



Magdalena Kontek-Muzyka, Marcin Pigłowski, Maria Śmiechowska

Uniwersytet Morski w Gdyni

Gdynia, Polska

e-mail: m.kontek.muzyka@gmail.com, m.piglowski@wznj.umg.edu.pl, m.smiechowska@wznj.umg.edu.pl

ORCID 0000-0003-0603-0545 | 0000-0002-4032-2333 | 0000-0001-6933-594X

THE IMPACT OF CUSTOMER COMPLAINTS ON MANAGEMENT OF THE COMPLAINT PROCESS IN A BUSINESS-TO-BUSINESS COMPANY

WPŁYW REKLAMACJI KONSUMENTA NA ZARZĄDZANIE PROCESEM REKLAMACJI W PRZEDSIĘBIORSTWIE BUSINESS-TO-BUSINESS

Keywords: business-to-business (B2B), sales network, computer – assisted web interview (CAWI), cluster analysis, retailers, complaints.

Słowa kluczowe: *business-to-business (B2B), sieć sprzedaży, wywiad internetowy wspomagany komputerowo (CAWI), analiza skupień, sprzedawcy, reklamacje.*

Abstract

Company X is one of the door joinery manufacturers in Poland and operates on a business-to-business (B2B) model. It distributes products through a sales network, which means that complaints handling also takes place within that chain. The purpose of this study was to investigate the opinions of dealers and authorised sales network employees cooperating with Company X on its management of the complaints process with a view to improving it. The research was conducted in 2020-2021 through surveys using Computer – Assisted Web Interview (CAWI). The two-way joining cluster analysis was used to examine the results of the responses. Retailers gave a good assessment of the competence of the employees handling the complaints process at Company X. However, they also indicated that the full complaint handling time was too long and so the Company X made improvements to it. These included: verification of complaints based on photographs, shortening the production time of frames and rebuilding the dealerships complaints system. As part of further analysis, Company X can address the analysis of costs resulting from complaints.

Streszczenie

Przedsiębiorstwo X jest jednym z producentów stolarki otworowej w Polsce i działa w modelu business-to-business (B2B). Dystrybuuje produkty poprzez sieć sprzedaży, co oznacza, że obsługa reklamacji również odbywa się w ramach tej sieci. Celem badania było poznanie opinii dealerów i autoryzowanych pracowników sieci sprzedaży współpracujących z Przedsiębiorstwem X na temat zarządzania procesem reklamacji w celu jego usprawnienia. Badanie zostało przeprowadzone w latach 2020-2021 za pomocą ankiet z wykorzystaniem wspomaganego komputerowo wywiadu internetowego (CAWI). Do zbadania wyników odpowiedzi wykorzystano analizę skupień.

Sprzedawcy dobrze ocenili kompetencje pracowników obsługujących proces reklamacji w firmie X. Wskazali jednak również, że pełny czas rozpatrywania reklamacji był zbyt długi, dlatego firma X wprowadziła do niego ulepszenia. Należały do nich: weryfikacja reklamacji na podstawie zdjęć, skrócenie czasu produkcji ram oraz przebudowa systemu reklamacji u dealerów. W ramach dalszej analizy Przedsiębiorstwo X może zająć się analizą kosztów wynikających z reklamacji.

