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**IMPLEMENTATION PLAN**

# **1.0 OVERVIEW**

This chapter illustrates the system implementation phases of our system FastPro.Com Resource Scheduling and Optimization web app.

# **2.0 Oversight**

## **2.0.1 Project Management**

### **2.0.1.1 Project Manager:**

* The executive position leads all stages of web application development to deliver on-time resources and maintain budget constraints.
* Facilitates communication between stakeholders, developers, and end users.
* The team detects possible risks which requires developing strategies to prevent them.
* The project manager has the task to review all major project outcomes before final approval.

### **2.0.1.2 Project Team:**

Different key personnel make up the project team to handle application responsibilities. A record of their duties together with their contact information should be established. The team may include:

* The project team consists of software developers who perform backend development and front-end development and full-stack engineering tasks.
* System administrators
* Data analysts and migration specialists
* UX/UI designers
* Personnel selected from end-user departments play the role of representatives to direct staff interaction with the application system.

### **2.0.1.3 Decision-Making Responsibilities:**

* The PM has primary authority to make routine choices for development work alongside testing operations and deployment execution.
* Project modifications that impact budget or feature extent or timeline requirements need Steering Committee confirmation since it includes senior executives and essential stakeholders.

### **2.0.1.3 Communication Plan**

* The System Support Team will provide frequent progress reports to all stakeholders including members of the Steering Committee.
* The team will conduct weekly meetings to check progress as well as solve challenges and stay focused together.
* An exclusive communication platform consisting of project management software and internal messaging tools will ensure continuous collaboration among team members.
* The implementation process provides open communication channels that allow end users to present feedback and pose questions as well as voice concerns to the implementation team.

# **3.0 PURPOSE**

The main objective of the implementation plan was to ensure there is a smooth change over

from the old system to the new system. This is done through training of staff on or about

the system.

# **4.0 Assumptions and Constraints**

## **4.0.1 Schedule:**

***Assumption:*** The overall timeline for implementation is achievable based on the estimated time required for each activity (conversion, training, etc.).

***Constraint:*** Unexpected delays may occur due to unforeseen technical issues, data migration complexities, or staff training challenges.

### **4.0.1.2 Budget:**

***Assumption:*** The allocated budget is sufficient to cover all implementation costs, including software licenses, hardware upgrades (if needed), training materials, and staff support.

***Constraint:*** Unforeseen expenses might arise due to additional software requirements, extended training needs, or external consultant involvement.

### **4.0.1.3 Resource Availability and Skill Sets:**

***Assumption:*** The project team possesses the necessary skills and experience to complete their assigned tasks effectively.

***Constraint:*** Team members might require additional training on the new system, or there could be unforeseen gaps in expertise that necessitate external resources.

**4.0.1.4 Software and Other Technology:**

***Assumption:*** The chosen software is compatible with existing systems and meets all functional requirements for the Resource Scheduling management system.

***Constraint:*** Compatibility issues between the new software and existing systems might emerge, requiring additional configuration or workarounds. The chosen software might not fully address all the needs, potentially prompting additional customization or integration work.

### **4.0.1.5 Interoperability of Existing Applications:**

***Assumption:*** Existing applications can integrate seamlessly with the new web app system, allowing for data exchange and streamlined workflows.

***Constraint:*** Existing applications may not be readily compatible with the new system, requiring additional development effort or data mapping to achieve interoperability.

### **4.0.1.6 Other:**

***Assumption:*** Staff will be receptive to change and willing to learn the new system.

***Constraint:*** Staff resistance to change or challenges adapting to the new system could hinder the implementation process.

***Assumption:*** External factors like power outages or internet disruptions won't significantly impact the implementation.

***Constraint:*** Unforeseen external events could cause delays or require adjustments to the implementation plan.

# **5.0 INSTALLATION**

## **5.0.1 PARALLEL INSTALLATION**

System upgrades provide greater operational efficiency which leads to better competitiveness. The Resource Scheduling and Optimization Web Application should be deployed through parallel implementation as it represents the best deployment approach.

The new system runs alongside the current system until the complete migration process is finished. The parallel implementation approach stands as the preferred method because it presents low risk to operations. The system preserves its original state for quick return in case of encountered problems thus maintaining reliability throughout the transition period.

Even though parallel implementation boosts system stability while reducing operational risks it becomes expensive and takes longer compared to alternative implementation approaches.

# **6.0 CONVERSION**

Multiple stakeholders need to collaborate successfully for implementing the Resource Scheduling and Optimization Web Application.

All staff who serve as daily system users need to participate actively during conversion in order to comprehend and operate effectively with the new system.

The Project Manager conducts oversight to achieve coordination that brings about minimal disruptions during the transition process.

The top priority of developers together with IT specialists will be to assist users during the system transition by providing guidance and troubleshooting support until users operate the new system efficiently.

**6.0.1 Conversion Plan**

### **6.0.1.1 Data Migration:**

* The IT experts will retrieve data from the previous system for migration by confirming its accuracy and completeness.
* The migration process will occur during hours of lowest operations to prevent disruptions.
* A detailed checklist system will measure migration advancement while discovering possible problems.

### **6.0.1.2 Cutover:**

* The project manager will lead the transfer process from current to innovative software.
* A proper communication plan will instruct employees about when cutover occurs as well as how long systems might be unavailable and what specific steps will be necessary.
* During system transition the IT team will deliver immediate assistance to handle technical problems.

### **6.0.1.3 Post-Cutover Support:**

* The IT team will offer constant support to enhance the user's experience across the system.
* The system will provide users with a knowledge base that contains both frequently asked questions as well as troubleshooting guidelines to help them fix typical problems.

