**Status Acounting**

The purpose of this document is to establish methods for implementing changes, monitoring, and evaluating results in a software development team. These practices are essential to ensure the effectiveness and efficiency of development processes, as well as to maintain quality and customer satisfaction. By implementing these methods, the team will be able to effectively manage changes in the software, assess their impact, and make informed decisions to continuously improve the final product.

The following sections will be defined:

1. Estimation of resources to implement the changes.
2. Procedure for obtaining information about the implementation of the change.
3. Evaluation variables to measure the behavior of the implemented change.

**Mechanisms for estimating resources to implement changes.**

* Cost Estimation: Taking into account costs associated with team working hours, necessary infrastructure, and any other direct or indirect costs related to the changes.
* Function Point Estimation: If possible, employing the function point technique to estimate the size and complexity of the changes.
* Analogy Estimation: Using similar past experiences as a reference to estimate time and resources.
* Requirements Analysis: Carefully reviewing the requested changes to fully understand their scope and complexity.
* Task Breakdown: Breaking down the changes into smaller, more manageable tasks that can be estimated more accurately.
* Review and Adjust: Review and refine your estimates as you gather more information or encounter changes in requirements.
* Time Estimation: Utilizing techniques such as PERT (Program Evaluation and Review Technique) estimation to gauge the time needed to complete each task.
* Contingency Reserve: Incorporates a buffer of time and resources to address potential unforeseen or additional changes during implementation.

**Procedure to obtain the information about the implementation of change**

1. Identification of involved parties: Recognizing the entities involved in carrying out the proposed change.
2. Scheduling meetings: Setting dates for meetings with stakeholders to address the implementation of the change.
3. Evaluation of the change request: Thoroughly analyzing the change request to understand its scope, goals, and potential impact.
4. Analysis of the action plan: Discussing the action plan to implement the change, considering aspects such as schedule, available resources, and interdependencies.
5. Recording information: Recording all relevant details related to the execution of the change, including the agreed plan, schedules, resource needs, and potential risks or challenges.
6. Resource allocation: Assigning the necessary resources, such as personnel, equipment, and supplies, to carry out the implementation of the change.
7. Progress monitoring: Closely monitoring the progress of the implemented change, providing regular updates to stakeholders on the current status, and documenting any issues that arise.
8. Feedback collection: Obtaining feedback from stakeholders at all times during the implementation process to ensure that the change meets their expectations and requirements.
9. Review of execution: Assessing the implementation of the change to ensure its successful completion and the achievement of the objectives set forth in the change request.
10. Closure: Once the change has been successfully implemented, closing the change request and updating any relevant documentation or systems.

**Evaluation variables to measure the behavior of the implemented change.**

* **Duration of performed tasks:** Compare the total estimated duration of the tasks to be performed with the time it took to actually complete the tasks.

Two different approaches will be analyzed:

1. Total duration of the change request to complete its implementation:

This approach focuses on the total time taken from the beginning to the completion of the change request implementation.

1. Time for each activity that contributed to the implementation of the change:

In this approach, the implementation of the change is broken down into different activities or tasks. Each activity is individually analyzed to determine how much time it took to complete.

1. Once the previous times have been obtained, the following scenarios will be analyzed.

|  |  |  |
| --- | --- | --- |
| Less time | Perfect time | Greater time |
| Make an adjustment to the schedule and use the remaining time to continue with the next tasks. | Continue with the schedule activities and document the planning up to this point as accepted. | * Review the impacts on other project activities. * Apply charges to those responsible for the activities. * Rearrange the project schedule to avoid affecting the product delivery date. |

* **Cost of the change request:** Compare the estimated cost vs real cost. This element involves evaluating the difference between the estimated cost initially projected to carry out a change request and the actual cost incurred during its implementation. By comparing these two values, it can be determined if there were significant discrepancies between what was expected to be spent and what was actually spent.

The associated costs can be based on:

* Team members
* Activities
* Technologies and services

With the associated costs in the above points, the following scenarios are analyzed:

|  |  |  |
| --- | --- | --- |
| Actual cost lower than estimated cost. | Adequate actual cost. | Actual cost higher than estimated cost. |
| * Save the remaining budget for future situations. * Document the experiences with references about budget overestimation. | Continue with the schedule activities and document the planning up to this point as accepted. | * Analyze how the change affects the defined project budget to accommodate the change. * Document the experience as an underestimated estimated cost. |

* **Number of performed tasks:** Compare the initial task and the task performed. This metric involves assessing the variance between the tasks outlined in the initial plan and those that were executed during the implementation phase. By comparing these two sets of tasks, it becomes possible to identify any deviations or additional tasks that arose during the implementation process.

