



# Solving a Problem of Delays in a Work Team

Germán Rodríguez Franceschini  
 Advisor: Héctor J. Cruzado, PhD. PE  
 Polytechnic University of Puerto Rico



## Abstract

This project analyzes the work environment in a team that present delays in the delivery of tasks with the aim of reducing them. It's a small and diverse team in an information technology services company that works from home. Applying the techniques of Affinity Analysis, Relationship Matrix and Cause and Effect, deficiencies in communication, well-being and organization were found. To correct them, Catch-Up and Coaching techniques were used through messages, e-mails, video calls, blogs, podcasts and videos. It was possible to establish a work environment of trust, respect, cooperation and union with defined goals and responsibilities. The project objective was reached, delays in the delivery of tasks in the team were reduced. The relationship between a valued and strengthened work team and performance was established. The opportunity that work from home represents for future studies also arises.

## Introduction

Working in a team is common today for most companies. Teams are created to achieve together a goal already determined through collaboration and commitment. On some occasions, due to different circumstances, the efficiency or performance of a team may be affected and delays in the delivery of tasks is one of the problems that may arise.

This project was performed at an information technology services company that is dedicated to working with other companies, modernizing and optimizing operations and security in order to obtain high levels of performance and competitiveness. This is a company where teamwork is encouraged. The project analyzes the work environment in a team that presents delays in the delivery of tasks with the aim of reducing delays through the application of administrative techniques. This is a small and diverse team made up of eight people. The team has persons from both sexes, different generations and cultures. The team has been working from home in recent months.

The objective of this project was to reduce the delays. In this paper, the actions taken to analyze and solve this problems are presented.

## Methodology

Using administrative methods, it was possible to determine some of the cause of the delays in this work team and to establish and apply the appropriate techniques to solve the deficiencies found.

The first technique used to establish the causes of delays was an Affinity Analysis Diagram. Through this, data was collected that included expressions, ideas, opinions and complaints from the team members. They were grouped according to their affinity and related to the possible causes of the delays. Figure 1 shows us the Affinity Analysis Diagram.

Then, a Relationship Matrix Diagram was created. An L-Type Matrix was used. The deficiencies found were placed on one axis of the matrix and the requirements were placed on the other axis. Each team member assessed each requirement related to the deficiencies found to determine the relative importance of each deficiency. A strong relationship was established between the requirements and the causes of delays. Figure 2 shows us the completed Relationship Matrix Diagram.

Finally, a Cause and Effect Diagram, Figure 3, was created to illustrate the relationship between the causes found and the delays. This is a simple, easy-to-understand diagram that conveys the root problems to all team members to visualize and focus on working on them.

