

MS 923
Service Operation Management
Assignment

Dry Cleaning Service Report

Group 24

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Executive Summary

This report details and discusses the service operation behind a generic dry cleaner's store. A brief description of the operation is provided, then this report proceeds to discuss the application of various aspects of 'Service Operations' through the example of a dry-cleaning store. The scope of this report is restricted as to limit discussion to dry cleaning and how each of the topics relates or deviates when comparing a dry cleaner's store to other service operations.

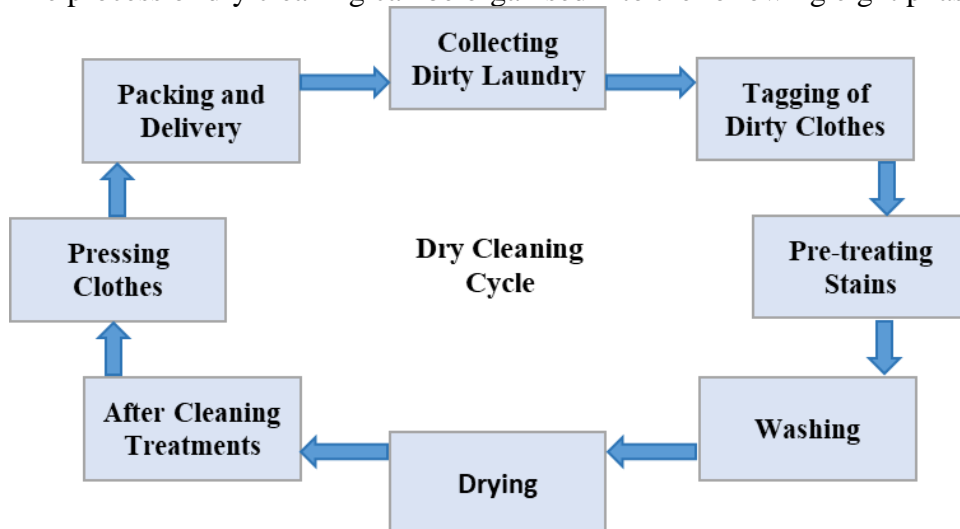
We find that dry cleaning exists between a pure service and manufacturing process. The design of a dry-cleaning operation provides two key 'moments of truth' at pick-up and drop-off of clothes, poka-yokes exist such as inspections and a blueprint is provided to demonstrate the unique elements of a dry-cleaning operations (e.g. the customer enters the store twice). Finally, the differences in how customers and cleaners view their productivity and quality is described alongside some common elements such as the speed of service.

Service Description

Dry Cleaning Services

Dry cleaning is the process of cleaning clothes and textiles without using water. Clothing is 'soaked' in water-free solvent, then dried, and pressed. These clothes are then packaged and either delivered to or collected by the customer. Dry cleaning services involve some machinery, expertise to handle delicate fabrics and complex garments. These services are designed to cater to a wide array of clothing items including coats, jackets, suits, dresses, formal wear, knitwear, and more.

The process of dry cleaning can be organised into the following eight phases:



Service Characteristics (IHIP)

In this section dry-cleaning is assessed according to each IHIP characteristic, finding that this service operation presents as somewhere between a pure service and pure product operation.