After analyzing the planned tasks and the tasks performed, one of the following scenarios must be assigned:

|  |  |  |
| --- | --- | --- |
| Fewer tasks completed than estimated. | Same tasks completed. | More tasks completed than estimated. |
| * Prioritize the unresolved tasks. * Reallocate resources. * Reorganize the schedule of activities. * Document this experience for future planning. | Continue with the schedule activities and document the planning up to this point as accepted. | * Celebrate the team's achievements. * Update the planning due to the new circumstances. * Evaluate the consequent impact of the event. * Document positive team experiences behind the event. |

* **Resources used:** Compare estimated trained personnel, tools and technology with actual ones used. This aspect involves examining the variance between the resources initially projected for the implementation of a change and the resources actually employed during the process. By conducting this comparison, it enables the identification of any discrepancies or deviations between the planned and actual resource allocation.

When analyzing the resources employed, it's necessary to accept some of the following scenarios.

|  |  |  |
| --- | --- | --- |
| Fewer resources used than estimated. | Same resources used as estimated. | More resources used than estimated. |
| * Communicate to the team about the current state of resources. * Review the project planning and adjust milestones and activities. * Identify opportunities to leverage resources effectively. * Document the lessons and experiences learned. | Continue with the schedule activities and document the planning up to this point as accepted. | * Identify and document the reasons why the event occurred. * Inform stakeholders. * Review and readjust activities and deadlines. * Identify solutions if possible. * Document the negative experiences of the event. |

* **Interdependencies with other project components:** Planned versus actual interdependencies used. This aspect entails evaluating the alignment between the interdependencies anticipated during the planning phase and those that were actually relied upon during implementation. Analyzing this comparison allows for identifying any discrepancies or deviations between the anticipated and realized interdependencies. It provides insights into the effectiveness of interdependency management strategies and highlights any unexpected dependencies that emerged during the project execution.

**TIME**

* Time it takes to complete each change request.
* Time to complete each activity within the change request.

**COST**

* Cost of technological resources to implement the change.
* Cost of human resources.
* Costs of training courses.

**RESOURCES**

* Human resources to implement the change.
* Technological resources to implement the change.

**RISKS**

* Risk of losing human resources.
* Risk of damage to computer equipment.

**Here's how each variable affects the others:**

**TIME:**

* Cost: As time increases, more hours of work need to be included, impacting salary expenses.
* Resources: A new human resources planning may be required due to the extended timeline.
* Customer Satisfaction: Delayed tasks negatively influence customer satisfaction.

**RESOURCES:**

* Costs: Loss of human resources requires re-planning of costs and activities with the remaining staff.
* Time: Problems with human or technological resources can affect the established timelines in the planning.

**RISKS:**

* Risks are a criterion present in each variable, as all variables entail risks that need to be considered.

**COSTS:**

* Affects customer satisfaction: Excessive costs may not be liked by customers, leading to dissatisfaction.
* Also affects resources: It may impact decisions regarding technology purchases or hiring personnel

**Plan to evaluate the current status of the project**

In order to ensure the success and effectiveness of the EcoCaffe's project, a comprehensive evaluation plan is essential. This plan aims to assess various key aspects including time, costs, human and technological resources, risks, and customer satisfaction. By systematically analyzing these factors, we can identify strengths, weaknesses, and areas for improvement, ultimately guiding us towards achieving project goals and meeting stakeholder expectations.

These are the aspects that we will see next:

1. **Objectives of the Evaluation Plan**
2. **Evaluation Methodology**
3. **Areas to Evaluate**
4. **Action Plan**
5. **Schedule**
6. **Evaluation and Feedback**
7. **Objectives of the Evaluation Plan:**

* Evaluate the progress and performance of the EcoCaffe's system development in various key areas.
* Identify areas of improvement and optimization opportunities.
* Ensure that the project meets deadlines, budgets, and client expectations.