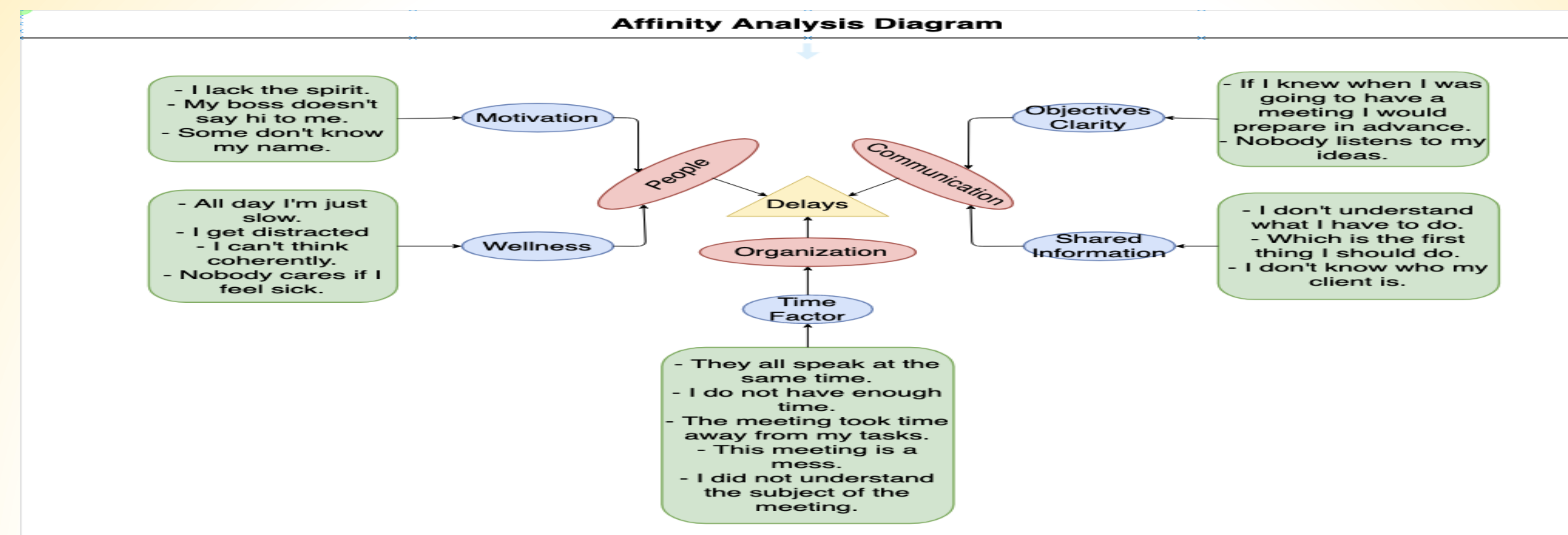


Figure 1  
Affinity Analysis Diagram

**Relationship Matrix Diagram**

Causes of delays	Work environment requirements					
	Relative Importance	Motivation	Wellness	Objectives Clarity	Shared Information	Good use of the time factor
People	2.8	■	■	■	■	▲
Communication	2.6	▲	■	■	■	▲
Organization	2.6	▲	▲	■	■	■

