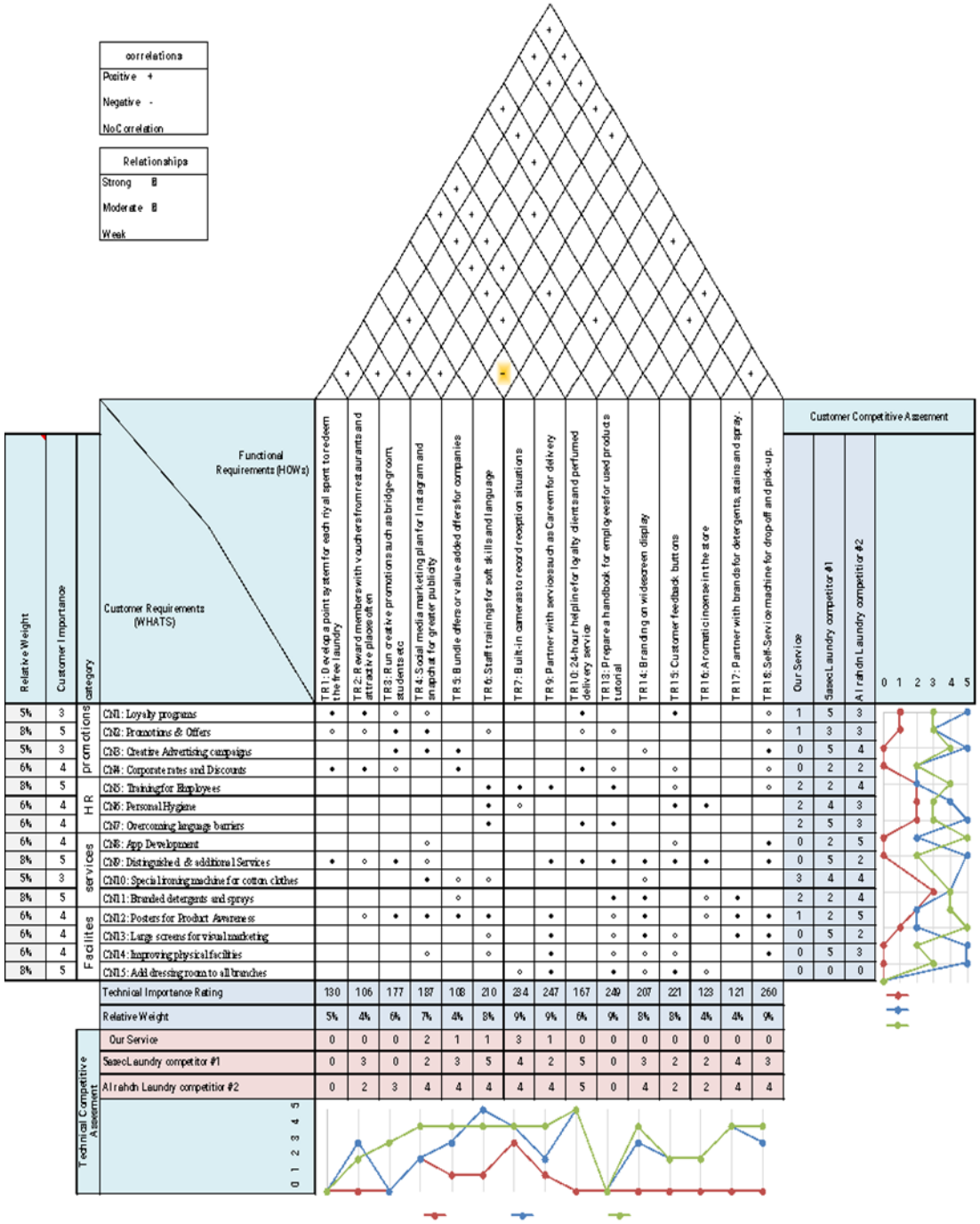
Customer needs (CN)	Importance 1-5	Technical requirements (TR)														
		TR1	TR2	TR3	TR4	TR5	TR6	TR7	TR9	TR10	TR13	TR14	TR15	TR16	TR17	TR18
CN1: Loyalty programs	3	9	9	3	3	0	0	0	0	9	0	0	9	0	0	3
CN2: Promotions & Offers	5	3	3	9	9	0	3	0	0	3	3	0	0	0	0	3
CN3: Creative Advertising campaigns	3	0	0	9	9	9	0	0	0	0	0	3	0	0	0	9
CN4: Corporate rates and Discounts	4	9	9	3	1	9	1	0	0	9	3	0	3	0	0	3
CN5: Training for Employees	5	0	0	0	0	0	9	9	9	0	9	0	3	0	0	3
CN6: Personal Hygiene	4	0	0	0	0	0	9	9	1	0	0	0	9	9	0	0
CN7: Overcoming language barriers	4	0	0	0	0	0	9	9	0	9	9	0	0	0	0	0
CN8: App Development	4	0	0	0	3	0	0	0	0	1	0	0	3	0	0	9
CN9: Distinguished & Additional Services	5	9	3	9	3	0	0	9	9	9	9	9	9	9	0	9
CN10: Special ironing machine for cotton clothes	3	1	0	1	9	3	3	3	0	0	0	3	0	0	0	1
CN11: Branded detergents and sprays	5	0	0	0	0	3	0	0	0	0	9	9	1	3	9	1
CN12: Posters for Product Awareness	4	1	3	9	9	9	9	9	9	0	3	9	0	3	9	9
CN13: Large screens for visual marketing	4	0	0	0	0	0	3	0	9	1	3	9	3	0	9	9
CN14: Improving physical facilities such as set-up and furnishing	4	0	0	0	3	0	3	3	9	0	3	3	3	0	1	9
CN15: Add dressing room to all branches	5	0	0	0	0	0	1	3	9	0	3	3	9	3	0	0
Score (importance rating)		**130**	**106**	**177**	**187**	**108**	**210**	**234**	**247**	**167**	**249**	**207**	**221**	**123**	**121**	**260**
Ranking		**11th**	**15th**	**9th**	**8th**	**14th**	**6th**	**4th**	**3rd**	**10th**	**2nd**	**7th**	**5th**	**12th**	**13th**	**1st**