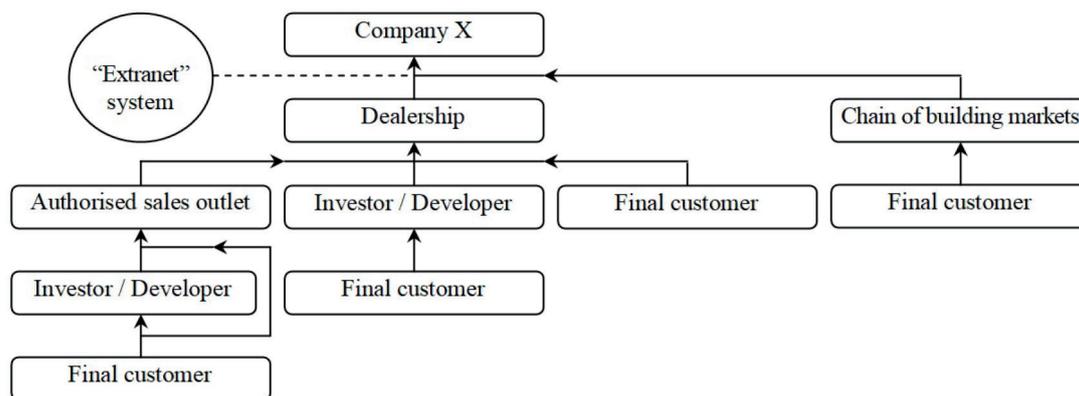
INTRODUCTION

Company X belongs to a group of large Polish companies and is a manufacturer of door joinery, including internal doors, flat entry doors, house entry doors and technical doors. There are several hundred enterprises producing doors in Poland, and their number has been decreasing for several years. Mostly these are small production facilities, but a few dozen of the largest companies are responsible for most of the turnover and the direction of development of this sector. According to estimates by The Centre for the Analysis of Branches (CAB), the 15 largest manufacturers (which include Company X) account for half of the value of door production in Poland [CAB, 2021].

The distribution of Company X's products is carried out on a business-to-business (B2B) model. It mainly cooperates with dealers on the basis of agreements signed with them. The dealers, in turn, distribute the products to authorised sales outlets, investors/developers or directly to final customers within business-to-customer (B2C) model. It is worth noting that, compared to the B2B model, the B2C model is more often characterised by a larger number of customers, less complexity of products and services and shorter sales cycles [Brueller et al., 2019]. Thus, in the case of the B2B model, there are fewer customers, products and services are more complex and sales cycles are longer.

The selective distribution model adopted by Company X determines the management of the after-sales service, including the complaints process, which is quite complex (Figure 1).

Figure 1. The complaint process for products of Company X in the distribution network.



Source: Authors own elaboration.

Under the terms of the cooperation agreements, dealers are obliged to act as intermediaries for Company X's warranty obligations. This means that all complaints submitted by an authorised sales outlet, investor/developer or final customer go to the dealer. The dealer then pre-verifies such a complaint and, via a web browser, sends information about it to Company X in the "Extranet" system.

There is a lack of works in scientific research on the analysis of complaints management in companies based on the B2B model. Therefore, the purpose of this study was to investigate the opinions of dealers

and authorised sales network employees cooperating with Company X on its management of the complaints process with a view to improving it.

DATA AND METHODS

The survey was carried out in 2020–2021 using the CAWI (Computer – Assisted Web Interview) method among retailers of the door joinery sales network who handle complaints about Company X's products. The evaluation covered aspects of the complaints process (Table 1) and the duration of the stages of the complaints process (Table 2). It was possible to indicate one of six responses, i.e.: 1 – Very bad, 2 – Bad, 3 – Average, 4 – Good, 5 – Very good and “No opinion”.

Table 1. An evaluation of aspects of the complaints process.

No.	Aspect of the complaints process	1 – Very bad	2 – Bad	3 – Average	4 – Good	5 – Very good	No opinion
1.	Complaint handling system “After-sales service”						
2.	Competence of staff dealing with complaints						
3.	Efficiency of service						
4.	Empathy of staff, willingness to help						
5.	Management competence in the area of complaints						
6.	Ease of making and handling complaints						
7.	Factory service support						
8.	Transparency of complaints procedures						
9.	Complaints training by the manufacturer						
10.	Warranty documents						

Source: Authors own elaboration.

Table 2. An evaluation of the duration of the stages of the complaints process.

No.	The duration of the stages of the complaints process	1 – Very bad	2 – Bad	3 – Average	4 – Good	5 – Very good	No opinion
1.	Complaint verification time (after submission of complete photo documentation)						
2.	Waiting time for a new product after the complaint has been accepted						
3.	Time to return the product and issue a correction invoice						
4.	Waiting time for the factory service						
5.	Complaint handling time (in full)						

Source: Authors own elaboration.

The survey form was sent electronically to the email addresses available in Company X's database only to those companies that agreed to be contacted for marketing purposes. These were 563 companies, including 150 dealerships and 413 authorised sales outlets. The mailing of the form was preceded by telephone calls informing respondents of the intention to conduct the survey, with a request to complete it. Responses were received from 180 respondents, including 72 employees of dealerships (48%) and 108 retailers of authorised sales outlets (26%). This difference in the number of responses may be due to the fact that Company X work closely with dealerships, which in turn operate authorised outlets.