Inseparability

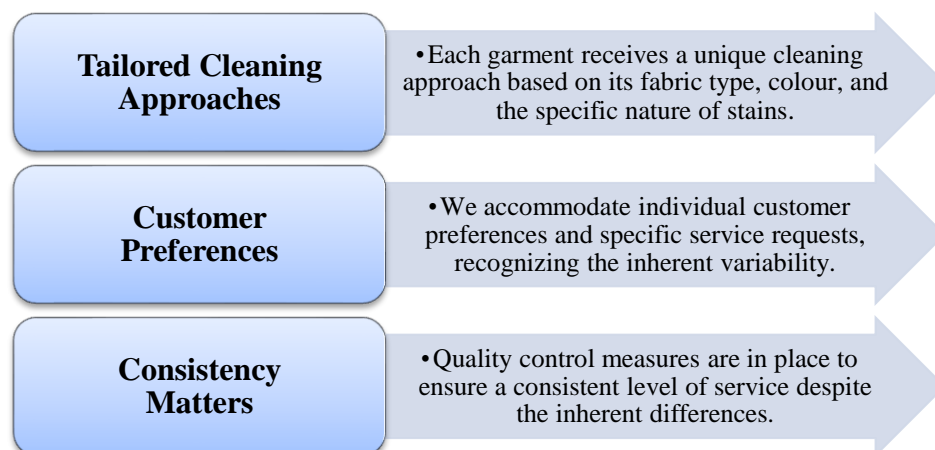
Dry-cleaning services are produced and consumed separately, not simultaneously. Further, the customer serves a minimal role in production. Hence the service is separable from consumption. In this way, dry cleaning is closer to a product operation.



Heterogeneity

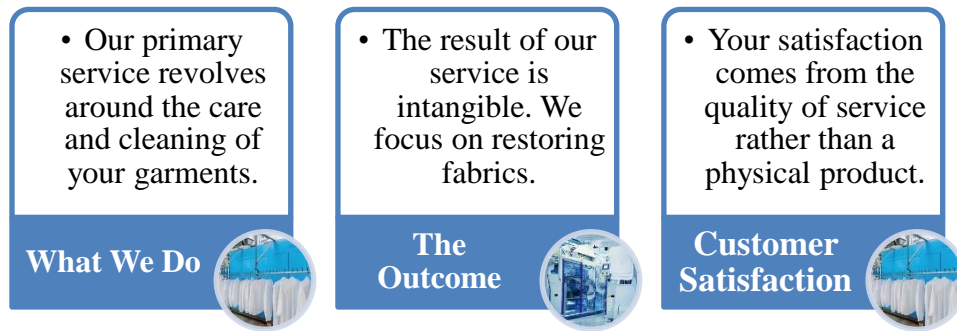
Dry-cleaning services are heterogeneous in nature as different bundles may be offered that include supporting services such as minor repairs, tailor services such as alterations, express turnarounds or bulk packages that may include discounts.

However, the services are not very heterogenous as similar materials and items of clothing would need to be cleaned through the same procedures. Unlike other service operations such as consulting, there is a hard limit on the amount of variation that dry cleaning requires. From an operational perspective, there are constraints on the types of tools that can be used and the cleaning techniques that can be employed. On the other hand, from an input perspective, there are restrictions on the variety of clothing materials that can be processed. This means that only certain types of materials can be handled. In this way, dry cleaning has a limited capacity to 'fit' the customer. Also, customers typically do not approach a dry-cleaning store looking for a fitted, unique experience.



Intangibility

Dry-cleaning is intangible as the output of the process is not a physical object that can be held. However, the effects of the service might be seen or felt on the cleaned clothes and so a dry-cleaning service may offer a more tangible 'product' when compared to other services such as education.



