

## Retiring Budget Cars: Quality Improvement

### Description

The Budget Rent-A-Car operation in Dallas, Texas formed a quality improvement team to improve its process for retiring or “turning back” older vehicles and moving them into auction. Ideally, this turnback process should be as short as possible to maximize revenues, since unused vehicles make no money for the company and indeed take up lot space that might otherwise house active vehicles. In its analysis of the process, however, the team determined that it took, on average, 5.7 days to turn back retiring cars. Fully 69 percent of those cars required more than the targeted goal of three days to reach auction.

The team set out to find the causes of delay in the turnback process. It chose three of the slowest locations and created flow diagrams of the process used at each location. The processes proved to be quite similar, even though the physical layouts at each location differed. Next, the team brainstormed theories for delays and listed them in a cause-effect diagram. Most of the theories focused on the employees’ knowledge of both the overall process and the individual steps for which an employee was responsible.

The team therefore designed a survey of employees to collect data on those theories. The survey went out to the members of the process—supervisors, customer service representatives, service agents, shuttlers, and mechanics. The results of the survey verified the causes tested. On average, the surveyed group of 62 employees could correctly answer only half of the questions about the turnback process.

The team then developed remedies to combat these deficiencies. Fifteen solutions were implemented to address both general knowledge and specific areas of risk. Among the steps taken were mandatory training for all employees, complete with written procedures, several different tactics to facilitate the identification of turnback vehicles, and strategies designed to heighten scheduling and staffing attention to the turnback process.

Within a year, this quality improvement effort yielded significant results. The average turnback time dropped to less than two-and-a-half days per car, and the bottom-line savings were substantial. The Budget operation in the Dallas area saved \$110,000 the first year in vehicle depreciation costs and in savings on interest and transportation costs.

### Learning Points

By using a structured quality improvement process, the Budget team was able to achieve its mission, i.e., significantly reduce the turnback time needed to send older rental cars to auction. By using simple quality improvement tools (in this case, flow diagrams, cause-and-effect diagrams, data collection and analysis, and brainstorming), the team was able to identify the real causes for delays in the process and develop remedies to reduce or eliminate them.

### Discussion Questions

**Question:** Do you have examples from your own organization where the needs of the employees have changed, but the same old processes are still being used?

**Answer:** Responses will vary. Most organizations will have examples of outdated processes that no longer meet the needs of employees. These examples are excellent candidates for quality improvement projects.

**Question:** Are there any examples of “turnback processes” in your organization? Are there chronic problems that continue to exist unresolved? How might you use the quality improvement process to find a creative remedy to the problem?

**Answer:** Responses will vary. By following the quality improvement process, a quality improvement team can understand the problem fully and uncover its root causes. As a result, it is likely to develop a remedy that will eliminate the problem forever.

**Question:** What techniques might be effective in collecting information about customer or employee needs?

**Answer:** Responses will vary but may include the following:

- Surveys designed to collect information from a large number of individuals. In this case, the team used an employee survey to confirm its theories about the root cause of the turnback problem.
- Asking structured open-ended questions that usually start with: How?; In what way?; Can you tell me more?; Describe...; What?; Can you give me an example? and What benefit are you seeking?
- Conducting focus groups (with groups of customers or employees) can provide an accurate picture of what is important to those customers. Usually, feedback from one customer will stimulate comments from another, providing richer information than can be obtained in a questionnaire alone. The focus group facilitator can easily probe for more details by using follow-up questions.

**Question:** What can quality tools help you do?

**Answer:** Quality tools contribute greatly to the success of quality teams as they tackle difficult problems. By collecting, organizing, and displaying data with the help of quality tools, patterns and trends emerge to shed new light on problems.

**Question:** What quality improvement tools were used by the Budget Rent-A-Car improvement team? What additional quality improvement tools have you used to help solve problems you have encountered in your work?

**Answer:** The Budget quality improvement team used flow diagrams, cause-effect diagrams, data collection and analysis, and brainstorming. There are many other quality improvement tools available to solve problems, including: histograms, Pareto analysis, data collection, stratification, scatter diagrams, location diagrams, and box plots.