The results (as totals of individual responses) were collected in Microsoft Excel 365 (Microsoft Corporation, Redmond, DC, USA) in two pivot tables. Transposition of the data was then carried out in preparation for further analysis. The columns of the first source table included aspects of the complaints process, the columns of the second table contained the duration of the complaints process stage, and the rows of both tables indicated the six possible answers indicated by the respondents. The data were further transferred to Statistica 13.3 (TIBCO Software Inc., Santa Clara, CA, USA), where two-way joining cluster analysis was performed. This analysis is useful when data from both the rows and columns of the source tables can be expected to simultaneously contribute to the discovery of meaningful cluster patterns. Although the cluster structure resulting from this analysis is not homogeneous by nature, this method is considered a powerful tool for data exploration [TIBCO, 2024] and is particularly suitable for analysing very large data sets [Ramette, 2007].

The results of the cluster analysis are a reorganised data matrix [Krolak-Schwerdt, Wiedenbeck, 2006; Stanisiz, 2007], which is represented as a two-dimensional contour/discrete chart. It is created by fitting a surface function to a three-dimensional scatter plot. In the chart, the points symbolising the data are shown as rectangles in different colours and indicate the level of clusters [Stanisiz, 2007]. White indicates no clusters (or the smallest clusters) and larger and larger clusters are represented successively by green, yellow, orange, red and brown (the largest clusters). The same colours or colours with similar shades indicated the similarities of the individual responses given by the respondents.

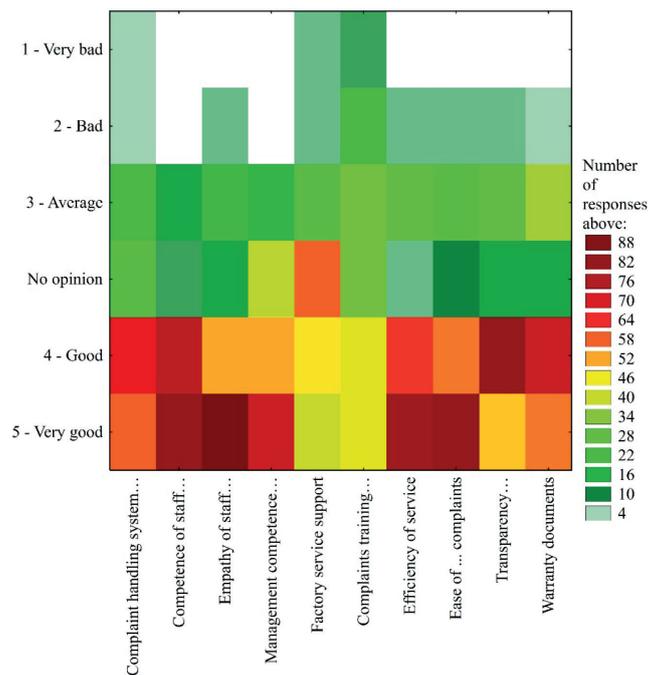
RESULTS

The opinions of employees of the door joinery sales network on specific aspects of Company X's complaints process is presented in Figure 2.

The largest clusters (red and brown) are concentrated in the middle and lower part of Figure 2. It should be noted that these are ratings of 4 and 5 with a high number of responses, indicating a distinct advantage of positive over negative ratings. The most positive ratings were for the complaints handling team at Company X. The retailers had the best opinions on the competence of staff dealing with complaints, which the majority of respondents rated very good and good (dark red and orange). The staff's empathy and willingness to help and the efficiency of the service were also rated as very good and good. Further clusters of "Very good" and "Good" ratings can be seen in the responses regarding the ease of making and handling complaints, the transparency of complaint procedures, warranty documents and the complaint handling system "After-sales service".

It is worth noting that the competence of management in the area of complaints was rated slightly lower than the competence of staff serving retailers. With this aspect, it is also possible to observe a cluster with the answer "No opinion" (yellow-green), which may mean that the retailers had no contact with the management. For company X, however, this is very good information, as it means that the complaints process is working correctly and the retailers have not had to contact staff management.

Figure 2. The opinions of sales network employees on specific aspects of Company X’s complaints process.



Source: Authors own elaboration.

In turn, the aspects of the complaints process to which Company X should pay particular attention, and where the highest clusters of low ratings (3 – Average, 2 – Bad or 1 – Very bad) were observed, were the complaints training provided by the manufacturer. The clusters by the response “No opinion”, may mean that the respondents have not yet participated in such training. Other aspects where clusters of “Average”, “Bad” or “Very bad” responses can be seen are warranty documents, transparency of complaint procedures, ease of making and handling complaints and service efficiency (green).