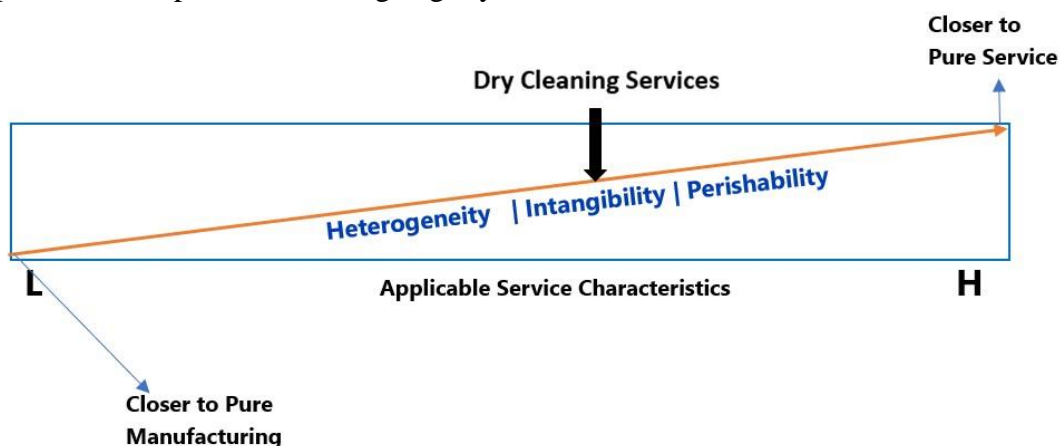
Perishability

Perishable services cannot be stored for later use or sale. Once a perishable service is produced, it is consumed immediately. Dry cleaning is somewhat perishable in nature as they are designed to be used when provided and only exist at the time of the service.

However, the materials used such as solvents and soaps may be stored, and the machinery/tools used for the process stay beyond the provision of 1 service. Unlike a time-sensitive airline seat or even a product such as an apple, the dry cleaner does not suffer from their service being left unpurchased. However, dry cleaning cannot be bought and kept for later use and so it is still relatively 'perishable.'



Overall, dry cleaning shares the service characteristics of heterogeneity, intangibility, and perishability. However, it is less heterogenous than other services. Furthermore, the cleanliness of the clothes is relatively tangible compared to some service outputs. The service is also relatively less perishable. Finally, as the customer interaction in the production of the service is limited, dry-cleaning consumption is very separable and distinct from production. We have judged that dry-cleaning would be about halfway between a pure manufacturing and a pure service operation, tending slightly towards the service side.



Service Classifications for Various Dimensions

Dry Cleaning	Level
Degree of Customer Contact	Medium
Degree of Customisation	Low-Medium
Degree of Front Value Added	Low
Degree of Labour Intensity	Medium
Degree of Process Focus	High
Degree of Discretion	Medium

Medium Customer Contact

Customers drop off and pick up their items but do not typically interact with staff during the cleaning process. Customer interaction is limited to service initiation, receiving order information, payment, service delivery and getting feedback from customers. This takes place face-to-face with low customisation. This presents a moderate sales opportunity. Dry cleaning would also be in the permeable system zone (Chase Model, 1978) in Chase's customer contact approach; hence production efficiency is likely to be moderate.

Low-Medium Customisation

Dry cleaning can handle a variety of materials, but the process is somewhat standardized. Customisation in dry cleaning involves bundling services and classification of customers into individual and corporate services.

Low Front Value-Added

Interaction with the customers in dry cleaning is limited to the collection, drop-off, and selection of services. Customers are not present during cleaning. Hence, dry cleaning has a proportionally high degree of back value-add and a low degree of front value-add.

Medium Labour Intensity

Labour is required for receiving items, sorting clothing, inspecting for stains, operating cleaning machines, and performing additional services. It is laborious, but machinery has limited human labour to sorting, collection, packaging, and inspections. However, we argue that this is medium-intensity labour due to only moderate skill being required to work effectively.

High Process Focus

The process is focused on specific steps such as inspection, cleaning, and pressing. Each of these have their own standardized procedures that are not often deviated from.

Medium Discretion

Dry-cleaning is standardized, however there are some discretionary services that may be provided. Additional care may be provided to returning customers; their clothing may be held for longer than the usual allowable period, or a courtesy phone call may be used to inform the customer as soon as their clothes are ready for collection.

Dry cleaning operates closest to a 'service factory' (Schmenner Roger W., 1986) due to the lower levels of labour intensity and customisation. However, as customer interaction is medium, dry cleaning also shares characteristics with a 'service shop.'