Symbol	●	▲	■
Value	1	2	3
Relative Importance	Weak	Medium	Strong

Figure 2  
Relationship Matrix Diagram

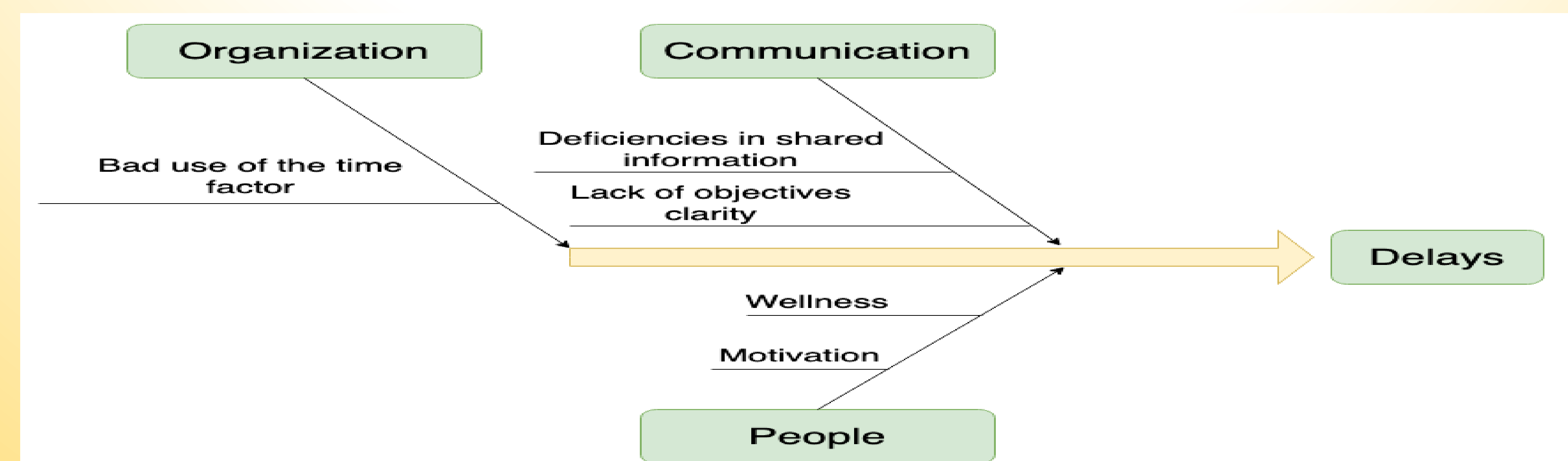


Figure 3  
Cause and Effect Diagram

## Results

The results obtained have been positive. Some of the causes of the delays found have been deficiencies in communication, organization and well-being among team members. These three factors are needed to achieve a good work environment. With the applied administrative techniques of Catch-Up and Coaching, delays have been reduced. It worked with well-being, communication and motivation. Figure 4 shows us the delays in the delivery of tasks during the first three weeks. Figure 5 shows us the reduction in the delivery of tasks during the last four weeks.

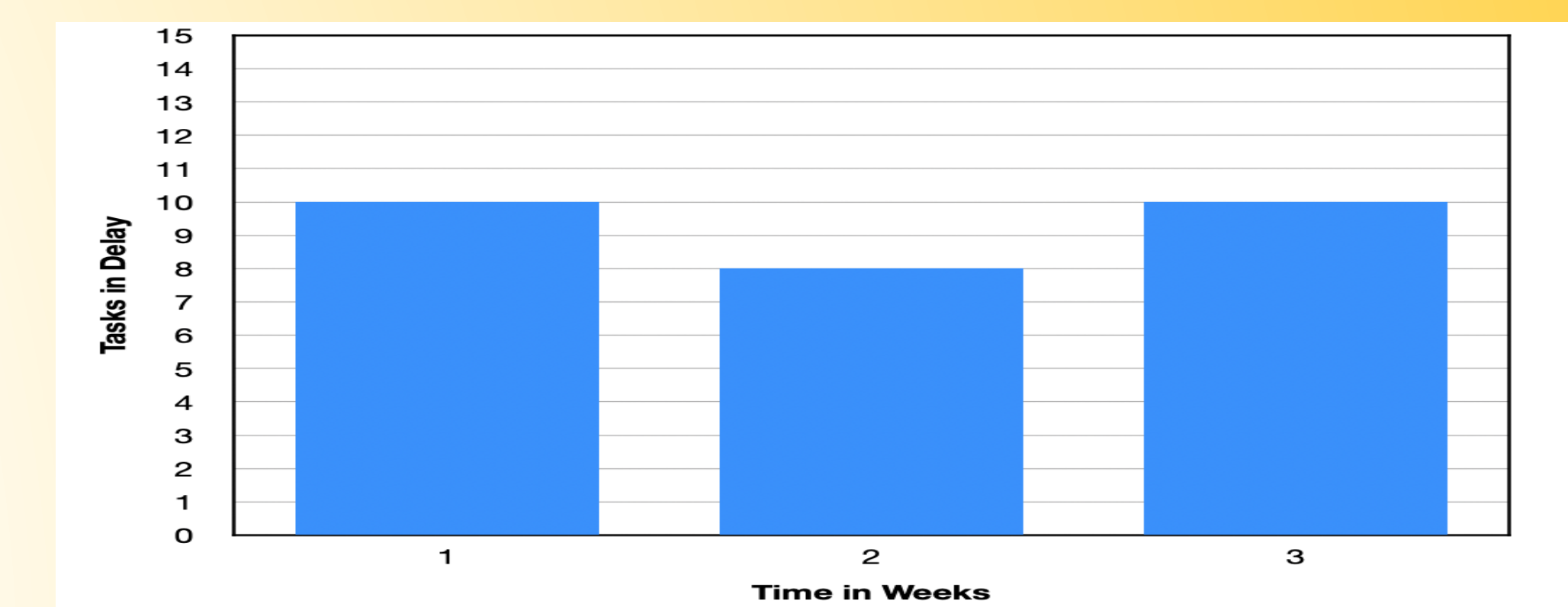


Figure 4  
Work delivery delays for three weeks (From August 30 to September 19, 2020)

