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Competency Development of Quality Control in Automotive Companies to Improve Service Quality

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ABSTRACT
The automotive industry is growing rapidly, changing consumer needs make the industry continue to innovate and make them improve the quality of service. One of these efforts is improving the quality of sales and after-sales, because starting from here the industry can generate more than three times the turnover when compared to relying on product sales only. In the industry, The Quality Control team plays an important role, the QC team provides innovation improvement ideas conducted by other departments until the output is produced perfectly using the concept of Plan-Do-Check-Action (PDCA), while the QC function in the context of sales and after-sales here is to control the service process of each dealer to comply with company standards. QC team must have a qualified knowledge and ability which described the ability including providing services, responsive, trustworthy and have empathy in running relationships in the team and consumers. In addition, brainstorming capabilities and 5 Why Aproach where the strength of the analysis of market needs such as in the future. One of the techniques that can be used today for Quality Control Sales and After Sales is the technology called Customer Relationship Management system (CRMs) which will facilitate qc work in terms of fulfilling the components of PDCA. Therefore, each QC team must have the appropriate level of education qualifications, technological operating skills and analytical power to be able to affect the productivity of the company.

Keywords: After Sales, Automotive Industry, Competency, Sales, Quality Control

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BACKGROUND

The number of vehicle brands continues to grow, competition also led to an inevitable customer scramble. The automotive industry is a key pillar of global economic development, the automotive industry brings benefits and convenience to be developed, especially when the world experienced an economic crisis in 2008. Based on data released by AISI (Indonesian Motorcycle Industry Association) recorded motorcycle sales increased to 1,100,950 units throughout 2019 which means an increase of 19.4% from the previous year which only sold 922,123 units in 2018. Reflecting on the crisis experienced in 2008, automotive companies then made a review of the sales of their products, the company is now more focused on the after-sales business, where after-sales itself brings more profit when compared to relying only on product sales alone. This is similar to Bundschuh and Dezvane research (2003) which explained that the after-sales market is five times more profitable for the company compared to the new product sales market, this is because after-sales will take place many times as long as the automotive product still has useful value, this is where the company invests to generate turnover three times more than just the sale of products. The term Servitization was developed by Vandermerwe and Rada (1989) to increase the selling value of a product to consumers. One of them is by preparing service packages (technicians, self-service, service-related information provided) in other words after-sales is a grouping of services (maintenance, repair, warranty, etc.) offered to consumers to optimize the long-term use of their automotive products (Patelli et al, 2004). In addition, after-sales must also meet the requirements of financial management targets that have been set such as cost, profit, RON and cash flow. In addition, benchmarking should also be considered such as market share, customer satisfaction and loyalty to the product. After-sales are categorized into four:

1. Product service sales: Dealing with documents and procedures required to complete the sales process (e.g. insurance, warranty and maintenance)
2. Product usage services: Services that focus on efficient product terms of use, for example: product inspection, preventive maintenance and training.
3. Product recovery services: Pay attention to all technical activities performed to restore and maintain the functionality of the product, for example: incorrect replacement of parts, monthly routine maintenance.
4. End-of-life product service: Manage how regulations in disposing of waste products that are no longer feasible to use.

After-sales service is one of the efforts to strengthen consumer relations with the company or called "customer retention". In this case, the company opens a business as much as possible to provide what consumers need and expects its goal is clearly to improve customer service satisfaction, consumer loyalty and increase the profit to be obtained.
However, every dealer from an automotive company sometimes has a different understanding of the success of a standard set by his company. Especially will sales and after-sales applied due to minimal knowledge. Therefore, the success of an automotive company to maintain its consumers does not necessarily rely solely on sales and marketing. In order to provide optimal service to consumers, the company must also focus on the quality of internal performance of sales and marketing personnel. One of the efforts that can be done by the company is the implementation of Quality Control. Quality Control is an improvement activity in all fields involving all staff and employees in making improvements in a company (Dianto, 2007).

The purpose of this writing is to know what capabilities are needed so that the Quality Control system in automotive companies can improve the standardization and quality that they have.