Service Design

Service Quality Dimensions

The quality of a dry-cleaning service may be measured by multiple dimensions. Service quality dimensions include reliability, integrity, helpfulness, care, and attentiveness. How the

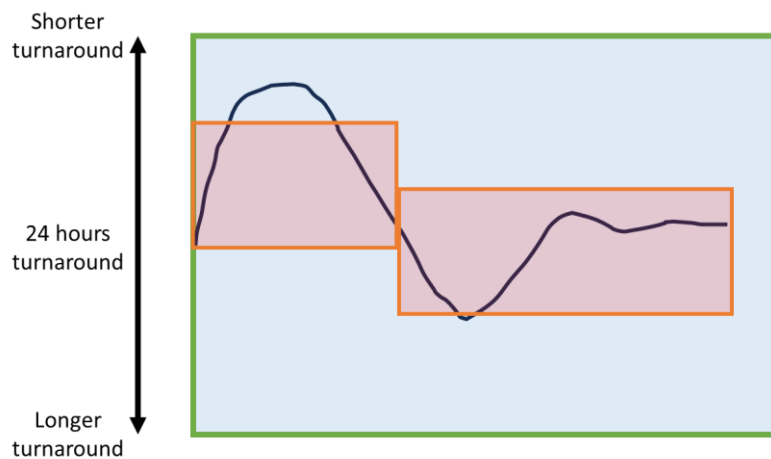
service is presented is important, factors such as the appearance of the store and the quality of supporting services play a role in how the customer values the service. Also, the quality of the service, in the cleanliness of the clothes, would be a tangible dimension to consider. An intangible element may be reliability which would encompass how dependably the service may be conducted promptly and properly.

Moment of Truths

‘Moments of Truth’ refers to any interaction with the customer that can disproportionately change a consumer’s opinion about the service. Moment of truths may occur in dry cleaning during the first customer interaction and pick-up of the clothes. The first customer interaction is particularly key. The store manager would need to assure the customer that they are dependable and will provide an adequate and competitive service.

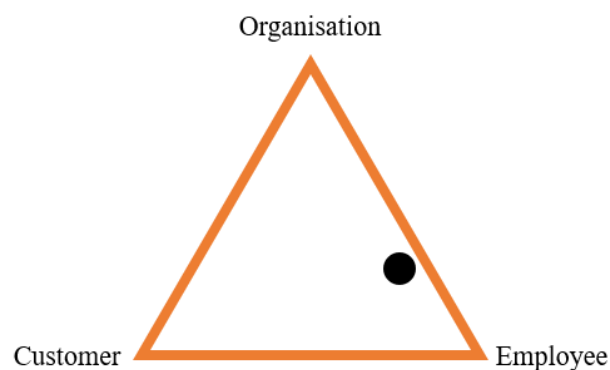
Zone of Tolerance

Zone of tolerance in dry cleaning would apply during the wait time for clothes to be cleaned. This is known as the ‘turnaround time.’ If the turnaround time is shorter than the expected, the zone would shift towards the ‘delighted zone.’ In the chart below, the customer experienced a shorter turnaround than was expected. Having been through the service before, the returning customer might expect the same higher degree of service.



Service Triad

In the dry-cleaning sphere the operational structure is skewed towards employee dominance. The store manager has a pivotal role in which they apply discretion on how they treat customers with regards to additional services or additional perks. For example, a store manager can employ empathy to speed up the turnaround time for a particular customer. They may advise the customer on how best to clean certain clothing. The triad diagram below pinpoints dry cleaning as tending slightly towards the organisation. This stems from the procedures and regulations set by the organization which must be followed.

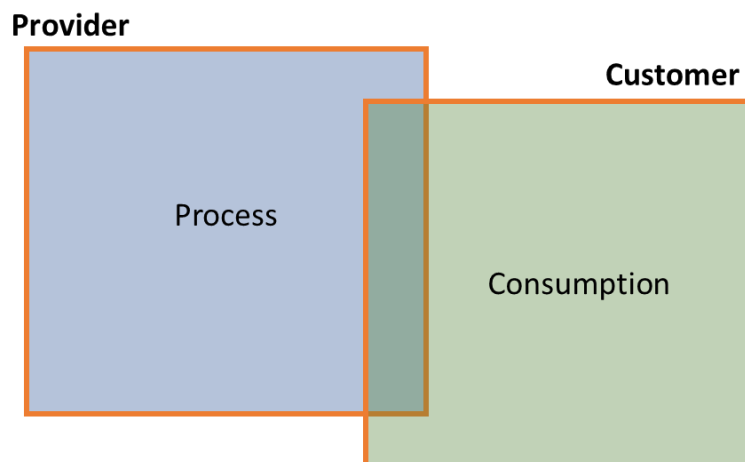


Packages and Concept

The idea of a service package and concept apply to dry cleaning. The **core explicit service** would be to have the clothing cleaned. A **core implicit service** could be the cleanliness and nice feeling of the clothing when they are worn. There might be several **supporting services** such as delivery of clothing, express turnaround and/or a waiting room.