1. **Evaluation Methodology:**

* **Interviews and Surveys:** Conduct interviews with the development team members, stakeholders to gather feedback on the project progress and customer satisfaction.
* **Data Analysis:** Analyze data related to development time, costs, resource utilization, and customer satisfaction metrics.
* **Risk Assessment:** Review and update the project's risk assessment, identifying potential obstacles that could affect project success.
* **Progress Review:** Conduct periodic reviews of the project's progress compared to established milestones and project objectives.

1. **Areas to Evaluate:**

* **Time:** Assess the project's progress in relation to the planned schedule, identifying potential delays and areas where the development process can be expedited.
  + **Number of requirements** met from the total planned for the current date.
  + **Number of pending requirements** that had to be met up to the current date.

To evaluate this variable, the fulfilled requirements and those planned up to the date are determined:

|  |  |  |
| --- | --- | --- |
| Acceptable | Negative | Positive |
| Fulfilled requirements are equal to the planned ones. | Fulfilled requirements are fewer than the planned ones. | Fulfilled requirements are greater than the planned ones. |

* **Costs:** Review the project budget and compare it to actual expenses, identifying any significant deviations and seeking ways to optimize costs.
  + **Budget vs. Actual Expenses:** Compare the project's initial budget with actual expenses in development, resources, and other associated costs. Are there significant deviations between the planned budget and actual costs?
  + **Resource Optimization:** Assess whether financial resources are being efficiently utilized in the project.

To evaluate this variable, the current costs and those planned up to the date are determined:

|  |  |
| --- | --- |
| Negative | Positive |
| Current costs are greater than the planned ones. | Current costs are equal to or less than the planned ones. |

* **Human Resources:** Evaluate the availability and performance of the development team, identifying potential training needs or adjustments in resource allocation.
  + **Team Capabilities:** Evaluate the skills and capabilities of the development team to meet project requirements. Does the team have the necessary skills to address technical challenges and meet deadlines?
  + **Staff Satisfaction and Retention:** Analyze staff satisfaction and retention in the development team.

To evaluate this variable, the current human resources and those planned up to the date are determined:

|  |  |  |
| --- | --- | --- |
| Acceptable | Negative | Positive |
| Current human resources are equal to the planned ones. | Current human resources are greater than the planned ones. | Current human resources are fewer than the planned ones. |

* **Technological Resources:** Review the technological infrastructure used in the project, identifying potential compatibility issues or upgrade needs.
  + **System Functionality:** Evaluate the functionality and performance of the EcoCaffe's informatic system under development.
  + **Technology Update:** Review if the technology used in the project is up-to-date and compatible with system and business needs.

To evaluate this variable, the current technological resources and those planned up to the date are determined:

|  |  |  |
| --- | --- | --- |
| Acceptable | Negative | Positive |
| Current technological resources are equal to the planned ones. | Current technological resources are greater than the planned ones. | Current technological resources are fewer than the planned ones. |

* **Risks**: Evaluate the effectiveness of implemented risk mitigation strategies and review if new risks have emerged that require attention.
  + **Identification of Emerging Risks:** Identify and assess new risks that have arisen during the project's development.
  + **Effectiveness of Mitigation Strategies:** Evaluate the effectiveness of implemented risk mitigation strategies to address identified risks.

To evaluate this variable, the risks that have arisen are identified, and it is determined whether any mitigation strategy was applied.

|  |  |  |
| --- | --- | --- |
| Acceptable | Negative | Positive |
| 24% or less of the risks that arose did not have a mitigation strategy applied. | 25% or more of the risks that arose did not have a mitigation strategy applied. | All the risks that arose had a mitigation strategy applied. |

1. **Action Plan:**

* **Problem Identification and Opportunities:** List identified problems and areas for improvement, as well as opportunities to optimize project progress.
* **Development of Improvement Strategies:** Propose concrete actions to address identified problems and capitalize on improvement opportunities.
* **Resource Allocation:** Allocate additional resources or reallocate existing resources as needed to implement improvement strategies.
* **Continuous Monitoring and Evaluation:** Establish a process to continuously monitor project progress and adjust strategies as needed.

1. **Schedule:**

* Define a detailed schedule for implementing corrective actions and improvements identified, with clear deadlines and responsible parties designated for each task.

1. **Evaluation and Feedback:**

* Establish periodic evaluation points to review the progress of the action plan and gather feedback from stakeholders.
* Adjust the evaluation plan and action plan as necessary based on the results and feedback received.