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LITERATURE REVIEW

Definition of Quality Control

According to Nyoko (2016) Quality Control (QC) is a group that conducts continuous meetings to control and improve the quality of products, services, work processes using concepts, tools and quality control techniques. Quality Control contains the same group of sub-divisions and supervisors. Each member of the QC group can provide improvement ideas during the meeting. Quality Control continuously improves since the input process to produce output using the concept of Plan-Do-Check-Action (PDCA) or known as Deming Cycle (Chase, et al, 2001). When the first problem has been solved, QC will make improvements to other problems by collecting problem data or some activities, then analyzed using simple statistics tools such as Scatter charts, graphs, causal charts, Pareto diagrams and histograms. Problem solving techniques use brainstorming, 5 Why Approach and 5W3H matrix diagrams (What, When, Who, Where, When, Why, How, How Many and How Much).

The purpose of Quality Control according to Gaikwad, et al, 2009) is: The purpose of Quality Control according to Gaikwad, et al, 2009) is:

1. Contribute to the improvement and development of the organization or department
2. Overcome structural organizational barriers in developing improvement ideas
3. Develop a positive attitude in the involvement of decision making
4. Foster respect and fun attitude in work
5. Improving the quality of products and services
6. Improving competencies that support organizational objectives
7. Reduce costs and inefficient business in the long run
8. Increase efficiency and produce improvements so that it can meet customers' wishes
9. Customer satisfaction is the goal to have competitiveness

In the application of Quality Control, QC uses eight steps improvement, seven tools and problem solving brainstorming techniques, 5Why Approach and 5W3H.

Quality of Service

Quality of service is a concept that is considered as a relative measure of perfection or goodness of a product or service consisting of design quality and conformity quality (Tjiptono, 2005). If reality is more than expected, then the service can be said to be quality, whereas if the reality is not expected, then the service is said to be not quality. Thus the quality of service can be defined as the extent of the difference between the reality expected by consumers for the services they receive or obtain (Setyoningsih, 2011).

The dimensions are sorted based on satisfaction obtained by consumers regarding the quality of service including:

a. Reliability, which is the ability to provide the promised service immediately, accurately and satisfactorily
b. Responsiveness, which is the desire of the staff to help provide an agile and responsive service
c. Assurance, covering the knowledge, competition, decency and trustworthy nature of the staff, free from harm, risk or doubt.
d. Empathy, including ease in establishing relationships, good communication, personal attention and understanding of the individual needs of consumers.
e. Physical evidence (Tangibles), including physical facilities, equipment, workers and communication facilities

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Deming Cycle

The Deming Cycle is a continuous improvement model developed by Dr. Edward Deming a pioneer of TQM (Tjiptono, 2005). There are 4 main components and divided into several steps, namely:

1. Develop a repair plan (Plan)
2. Implement the plan made (Do)
3. Check the results
4. Make adjustments when needed (Action)

According to Knowles (2011) this model began by determining the purpose of then making a repair plan and then carrying out what had been planned. The results will be analyzed and known causes. If the result is not as expected then there needs to be modification by returning to the initial step, so that the expected improvement can be achieved.

Eight Steps of Repair and Seven Troubleshooting Tools

Eight steps improvement is a troubleshooting method or a method of improving success based on an ongoing PDCA cycle. The eight steps need to be applied by Quality Control in order to achieve the standardization and quality that the company targets, including:

1. Establish issues/problems/success factors that need to be fixed or improved
2. Analyzing causation
3. Find the root of the problem
4. Plan actions
5. Implement the plan
6. Check the results and impact
7. Create the Stadarization
8. Prepare your next plan

As for the seven problem solving tools (tools) used in each stage of improvement in the grouping of problems and facilitate data analysis in the process of problem solving and performance improvement are:

1. Stratification, which is grouping data in a certain category so as to facilitate the making of conclusions.
2. Pareto diagram, this diagram classifies the data in descending order from left to right, if the data is decreasing then it can identify the factors that contribute to a problem (Besterfield, 2009).
3. Causal Diagram, is a diagram that shows the relationship between cause and effect (Gaspersz, 2000).
4. Scatter chart, is a diagram that determines the causal relationship between two variables by plotting into a Scatter chart.
5. Histogram, is a graphical representation of process capability data distribution.
6. Graphics, is a tool used to display data in visual form.
7. Check Sheet, which is a form used to collect data by ensuring that the data is valid by process control personnel and problem solving.