It is worth mentioning, however, that factory service is a rather specific aspect as it is very limited. According to the agreements between Company X and the dealers, all complaints are handled by the dealers themselves. The factory service is only sent out for: complaints that are very difficult to verify, large complaints involving a dozen or several dozen doors, or recurring complaints where there has been another complaint to be claimed. Nevertheless, a cluster of responses with ratings of “Average”, “Bad” or “Very bad” may indicate a real low quality of the service or be due to low availability of the service in the market.

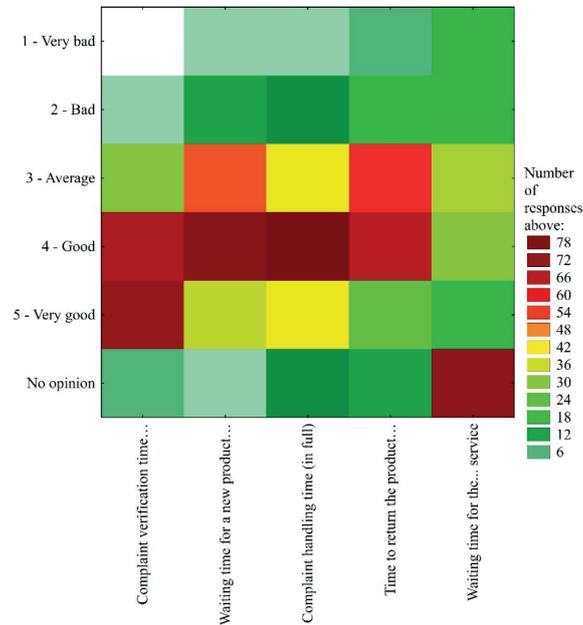
The sales network employees also assessed the duration of the different stages of Company X’s complaints process (Figure 3).

The duration of the individual stages of the complaints process, as well as the total time, was mostly rated as good or average (brown and red colours in the middle of the chart, respectively).

The best rated stage of the process was the time taken to verify the complaint (once complete photo documentation had been provided). Only at this stage did the concentration of responses appear with ratings of “Very good” (dark brown) and “Good” (brown). The positive rating of the retailers may be a result of the measures taken by Company X, which, as part of its “advertising through complaints” strategy, aims to verify all complaints on the basis of photos. The retailer should be informed within a maximum of three days of the submission of complete photo documentation (allowing verification of the complaint) whether the complaint has been accepted or rejected and what the next steps are (e.g. replacement of the product with a new one, acceptance of a return, repair or service visit at the final customer’s site). This allows the retailer to provide a response to the customer in a very short time and to be sure to receive a corrective invoice when the defective product is returned. This is a significant

change in the process, as previously the retailer had to wait for the majority of defective products to be returned to the factory, where the requests were verified. This meant that final customers waited an average of one to two months for a decision.

Figure 3. The opinions of sales network employees on the duration of the different stages of Company X's complaints process.



Source: Authors own elaboration.

The next stage assessed was the waiting time for a new product after a complaint was acknowledged. The highest concentration of retailer ratings was for the responses "Good" (brown) and "Average" (red). However, it should be noted that there were also ratings of "Bad" (green) and "Very bad" (light green). Replacing a product with a new one involves the re-manufacturing of the door leaf or frame in each case. Only accessories are dispatched from stock. The Company X continues to make efforts to reduce the production time of the products under complaint. Most doors can be delivered by the manufacturer within two weeks, while the standard production run is between four and twelve weeks. This time is therefore much shorter, but not always satisfactory for the final customer. This is because, while waiting for the new product, the customer cannot complete the installation of the door, thus extending the time for interior finishing or the completion of renovations.