Facilitating services exist to store the customers' clothes until they may be picked up and a courtesy call may be made to inform/remind the customer of their clothes being ready for collection. An example of a **peripheral service** is the informational pamphlet on correctly cleaning clothes that is offered at the counter of some dry-cleaning stores.

The Transformation Process

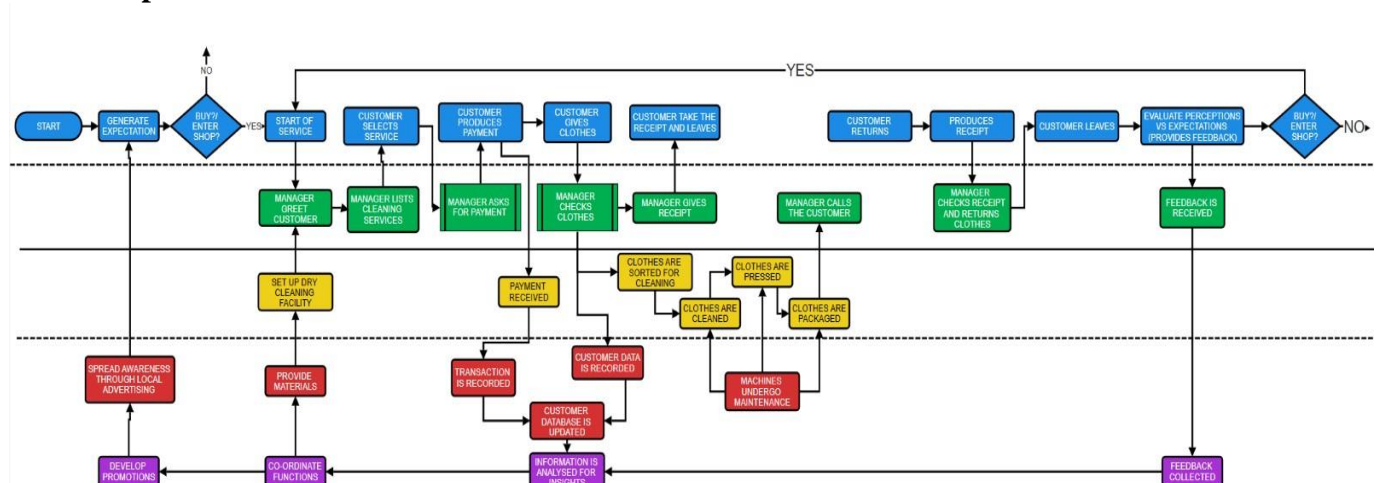


In comparison to other services dry cleaning is not as overlapped in the service process and consumption since the customer leaves the facility and comes back once the product is ready. The overlap shown is due to the service concept and package with supporting services, facilitating services, as well as other factors such as the delivery speed of the service which play a role in customer satisfaction and consumption.

Poka-Yokes

Several poka-yokes are used in a dry-cleaning. Machinery has in-built poka-yokes such as fuses, and clothing would be checked to make sure what cleaning procedures would be suitable. Patches of a new material may be tested in a machine before the clothes are put in.

Service Blueprint



The service blueprint above allows for an overview perspective of the dry-cleaning operation.

Some differences with regards to dry cleaning are how the customer is making two appearances (they enter and leave the store twice). Further, the store manager does not provide the service, but serves as the interface between the customer and the actual dry cleaning. Backstage, the actual dry cleaning is performed. Supporting operations such as coordination help the entire operation function.