Quality Function Deployment

Quality Function Deployment (QFD) is a Total Quality Management (TQM) tool used to develop customers' needs and expectations systematically. According to Kiran (2017), QFD is a structured approach that defines customer needs and expectations and uses them to establish plans and create products and services that meet these expectations. This approach involves capturing customer needs and requirements using surveys, observation, or field reports and summarizing the understanding as a product planning matrix used to translate product requirements and characteristics to satisfy customer needs (Kiran, 2017). The most significant usage of the QFD process in work quality improvement is translating customer needs and expectations into product and service specifications (Kiran, 2017). The researchers employed the House of Quality (HOQ), which is the main tool used in QFD. Figure 6 presents the HOQ for this study. Firstly, the voice of the customer was divided into five categories extracted from the Affinity Diagram with some adjustments (promotions, human resources, services, detergent products, and facilities). Below these categories, there was a list of 15 requirements collected from customer statements. The importance of each requirement was identified from 1 to 5. Next, technical requirements were imported from the PDPC, with a total of 68 solutions which was reduced to 15 requirements that hold the highest scores. The relationship aspect was brought in from the

prioritization matrix tool. The score of each technical requirement has been calculated; the highest score was 260 for self-services machine for drop-off and pick-up and the minor score was 5 for Partner with services such as Careem for delivery.The competitive evaluation involved three companies, the company under study and two other companies that focus on the same client segments. The company and competitors' services were assessed against customer requirements before employing the improvement actions, and the scale of this test was from 0 to 5. The roof was used to identify where technical requirements support (+) or impede (-) one another in the implementation. To summarize, the HOQ made use of management tools to develop and offer the most appropriate solutions for customer needs and to compete with its rivals in the market.