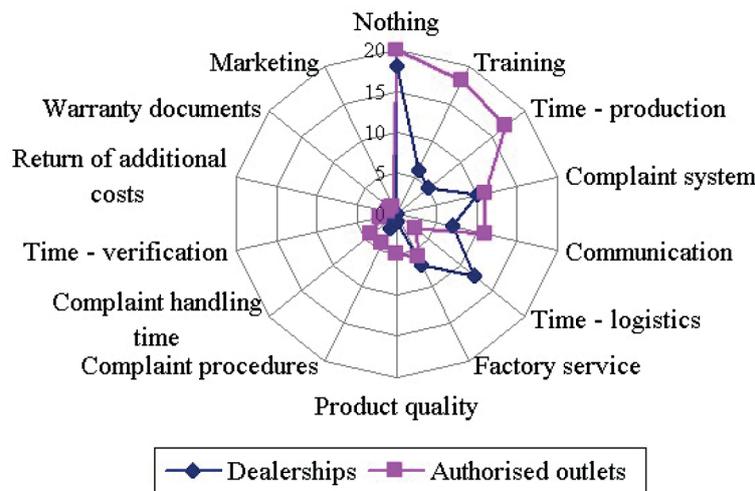
The next step in the process is to return the product and issue a correction invoice, i.e. a reimbursement for the defective product. This is the logistical and accounting element. Once the retailers have declared in the system that they have a defective product to return, Company X collects this return from the dealerships. This is followed by an inspection of the products by a designated complaints committee and a corrective invoice is issued. This is a stage that can take anywhere from a week to a month. The reason for this is that the cars collecting the returns are sent to the retailers with varying frequency, which depends, among other things, on the location of the outlet, the number of deliveries and the number of items to be returned. This may be the reason for the lower satisfaction with the duration of this stage, as the highest concentrations were found with the answers "Good" (brown colour) and "Average" (red colour), but also a high number of "Bad" and "Very bad" ratings (green colour) can be observed.

The last element of the complaint process assessed was the waiting time for a factory service visit. This only occurs for a few per cent of complaints, so the highest concentration was with the answer

‘I have no opinion’ (brown). However, ratings of ‘Bad’ and ‘Very bad’ were also indicated (green). The negative ratings may be due to the fact that factory service visits are scheduled for large complaints involving several or dozens of doors. These most often concern large investments (hospitals, hotels, public buildings). Due to the level of complexity of the contract and the complexity of the products, handling these complaints is therefore much more time-consuming.

The survey also asked retailers what elements they felt needed improvement in Company X’s current complaints process (the radar chart with grouped answers is presented in Figure 4), as well as what support they needed.

Figure 4. Elements of Company X’s complaints process requiring improvement in the opinion of sales network employees.



Source: Authors own elaboration.

One fifth of retailers indicated that in their opinion nothing needs to be corrected and that the complaints process meets their requirements. A large proportion of retailers expected Company X to provide trainings related to complaints (following legal changes in this respect) despite the fact that this is not its responsibility, because it results from the retailer’s legal obligations towards the customer. Further elements identified as needing improvement were related to complaint handling times. In this respect, respondents most often pointed to production time and time related to logistics, i.e. receiving defective products from storages.

Retailers also pointed out various shortcomings of the systems for handling complaints. There were also observations regarding communication with Company X staff, relating to: availability of staff, communication channels and understanding of retailers’ needs. Many respondents also expected to be able to take the opportunity for complaints service visits to their customers. In turn, there were less frequent remarks relating to product quality, complaints procedures, total complaint handling time, reimbursement of additional costs incurred by the retailer, warranty documents and marketing.

DISCUSSION

The improvements taken by Company X following the survey

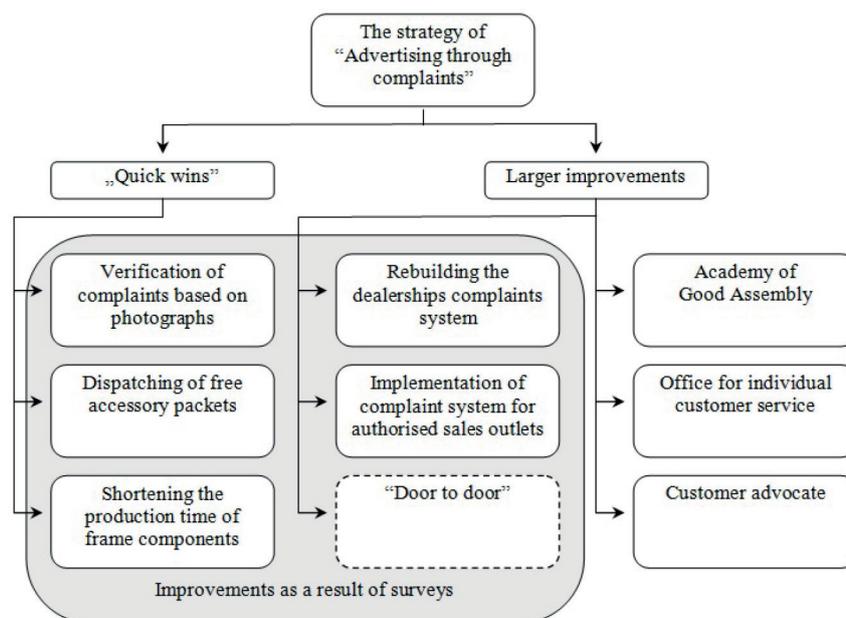
The number of complaints is shaped by product quality, quality of service and customer satisfaction [Wibowo, 2022]. Complaint handling and service recovery has a significant impact on customer