In terms to design, quality in dry cleaning is multidimensional (discussed further in the next section). There are two moments of truth that may be exploited to greatly improve a customer's evaluation of the service. There may be a number of services packaged together with the explicit service of cleaning clothes, such as a reminder phone call. A dry-cleaners store is also employee-dominated due to the limited array of discretionary services that may be provided.

Quality and Productivity in Services

Product and Process Quality

The product is always clean clothes however, the way cleaners diversify from their competitors is through process quality. Cleaners may emphasise treating customers with care, and checking up on them to ensure that they are satisfied. Moreover, having a quality-focussed operation might make the difference in customers' perceived service quality. For the customer, product, and process quality both affect satisfaction. A higher process quality will both improve customer satisfaction and perceived quality.

Duality in Customer and Operational Productivity

Quality and productivity are crucial factors in the services industry. Quality in services refers to the ability of a service to meet or exceed customer expectations. Productivity is the efficiency with which a provider can utilize resources. There is a close relationship between productivity and quality for dry-cleaning.

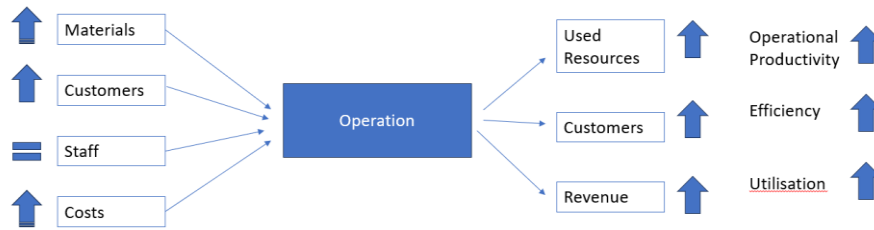
Service productivity can be measured from two perspectives, operational and customer productivity (Johnston/Jones, 2004). The inputs and outputs for each perspective of the operation process are different.

The inputs for the operation process of dry-cleaning are staff to carry out work; materials for cleaning such as solvents; customers; and costs of production. The outputs are the used resources; customers again; and the revenue generated by performing that service.

The customer inputs are the time taken, financial cost and effort of seeking out and using the service. Outputs would include the customer experience, the outcome of cleaned clothes and the value obtained from the service for the customer.

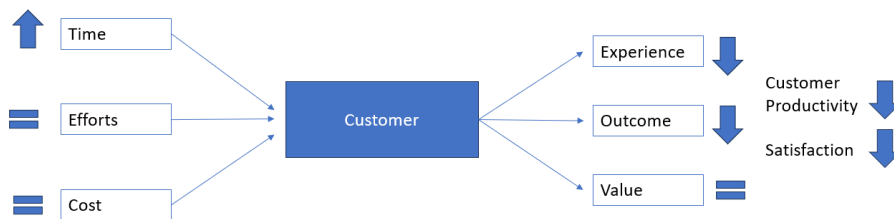
Two dry-cleaning productivity diagrams shown below. For these diagrams, suppose that the cap on orders is raised, and so more orders are being processed.

Operational productivity



Operational productivity increases here. The “ratio of operational outputs to inputs” (Johnston/Jones, 2004, p. 206) is likely increased, due to increased revenue with a fixed level of staff. The utilisation of the dry-cleaning business is the percentage of its capacity that it is being employed. When a dry-cleaning business increases the number of customers it serves, its utilisation will naturally increase as resources are stretched towards their capacity. The efficiency of a dry-cleaning business is the ratio of its output to its input. When a dry-cleaning business increases the number of customers it serves while other inputs do not increase by the same (or higher) proportion, its efficiency will also increase.

Customer productivity



Outputs such as the experience and outcome decrease (as customers are given less individual attention and their clothes are being processed and cleaned at a faster, more standardised rate). Time also increases as the turnaround time for each customer increases as the cleaners have a greater quantity of clothing to process.