Figure 6. HOQ


correlations
Positive +
Negative -
No Correlation
Relationships
Strong
Moderate
Weak
Functional Requirements (HOWs)
Customer Requirements (WHATS)
Relative Weight
Customer Importance
category
TR1: Develop a point system for each riyal spent to redeem the free laundry
TR2: Reward members with vouchers from restaurants and attractive places often
TR3: Run creative promotions such as bridge-groom, students etc
TR4: Social media marketing plan for Instagram and snapchat for greater publicity
TR5: Bundle offers or value added offers for companies
TR6: Staff trainings for soft skills and language
TR7: Built-in cameras to record reception situations
TR8: Partner with services such as Careem for delivery
TR9: Partner with services such as Careem for delivery
TR10: 24-hour helpline for loyalty clients and perfumed delivery service
TR13: Prepare a handbook for employees for used products tutorial
TR14: Branding on widescreen display
TR15: Customer feedback buttons
TR16: Aromatic incenses in the store
TR17: Partner with brands for detergents, stains and spray.
TR18: Self-Service machine for drop-off and pick-up.
Customer Competitive Assesment
Our Service
SaeedLaundry competitor #1
Al rahdn Laundry competitor #2
0 1 2 3 4 5
5% 3 promotions CN1: Loyalty programs
8% 5 CN2: Promotions & Offers
5% 3 CN3: Creative Advertising campaigns
6% 4 CN4: Corporate rates and Discounts
8% 5 HR CN5: Training for Employees
6% 4 CN6: Personal Hygiene
6% 4 CN7: Overcoming language barriers
6% 4 services CN8: App Development
8% 5 CN9: Distinguished & additional Services
5% 3 CN10: Special ironing machine for cotton clothes
8% 5 CN11: Branded detergents and sprays
6% 4 Facilites CN12: Posters for Product Awareness
6% 4 CN13: Large screens for visual marketing
6% 4 CN14: Improving physical facilities
8% 5 CN15: Add dressing rooms to all branches
Technical Importance Rating 130 106 177 187 108 210 234 247 167 249 207 221 123 121 260
Relative Weight 5% 4% 6% 7% 4% 8% 9% 9% 6% 9% 8% 8% 4% 4% 9%
Technical Competitive Assesment
Our Service 0 0 0 2 1 1 3 1 0 0 0 0 0 0 0
SaeedLaundry competitor #1 0 3 0 2 3 5 4 2 5 0 3 2 2 4 3
Al rahdn Laundry competitor #2 0 2 3 4 4 4 4 4 5 0 4 2 2 4 4
0 1 2 3 4 5

Areas for Improvement

Promotions and Communications

A number of views were expressed surrounding promotions. Some customers requested having, others were not aware that there were promotions. Therefore, it appears that there is a communication gap that requires further improvement and development such as: Using different communication channels, such as SMS, WhatsApp, and social media. Also, use printouts and flyers and hang them on the clothes. Furthermore, make promotional messages at the end of invoices; and use screens inside the stores that not only show promotion but also educate and make customers aware of the entire process to create trust in the service, hygiene, process, and care.
Subscriptions, Memberships, and Loyalty Programs. The laundry service provider does not have any subscriptions, memberships, or loyalty programs. Customers expressed an expectation of receiving this service. Frequent customers mentioned that, on several occasions (i.e., questionnaires and customer focus groups), they expected to have a membership card or loyalty program where they could get special discounted prices or point systems that could be claimed as free services. There are some concerns with the implementation of this kind of service like systems should be able to track memberships, pointing programs, etc. Also, clear program terms and conditions with transparent policy. Moreover, Eligible customer and enrollment procedures; and a table of benefits and advantages.

Staff Issues

The results of the questionnaires highlight careless staff who use their phone when customers are present. Customers complained that they did not feel welcome. Additionally, language may be a barrier, which could be trained simply without complicated language. The following are suggestions to improve the service and develop a customer-oriented mindset, for example, orientation and awareness sessions are held frequently to create a customer-oriented mindset. Also, the design and development steps of the service call for each customer to visit the store and determine what is required from the staff to serve them, starting from smiling and receiving until leaving. Furthermore, it is recommended to have approximately four to six steps in the service industry: and assure that the approach is sustainable applied by using a secret customer approach, direct feedback from customers, and frequent visits from branch managers and supervisors.

Services

The results show a high level of trust in the services provided, which could be a strong competitive advantage that may be built on to sustain. Customers are satisfied with regular and traditional services but requested

different levels of modern services, such as a greater focus on cotton clothes in the ironing services. Also, drive-thru services would allow customers to access services from their car. In addition, customers want to be able to drop off their clothes and receive them after cleaning and ironing without dealing with others, which may require investment in technology and setup. Moreover, customers requested access to clothes machines and asked to be able to complete cleaning services by themselves. This service would provide greater privacy and assure that their clothes are cleaned alone without mixing with those of others. Also, some customers requested having an extra service to wash clothes alone. Additionally, delivery services and application was repeated request. Customers requested delivery or collection, which may be key if properly designed with cost and logistics in mind. Moreover, if customers receive the clothes and want to wear them immediately and suggest having dressing rooms to change.

Detergent Products

Customers have a high level of trust in the services and often ask if detergent products are available for sale. This area is a new line to diversify the business and potentially reach a new segment of customers, who request that: Clothes smell spray. As well as stain remover and freshness. Also, detergent products; and air spray.