satisfaction. In turn, customer loyalty and customer retention are indirectly related to complaint handling and service recovery [Adzhigalieva, Hurriyati, Hendrayati, 2022]. The company should respond to customer complaints about the products sold and replace products that are defective or even make full refunds if customers are not satisfied with the quality of the products [Nasir, Mushtaq, Rizwan, 2016]. However, it is worth adding that the company should not only provide after-sales service, but also ensure that the consumer feels comfortable and is treated well and kindly [Susilo, Ikhsan, 2020].

Therefore, the number of customer complaints should be one of the business objectives of a B2B company [Engel et al., 2016] and the company should implement comprehensive customer relationship management with advanced software and analytical tools [Choudhary et al., 2011]. The after-sales process for complaints should be very clear to customers. They should know who to contact and the complaint handling team should put in place a quick and standard procedure. Therefore, there is a need to collect and store all the necessary information in a database in a complete and automatic way [Rebelo et al., 2021].

To assess the quality risk of products, one would have to count the number of complaints made against it [Sarker, 2019]. However, dealers and authorised sales outlets cooperated with Company X's mostly do not keep such statistics. Meanwhile, at Company X, it was noted that by properly managing the complaints process, it could also achieve its marketing and sales goals. Already during the conduct of the survey (in 2020), the company's internal strategy "Advertising through complaints" was launched. It was decided to implement a series of actions aimed at making changes to the complaints management process noticeable to the sales network's retailers. The measures were divided into short, quick-to-implement ("Quick wins"), which were expected to have an immediate effect, and longer-term improvements, which required the creation of project teams and the input of significant work and financial resources. Most of the improvements followed from the results of the survey among retailers (grey box in Figure 5).

Figure 5. Improvements in the strategy of "Advertising through complaints" implemented in Company X.



Source: Authors own elaboration.

There is a need to respond to the customer's complaint within a reasonable and acceptable timeframe [Choudhary et al., 2011]. As an example, in research related to automotive retail companies which deliver after-sales service to customers included such elements as: time taken for resolving

complaint and responsiveness to customer complaint [Shokouhyar, Shokoohyar, Safari 2020]. In the case of Company X, the first quick change was the introduction of verification of all complaints on the basis of photo documentation. Thanks to this change, the dealership employee was informed within a maximum of three days from the day of the complaint whether it was considered justified, whether he needed to complete the information, send additional photographs or whether the complaint was rejected, including the reasons. In complaints that were found to be justified, once the defective product was returned, the retailer was assured that he would receive a corrective invoice and be exempted from paying for a new item. Such a modification in the complaints process required changes in internal procedures and handling rules.

Proper inventory management by maintaining acceptable safety stock to avoid delays in the delivery of products to the customer [Choudhary et al., 2011]. Accessory shortages were reported very frequently (this was indicated in the survey results as well as in Company X's previous experience). Unfortunately, these shortages are basically impossible to verify, as Company X does not have a system for recording the packing stage of products or weighing the packed packets. Therefore, an action was carried out to dispatch to all dealerships the accessory packages that appeared most frequently in the complaints. The purpose of dispatching these packages was to ensure that the dealerships had a basic supply of hinges, locks, lock catches, screws and gaskets to enable any customer complaints to be resolved quickly. Indeed, the lack of these accessories often makes it impossible to complete the assembly of a door. Company X's intention was therefore to provide dealers with a kind of buffer, which they should replenish in the event of a customer request. This was a one-off action, as Company X's management did not want to make dealers stop reporting complaints about missing or faulty accessories, as this would stop them receiving information about the scale of the problem. In practice, despite the intensive communication of the objectives of the action carried out, only some dealers used the packages as recommended by Company X, and some used all the accessories and waited for the next packages to be dispatched.

