IMPROVE THE EFFECTIVENESS AND EFFICIENCY OF ORGANIZATIONAL PROCESSES AT CHALLENGE FITNESS STUDIO

Author: Jorge O. Colon Andino
Advisor: Dr. Rafael Nieves Castro, PharmD, Industrial Engineering Department

Abstract

This project focuses on the implementation of company improvements using engineering tools. The Challenge Fitness Studio organization's based improvement process was analyzed. The main focus of the project focuses on the effectiveness and updating of the organizational system in an automated manner with methodologies and tools learned through graduate studies. The PDCA Cycle methodology was used to develop this project and successfully eliminate the outstanding problems determined in the analysis to implement improvements. Our goal was to provide Challenge Fitness Studio with the necessary tools in order to develop an organized structural strategy with a continuity of daily processes. We focus on demonstrating the staff that the organization and technological tools will help with the efficiency and facilitation of the process. We conclude the final project by presenting the customer's structured documents and enhanced processing that will help you through your journey to a thriving business.

Key Terms - Cause and Effect Five Why and Two How Tools Analysis (5W2H), Challenge Fitness Studio (CFS, Plan, Do, Check, Act Cycle (PDCA Cycle), Process Flow Diagram (PFD).

Project Description

Improve the efficiency of Challenge Fitness Studio's organizational processes, without any operational cost. As part of business improvements it is to evaluate the labor productivity opportunities and the deficiency on the method standardizations to provide better tools to the staff and the administration in eliminating deficiencies based on standardized methods that provide continuity and consistency in staff and administrative work functions that impede growth and stability.

Objectives

- Improve the inventory management system and automatize the administrative methods with technological means.
- Lean Process Improvement
- Increase effectiveness and efficiency with Engineering Tools in a PDCA Cycle methodology.
- Perform improvement, effectiveness, and continuity deployments without incurring additional costs.

Methodology

Plan Phase:
- Interview customers explore the daily task and process assigned to staff.
- Confirm Scope and Problem Statement with project champion.
- Project Charter from the Customer Interview.
- Study the elements of the organization by means a PFD.

Do Phase:
- Measure current process effectiveness.
- Complete root cause analysis though prioritizing causes on a Cause and Effect Five Why and Two How Tools Analysis.
- Demonstrate effect on the problem of every potential cause prioritized.
- Design implementation plan.

Check Phase:
- Analyze each element of the CFS operation.
- Generate solution ideas and implementation requirements.
- Forecast benefits and Discuss solutions with customers.

Act Phase:
- Execute the recommendation of implementation plan.
- Analyze and verify improvement with the targeted cause on the project goal.
- Document and train personnel on new standard work.
- Share lessons learned and the repeat the cycle for continuity improvement.

Results and Discussion
Plan Phase

When the operational needs of CFS are defined, they are based on the practical use of up-to-date technological means in a way that significantly facilitates the monitoring process. The first phase of the cycle is subdivided into four (4) subparts..
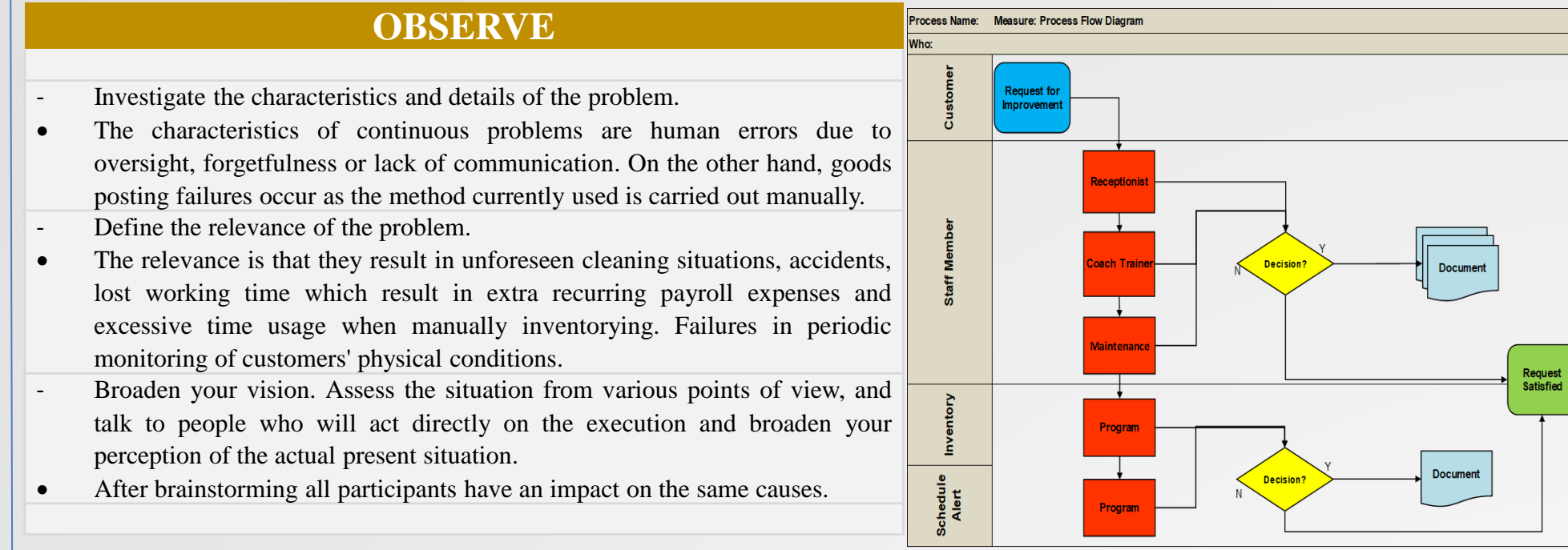
Plan Phase Cont.