Action Plan

Action	Priority	Responsible	Assigned	Due	Resources	Obstacles
Introduce the plan to all members	1	Top MGMT HR	1-7	31-7	Human Official arrangement	Resistance of change
Develop a point system	1	IT/ sales	1-8	31-8	Financial / IT	Customer's reaction
Reward members with vouchers	1	IT/ sales	1-8	31-8	Financial / IT	Customer's reaction
Run creative promotions and offers	1	Marketing/sales	1-11	31-12	Financial/marketing	Customer's reaction
Staff training for soft skills	1	HR	1-7	31-8	Official arrangement	Lack of commitment
24-hour helpline	1	IT/customer services	1-9	31-10	Financial / Human	Human / technical

Prepare a handbook for used	1	HR	1-7	31-8	HR arrangement	Lack of commitment
Self-service machine	1	Operations / Sales	1-9	31-10	Financial / IT/Human	Financial cost / Technical
Built-in cameras	2	IT/customer services	1-8	31-8	Financial / IT	Technical
Social media marketing plan	2	Marketing	1-11	31-12	Financial	Financial cost
Branding on a widescreen display	2	IT/customer services	1-8	31-8	Financial / IT	Technical
Customer feedback buttons	2	IT/customer services	1-8	31-8	Financial /Human/ IT	Technical
Partner with brands for detergents, stains.	2	Sales/customer services	1-8	31-9	Financial /Human	Financial cost / products quality
Aromatic incense in the store	2	Sales/customer services	1-10	31-12	Financial	Lack of commitment
Partner with delivery services	3	Sales/customer services	1-10	31-10	Financial/ IT	Technical / Customer's reaction

Recommendation and Conclusion

This study used the SERVQUAL dimensions (Parasuraman et al., 1988), which is an effective theory used in measuring the service quality of Clothes Laundry Services. The survey strategy, focus group interviews, and questionnaires were used to collect data and gain an understanding of the company services, customers' expectations, needs, and areas for improvement. Quality management tools such as Affinity Diagram, Interrelation Diagram, Tree Diagram, PDPC, matrix diagram, and QFD were applied in this study to analyze, organize, classify, and categorize collected data, understand relationships, and analyze the cause-effect among dimensions. The Customer Journey Map applied was used to measure and analyze customer experience and evaluate the quality of a service or process

provided by the firm, while the Affinity Diagram was used to classify the data extracted and collected from questionnaires, and focus groups with employees and customers, and interviews. The Interrelationship Diagram aids the firm in understanding the relationships among different aspects of a complex group of factors that influence problem-solving. The Tree Diagram for this project was presented in a series and developed until reaching the desired level of detail. To provide possible solutions to the issues posed in the Tree Diagram, PDPC was employed to systematically identify what might go wrong in plans under development. The Matrix Diagram was applied to outline all the aspects of the PDPC diagram and rated them in terms of value and relationship for each of the initiatives wherein they were rated based on their strong, medium, weak, or no relationship. Finally, QFD was applied to establish plans to produce services that meet customers' expectations, deploying the firm's customer-focused services quality to responsible relevant departmental functions. A list of improvements was identified and followed by an action plan.

Initially, traditional services provided meet customer needs. it is recommended to start gradually introducing modern and next-phase services, such as self-service machines, where customers can pick up their clothes at any time. Also, it is recommended that to online services and updated applications. The price is reasonable, and customers are willing to pay the current price. This aspect is one of the strengths of the service, and the firm can continue to develop and improve to achieve consistent and sustainable aspects. However, promotion is considered a weak area that customers frequently mentioned. It is recommended to use a wealth of communication channels (i.e., SMS, social media, posters, flyers, publicity, etc.) to reach customers and communicate promotions. These offers could also be linked and associated with loyalty membership programs. Secondly, staff is trusted by the customers, and there are several points relevant to their understanding of serving the customer with awareness sessions that take the service and customers' satisfaction to the next level. It was also found that the staff does not promote extra services or try to cross-sell or advise. It is recommended to ask customers about any special services required to remind them. Additionally, this area may represent an opportunity to communicate promotions or branded labeled detergent or clothes spray. To implement the recommendations, the support and belief of owners and management play a key role. Staff is required frequently to undergo training to adequately serve customers. Serving a customer is not an ad-hoc action; instead, it is a continuous journey that requires a significant commitment. It's recommended to formulate a plan, create a task force, and define the person accountable and in charge of the actions plan, timing, and results of this project to assure that the things are in place executed, and implemented. The findings and

recommendations are not only for laundry services; they could be extended and applied across a variety of sectors. However, beginning with this process, it is most important to consider customers' needs and base service quality on them.

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