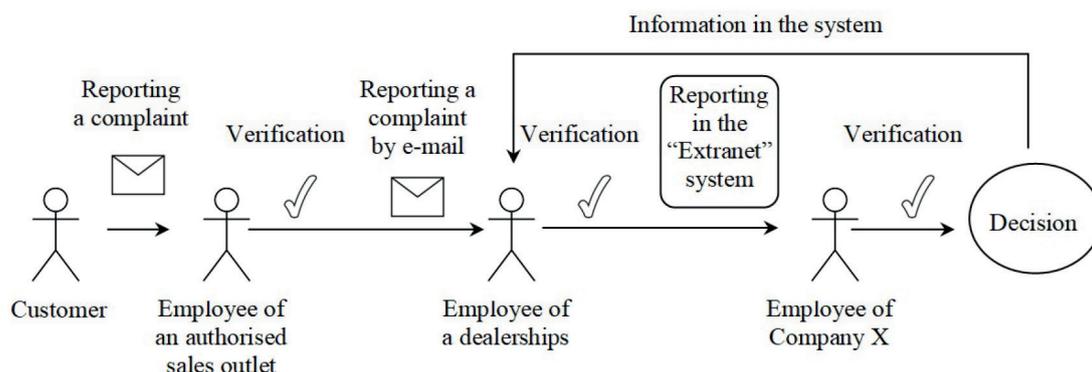
The waiting time for a new product within a complaint was one of the most poorly rated elements of the process. As a result, after presenting the findings of the survey at the monthly quality meetings with Company X's management, it was decided to introduce the following change. Namely, the production time for doorframe components within the complaint was reduced and it was decided not to return them. During production tests, it was possible to achieve a deadline of one week for the production of frame elements, which was half as long as the time for the other complaints. The abandonment of returns until the complaints were verified was dictated by the fact that the majority of complaints are mechanical defects, the causes of which are almost impossible to identify, and that returns also generate additional logistical and product disposal costs.

In surveys, retailers indicated a number of inconveniences in the system for handling complaints. Company X's management therefore decided to launch a large project to overhaul and improve the current system. A project team was formed, including representatives from the complaints handling team, the complaints storage staff, the logistics department and programmers. The project was completed in 18 months. First, the retailers' survey responses were refined, then Company X's capabilities were verified and a project schedule was created. As part of the project, the layout of the system was redesigned, introducing solutions that are easy to use and reduce the time needed to handle complaints. The possibility of reporting complaints involving several products was introduced, e-mail notifications of changes in the status of a complaint were added, the systems for handling standard and contract orders were linked to the complaints system and the module related to returns was improved. Modifications were also made to Company X's logistics and storage operation, and electronic complaint viewing protocols and electronic signatures of complaint team members were introduced. The implementation of changes to the system was carried out in stages. Prior to each change, Company X sent information to dealerships about

the planned modification. In addition, dealers were able to receive telephone support from Company X employees.

In the surveys, retailers also rated the duration of the entire complaints management process low. In the case of complaint reporting at authorised sales outlets, part of the process took place outside the Company X system. The retailer at the point of sale reported the complaint to the dealer with whom they work, and only the dealer's employee reported the complaint to the Company X system (Figure 6).

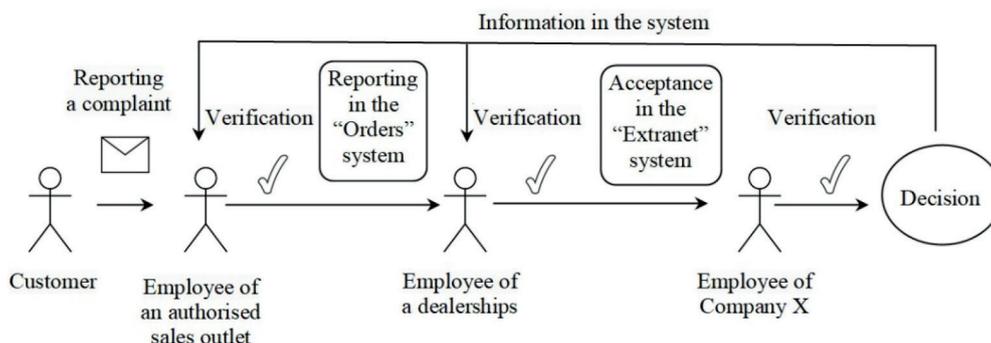
Figure 6. Customer complaint process prior to the implementation of a complaint system for authorised sales outlets employees.



Source: Authors own elaboration.

Reporting complaints in this way meant that Company X had no information about when the dealer would forward the complaint to it, and the authorised outlet employee did not have an opinion of the complaint they had submitted and could only rely on the information provided by the dealer. However, employees at authorised sales outlets already had access to the "Orders" system for sending orders, so once this problem was identified, the decision was made to add a complaints module to the system. Still, the modified system had to fit into the existing model of cooperation between Company X and the dealers, so the existing complaints process was reflected in the system. Once the changes have been made, the employee of the authorised outlet can submit a complaint in the "Orders" system, indicating the product being complained about and adding a description of the defect and photographs. This complaint is then sent to the dealer, where it is initially verified and then rejected, sent for completion or forwarded to Company X in the "Extranet" system (Figure 7).