Quality Control Competency

In conducting Quality Control, in addition to using the available tools, personnel who are part of the quality control group must also have certain capabilities to be able to carry out quality improvement plans including:

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1. Brainstorming

It is an ability and method used to gather creative ideas in a group quickly, precisely, easily, simply and can involve many people (Dianto, 2007). Brainstorming is considered effective for collecting data and being feedback for employees. In brainstorming, managers and supervisors act as facilitators. In brainstorming, participants should be encouraged to issue and express any ideas that exist and are considered valid (Tjiptono, 2005). This brainstorming includes:

a. Determining possible causes of the company's productivity decline
b. Decide what productivity issues need to be resolved
c. Team members feel free to talk and contribute ideas
d. Capture a large number of alternative perceptions
e. Creativity is the desired outcome
f. Facilitators can effectively manage teams

2. 5 Why Aproach 5

Why Aproach is a concept that is applied to asking questions up to five times to analyze something (Fukui, et al, 2003). This concept is used to find the root of the problem because the first sign of the problem is symptoms, not causes this is why every personnel must be able to do critical thinking in order to find actions to solve the problem that will arise.

3. 5W3H

5W3H here is a matrix (planning actions) where the formula is:

- What: What are the causal factors to be addressed or supporting factors to be improved
- Why : Why countermeasures or improvements are needed
- Where : Where is the scene or repair
- When : When it starts and when it is expected to be completed
- Who : How the method or how to work
- How Much : What is the cost budget required
- How Many : How many tools are used

DISCUSSION

From the previous description, it is known that Quality Control plays an important role in order to guarantee and maintain the quality of both sales and after-sales in automotive companies. The capabilities of each personnel who are part of the QC also need to be considered. The aspects emphasized in Quality Control here are: (1) Elements of control, management of a job, defined and well-managed processes, integrity criteria (2) Competencies, such as science, skills, experience and qualifications (3) Soft elements, such as staffing, integrity, trust, organizational culture, motivation, team spirit and quality relationships (Anonymous, 2020).

Each QC personnel must have several skills that make them capable of the challenges that will be faced such as: (1) Having an appropriate educational background and relevant to the work as Quality Control (2) A QC must have communication skills both oral and written good (3) Good analytical skills teruta arithmetic calculation and precision (4) Ability in using technology (5) Able to collaborate with other departments in helping maintain or improve quality more effectively. In keeping with the global dynamic movement, automotive companies also need to learn to predict the needs and desires of the market. This is intended to keep the company afloat, innovation is created and consumer loyalty is also maintained. In this era of globalization where human mobility becomes higher, the efforts that companies can make are not just building dealers and waiting for consumers to come.

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The implementation of other efforts to bring in consumers needs to be worked on. One of them is from the after-sales aspect. Use of the online system. Companies usually use a Customer Relationship Management system (CRMs) strategy that is packaged easily for its use because it can be accessed through a smartphone or system. According to Octa (2019) after-sales services can increase customer satisfaction by: (1) Utilizing digital channels to make regular maintenance service scheduling through mobile applications or websites that can be accessed directly by consumers (2) The occurrence of an increase in the number of consumers who come to perform routine maintenance of vehicles in authorized workshops (3) This also increases the transaction of replacement of official parts when consumers perform routine maintenance (4) Optimizing and working efficiently and quickly when providing routine maintenance services of vehicles from the beginning to End. Although this Customer Relationship Management system (CRMs) has many advantages for the company, the QC role must also continue to monitor the course of use of this system because it allows the leakage of user data. So that later, QC qualifications not only control the sustainability of CRMs but also must be able to maintain the security of data usage of these CRMs. The trick is to meet the QC dimensions namely: Reliability, Responsiveness, Assurance, Emphathy and Tangibles.

CONCLUSION

In maintaining and improving the quality in a company, quality control group or Quality Control plays an important role because it conducts supervision from input to output. QC personnel must have adequate qualifications because it can affect the productivity of the company, in this case it is an automotive company that is sales and after-sales. If the quality is not maintained, in addition to lowering the company's profit will also decrease the level of customer satisfaction.

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