Table 1: Subpart Identify

Table 2: Project Charter

With the set of observations provided in Table 3 make an adapting the PFD (Figure 1) to the finding solutions it is analyzed the customer requisitions to develop the strategy.

Table 3: Subpart Observe

Figure 1: PFD

In the subpart of Analyze (Table 4) the root cause analysis is one of the common tools to use for continuous improvement. The main objective of the problem is to understand a problem and its cause. This analyze was make with 5W2H tools show in Table 5.

Table 4: Subpart Analyze

Table 5: 5W2H

In the Table 6 describes what the implementation plan and determine areas to impact in the execution.

Table 6: Subpart Action Plan

Do Phase

In the Do phase we use a tool commonly used in organizational structures where at the same time we can continue to self-evaluate the system to add corrections to prevent deviations that produce our errors such as adapting them to face future changes without affecting the continuity of the company's processes. Assimilate the staff to feel part of it, increasing the expectations of group work by achieving cohesion among the members of the organization, and therefore building a business culture. In the Table 7 show the description of the design execute

Table 7 : Subpart Execute

Check Phase

Table 8 contains a summary of the subpart Verify would look like and the important information to collect to establish upcoming corrections in the cycle.

Table 8: Subpart Verify

VERIFY
- Monitor results and create indicators. - The results of the implementation of improvements in practice exercise were excellent . - Check results and check for cause prevention. - Proper oversight is the prevention of recurring problems within the organization. - If there is no effect on the cause. - The improvements had a positive impact on the continuity of processes and minimized time in some areas corresponding to the administration of the organization. - Identify and make the necessary corrections. - Some points related to the employee manual should be clarified, and as suggestions for regular meetings to collect opinions and suggestions from customers and employees to further improve the company. - Evaluate the learning and review goals and results. - With this improvement and control implementation tool, goals were achieved and a regular self-assessment tool provided.

Act Phase

In the Act phase To solve the problem correctly, you need to improve the overall documentation and training process. The Table 9 describes the importance of customer-submitted implementations of recommended improvements.

Table 9: Subpart Standardize

STANDARDIZE
- Use the standard adopted to prevent the recurrence of the problem. - As mentioned above in the Check Step, the main recommendation to the client is to follow the steps of continuous improvement creating recurring habit of corrective self-assessment where the company will not only achieve the objectives already achieved, but will create a culture of job satisfaction, as well as a global satisfaction towards customers. - It is recommended that as the company's gradual growth can be suggested the change of a better inventory program and alerts of customer reviews a little more sophisticated, in which the additional expense incurred in it is justified.

The Figure 2 demonstrates the fully cost-free digitized inventory system, the operator owner will be able to carry out inventories remotely, speeding up the inventory replenishment purchasing process while accounting for the volume of purchases in an automated manner. Maximizing the monitoring task.

Figure 2: Inventory Program Sample

In the Figure 3 we observed an alert system for periodic physical reviews, in which it provides a notice seven (7) days in advance of the expiration date to have one week of preparation for the appointment of periodic reviews of customers.

Figure 3: Inventory Program Sample

Act Phase Cont.

In the following Figure 4 you can see the digitized daily task list, where each employee daily will submit it to the system, so that the employee himself will have with him a reminder of the tasks to be performed minimizing errors or oversights in their respective workspaces.

Figure 4: Task List

In this task list there will be a space to write any observations or situations that occurred in the working hours. Only the owner operator of the establishment will have access to the answers

In the following Table 10 have a brief conclusion as last part of this phase.

Table 10: Subpart Conclusion

CONCLUSION
- Document and measure the results obtained. - The results are documented and submitted to the customer for the demonstration of the fulfillment of objectives required by the customer. - Evaluate whether the results justify the new pattern. - These improvements achieved a pattern with positive results, which as employees achieve adaptation to changes the results will be consistent. - Validate the effectiveness of the problem solving process. - The solution to existing customer issues is validated and verified. - Repeat the PDCA cycle and apply increment continuous improvements. - As part of these practices, monitoring of all previous steps was implemented as a system of continuous improvement, creating an organizational culture designed to meet the highest corporate demands of the market.

Conclusions

The project carried out at Challenge Fitness Studio was mainly based on recommendations to achieve the automation objectives of the organization's administrative processes. It was facilitated to reduce uns measured working time with higher results and minimize errors, facilitating monitoring processes while substantially reducing customer discomfort due to lack of maintenance in areas of frequent use and lack of regular physical assessments.

In all these recommendations, no company expenses have been incurred, and substantially improve the monitoring process without having to interact with staff continuously. With the alert system we give continuity in the monitoring phase to customers fulfilling the objective of continuity of the organization and at the same time we increase customer satisfaction by providing the feeling that we are very aware of their physical health. This same alert system serves as a monitoring tool for the company's weekly and fortnightly tasks. In conclusion, we understand that meeting the implementation of the execution plan is sufficient to meet the satisfaction and correctness of the customer's main needs; without incurring additional costs and also causing savings by reducing inventory and material expenses among others; reducing operating costs that become benefits for the company.

And at the same time we take care of our natural environment by reducing the unmeasured production of solid waste, thus contributing even more to the health vision of the company.

References

[1] Professional Templates for Excel. (n.d.). (2021, February 1). From PDCA Excel Template: https://topexceltemplates.com/

[2]PDCA Cycle (Plan, D. V. (2013, August 23). PDCA Home. From PDCA Cycle (Plan, Do, Verify and Act): The Deming Circle of Continuous Improvement : https://www.pdcahome.com/5202/ciclo-pdca/

[3] What is Plan-Do-Check-Act (PDCA) Cycle? (n.d.). (2021, April 16). Retrieved from Kanbanize: https://kanbanize.com/leanmanagement/improvement/what-is-pdca-cycle