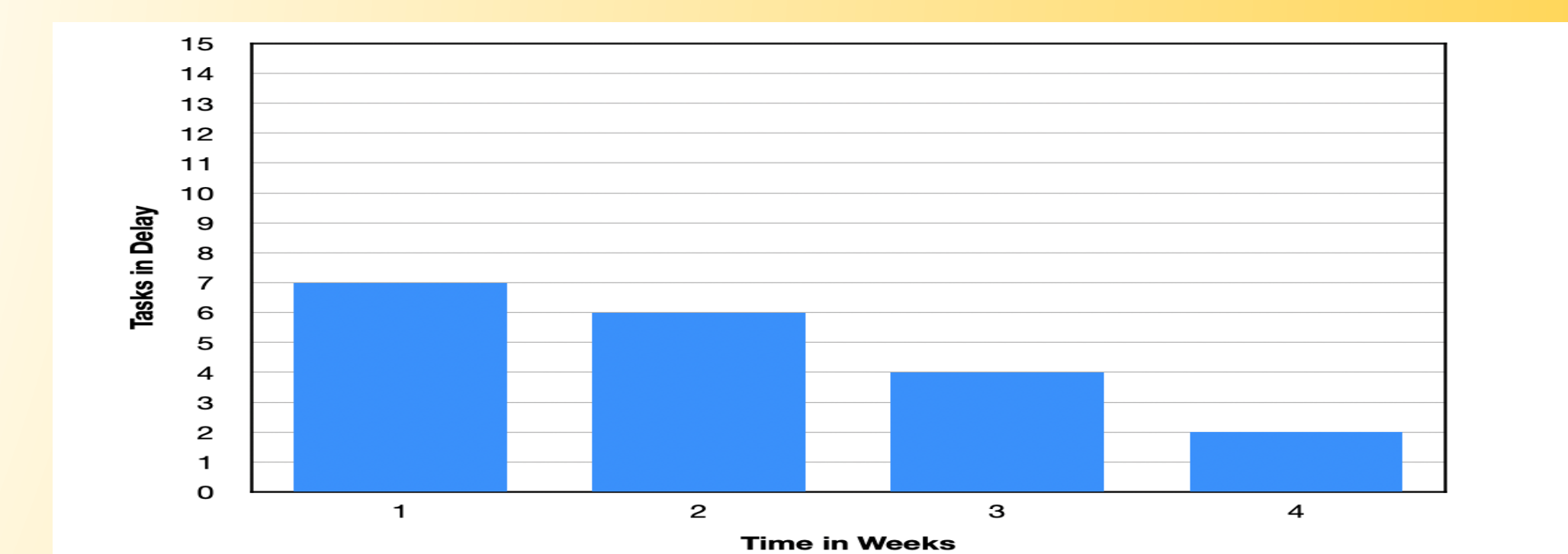


Figure 5  
Work delivery delays for four weeks (From September 20 to October 17, 2020)

## Conclusion

The objective of this project was achieved. Delays in the delivery of tasks in work team were reduced. Keeping the focus achieves the increase in performance. Awareness was created among team members that a good work environment is essential and that taking care of yourself and staying healthy is linked to performance. They learned the importance of acceptance and the value represented by the differences between members of a group and to establish relationships of trust based on a respect. Sharing knowledge, learning from the experience of their peers, and supporting each other united by the same goal led this team to achieve its goal of reducing delays. When the members of a work team are appropriately valued and strengthened, they will feel included and committed to the established goals and their performance will improve.

The opportunity represented by working from home was also found. This is a new way of working that will be around for a long time or maybe forever. Some unanswered questions are related to how the performance and goals of a company will be impacted in the long term with this new way of working from home. This could be an interesting topic to study.