Figure 7. Customer complaint process after the introduction of a complaint system for employees of authorised sales outlets.



Source: Authors own elaboration.

For the employee of the authorised outlet, the most important advantage of the adopted solution was the introduction of the possibility of constantly viewing the status of the complaint and Company X's response, without having to obtain this information from the dealer each time. In addition, reporting the complaint through the "Orders" system also eliminated the risk that the dealer's employee would overlook or forget to forward this complaint to Company X.

The implementation of the "Door to door" project resulted indirectly from the surveys carried out, but it was the largest project implemented as part of the improvement of Company X's complaints process. Its main idea was to take over the complaints service from dealers and authorised sales outlets and offer it to the customer. This was the first and so far only such undertaking among Company X's immediate competitive environment. In fact, the consequences of service failure in the B2B model affect both its supplier and customer. The supplier may lose a customer, brand image deteriorates and there is a loss of efficiency. In turn, the customer suffers from unfulfilled expectations, and the negative experience may be passed on to other potential customers [Baliga et al., 2021]. Thus, taking direct responsibility for the maintenance service by Company X seems to be a good solution. Indeed, by taking into account customer complaints and ensuring that the problem is solved, the company can significantly reduce customer losses. It is therefore necessary to listen carefully to complaints, record them and prevent the same negative situation from occurring again. In this way, the company's image can be improved and profitability can be increased, as the trust that customers have in the company will increase [Aslan Çetin, 2018].

When it comes to installation, the company should train its staff to provide a consistent and reliable service to customers [Choudhary et al., 2011]. Therefore, as part of the "Advertising through complaints" strategy, other activities were also introduced that were not the result of surveys. Company X started to sign permanent cooperation agreements with the installers who had best completed training at the Academy of Good Assembly and then obtained certificates. It has also established the office for individual customer service and the customer advocate.

Limitations of the research carried out

Due to the Covid-19 pandemic, surveys of dealers' and authorised outlets' opinions on the complaints process had to be conducted by CAWI, so there was no direct contact with them. The surveys were brought to only those retailers who agreed to be contacted by Company X for marketing purposes. Of those to whom a request to complete the survey was sent, only 32% took part in the research. It is also worth noting that, due to the selective distribution of the doors sold, Company X has no direct influence in shaping the complaints process. In turn, the impact on the quality of assembly is quite limited and only possible indirectly through the Academy of Good Assembly, which provides training and certification for installers. Company X has not accurately tracked the cost of complaints to date, and an internal project in this area was only launched in 2024. It has also been difficult or impossible to investigate image losses. It is notable that, according to the customer, the manufacturer is responsible for the poor quality of the doors, also if they are improperly installed, which is most often beyond the influence of Company X. However, it is also worth noting that, for reasons of data protection (which must be ensured by the retailers), the surveys could not be conducted among end customers.

CONCLUSIONS AND PERSPECTIVES FOR FURTHER RESEARCH

As a result of Company X's surveys of dealers and authorised sales outlets, it was found the retailers had the best opinions on the competence of staff dealing with complaints, the staff's empathy and

willingness to help and the efficiency of the service, the ease of making and handling complaints, the transparency of complaint procedures, warranty documents and the complaint handling system “After-sales service”. However, the retailers also indicated that they expect Company X to provide training on complaints, even though it is its responsibility to do so, as it stems from the legal obligations of the retailer to the final customer, not the manufacturer to the retailer.

The research also revealed that the duration of the complaints process is too long. This is particularly inconvenient for the final customer who is unable to finish interiors or complete renovations. Consequently, improvement actions were implemented, which included: verification of complaints based on photographs, dispatching of free accessory packets, shortening the production time of frame components, rebuilding the dealerships complaints system, implementation of complaint system for authorised sales outlets, a “Door to door” project was also introduced.

In further research, it may be of interest to Company X to conduct an analysis on the costs and impact of complaints on its trading partners. An analysis of the primary costs (including e.g. product replacement, repair, transport) and secondary costs (related to marketing activities, final customer service time, loss of good image, cost of handling comments on social media) would allow a holistic view of the complaints problem and an assessment of the profitability of introducing new solutions to improve the quality of after-sales service.

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