Customer productivity is the “function of the ratio of customer outputs such as experience, outcome and value to customer inputs, such as time, effort and costs.” (Johnston/Jones, 2004, p. 206). Customer productivity and satisfaction is the measure of how efficiently a customer's needs are met and how satisfied a customer is. Customer productivity decreases here alongside the increasing operational efficiency. When a dry-cleaning company increases the number of orders it is taking, it can adversely affect customer productivity and satisfaction. This is because the company must allocate its limited resources to more customers, which can lead to longer wait times and less attention to detail. As a result of decreased customer productivity and customer satisfaction may also decrease. This is because customers may be frustrated if they must wait longer for their clothes, and they may feel that their clothes are not being taken care of.

In addition, decreased customer experience and customer satisfaction can lead to a decrease

in customer loyalty and a decrease in the number of customers that the dry-cleaning company serves. This can create a vicious cycle, as the dry-cleaning company is forced to serve fewer customers to maintain customer productivity, which can further decrease customer experience and customer satisfaction.

Similar Elements

There are some similar elements of measure for service quality and production for both the customer and service provider. For dry-cleaning, these are speed of service; cleaning standard; and customer satisfaction.

Speed:

Speed is the combination of the turnaround time and the time taken to serve a customer waiting in the store. The faster that customers can be attended to, the more customers that the store has the capacity to serve. Also, the faster clothing can be processed and cleaned, the faster more customers' clothing can be attended to. For the customer, the faster that they are attended to, the shorter the cost in terms of time they must endure. This would improve their customer productivity and their service experience.

Standard:

Having consistent standards is important to service providers so that they deal with fewer mistakes that need to be corrected after inspection, fewer dissatisfied customers that might choose then choose to clean their clothes at the competition, also having a strict standard or procedure to follow would also make sure that clothing is not avoidably damaged and the safety of staff and machinery is ensured. Staff are trained in following standardized processes for inspection, handling, cleaning, and pressing to minimize variations.

From the customers perspective, having a consistent quality of service would allow them to have consistent productivity in that service. Also, it would better allow the customer to judge whether the service is worth their 'inputs' in time, cost, and effort. Reliability is key in dry cleaning as this is one of the few differentiators between various dry-cleaning stores. Therefore, a customer may be particularly sensitive to a lack of reliable standards.

Customer Satisfaction:

Customer satisfaction is key to the provider as this factor may decide whether the customer will return. By maintaining customers, the store manager is working towards working at capacity. This would involve greater operational productivity.

For the customer, raising their own satisfaction is an implicit service to dry cleaning. If they are satisfied with the cleaners' work and customer service, the customer will feel like they received greater value for their inputs. This would mean that customer productivity would be increased.

With regards to quality of the service, measurements are easier for dry-cleaning as compared to other service operations such as consulting. In some ways, dry cleaning mimics a product operation in that there is a 'product' being delivered. It just happens to be the product that was received by the customer as a 'raw material' input. However, there are some difficulties in tackling operational productivity as this can adversely affect customer productivity. When a cleaner focusses on efficiency, they may make sacrifices in terms of customer service to produce more services in less time. This can lead to a decreases in customer productivity, especially if customers may have to spend more time dealing with problems or low-quality services.

Speed of turnaround, satisfaction and work standards are particularly useful as they are similar through the perspective of the operation and customers. Tackling these as much as possible allows the cleaners to raise operational productivity and quality without an adverse effect on customers.

Conclusion

Overall, a dry-cleaning service operation is not a pure service, partly to the separability between consumption and production. On balance, dry-cleaning is between a service factory and a service shop. This is because labour intensity and customer interaction are moderate, between what would be expected of a factory and shop. The design of the dry-cleaning operation provides a 'moment of truth' each time the customer enters the store, both giving an opportunity and presenting a risk for the store manager in changing customer satisfaction while satisfaction is particularly sensitive. The customer-employee interaction is typically employee-dominated. The store manager can use discretionary supporting services to serve the customer beyond organisational procedures. Also, as a dry cleaner gets stretched towards capacity and becomes more operationally productive, the customer becomes less productive as they receive less attention, and their waiting time would increase. It is through acknowledgement of this delicate balance, that productivity-influencing decisions should be made. Some similar elements to operational and customer quality do exist, such as customer satisfaction, which may be tackled directly without adversely affecting one or the other.

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