# **7.0 SOFTWARE AND HARDWARE REQUIREMENTS**

These are the minimum hardware and software requirements needed to run the system efficiently.

## **7.0.1 Minimum Hardware Requirements:**

* Processor: Pentium Dual-Core or equivalent (i3 or later recommended)
* RAM: 4 GB minimum (8 GB recommended for optimal performance)
* Hard Drive Space: 50 GB available space

## **7.0.2 Operating System:**

* Windows (7 or above), Linux (Ubuntu LTS version recommended)

## **7.0.3 Web Browser:**

* Latest version of Mozilla Firefox or Google Chrome is recommended for optimal performance and security.

# **8.0 TRAINING PLAN**

A sequential training system will be developed to enable staff effective operation with the Resource Scheduling and Optimization Web Application. The trainers need complete system knowledge before leading employees through proper instruction.

A training plan defines all necessary resources which workers require to perform their duties smoothly when using the system. The training program can exist in different formats between basic outlines and hands-on interactive activities. Business expansion occurs because a properly organized training program improves worker performance and boosts motivation while advancing their capabilities.

A training program requires the consideration of vital elements to achieve success.

* Adequate user education requires detailed assessment of both staff member job types and expertise for creating training content best suited for their needs.
* An assessment should identify all particular abilities and knowledge which employees need to execute the system correctly.
* Training objectives should be established with specific learning targets to help employees obtain required competencies.
* The most suitable training approaches should be selected including workshops together with hands-on activities and video tutorials as well as user manuals.
* Implementing feedback mechanisms helps determine the success of training sessions by enabling changes for improvement.

# **9.0 Training Schedule:**

The training will be conducted over a two-week period, with two-hour sessions each day for the first week and one-hour sessions for the second week.

The training will be conducted in a computer lab where staff can practice using the new system.

## **9.0.1 Training Curriculum:**

Certainly! Let's tailor the training agenda specifically Resource Scheduling and Optimization Web Application:

**Week 1:**

**Introduction to the Resource Scheduling and Optimization Web Application**

* Overview of the user interface and navigation.
* Explanation of key features such as project setup, task management, resource allocation, team assignments, and budget tracking.
* Navigation walkthrough to demonstrate how to access different sections and functionalities.

**Creating and Managing Project Information**

* Instructions on how to enter project details, including project name, description, deadlines, and objectives.
* Training on assigning team members to projects and defining their roles.
* Demonstrating how to manage project phases and milestones.

**Task Management and Resource Allocation**

* Step-by-step guidance on creating and assigning tasks to team members.
* Training on tracking task progress, dependencies, and deadlines.
* Optimizing resource allocation by matching tasks with available personnel, equipment, and budget constraints.

**Team and Resource Management**

* Instructions on entering team member details, roles, and responsibilities.
* Training on how to assign and adjust workloads dynamically.
* Managing resource availability (e.g., personnel, tools, finances) to avoid bottlenecks and ensure project efficiency.

**Billing and Financial Tracking**

* Overview of billing features and cost tracking.
* Training on entering financial data, tracking project costs, and managing invoices.
* Demonstrating how to monitor budgets and optimize financial allocation.

**Week 2:**

**Budget Optimization and Forecasting**

* Exploring tools for budget planning and cost estimation.
* Training on how to analyze financial trends and adjust budgets dynamically.
* Demonstrating techniques for maximizing resource efficiency while minimizing costs.

**System Customization and Advanced Functionalities**

* Customizing system settings to align with organizational needs.
* Exploring integrations with payroll, accounting, and third-party project management tools.
* Using predictive analytics and AI-driven insights to optimize scheduling and resource distribution.

**Troubleshooting and Best Practices**

* Addressing common system issues such as data entry errors, scheduling conflicts, and budget inconsistencies.
* Providing troubleshooting steps and best practices for ensuring data accuracy and system reliability.
* Offering guidance on backup and recovery processes.

**Q&A and Continuous Support**

* Open session for users to ask questions and request clarifications.
* Encouraging feedback to improve the system and training materials.
* Providing access to additional resources such as user manuals, FAQs, and helpdesk support.

## **9.1 TRAINING METHODOLOGY**

One-on-One training should be combined with Instructor-Led methods to offer the best training solution for the Resource Scheduling and Optimization Web Application.

One-on-One Training:

* The training method allows teachers to maintain direct communication with their students.
* Staff members gain personalized information through the possibility to ask trainers' questions directly.
* This approach enables both higher engagement from staff and full comprehension about system usage.
* The training encourages developing relationships after sessions which leads to better long-term acceptance of the system.

Instructor-Led Training:

* The trainers delivered this training method to participants through direct person-to-person sessions.
* Professionals and key instructors organize structured and coordinated training sessions that lead the sessions.
* The training method promotes group interaction among staff members through team work activities and real-world practice with the system.
* The system use process enables staff comfort which reduces elements of resistance to change.

This combined learning method enables staff members to rapidly understand the system while maximizing their efficiency for scheduling resources and project management work.

## **9.3 TRAINING TOOLS**

To facilitate effective training, the following tools will be used:

User Manuals:

* Detailed guides explaining each component of the system and its functionalities.
* Step-by-step instructions for entering project info, managing tasks, allocating resources, tracking budgets, and optimizing schedules.
* Provides a reference for staff to revisit key concepts after training.

Projectors and Wall Charts:

* Visual demonstrations of system feature and workflows.
* Enhances comprehension by allowing staff to see real-time system operations.
* Helps trainers illustrate complex functionalities such as budget optimization and resource forecasting.

Hands-On Practice:

* Staff will use the system directly during training sessions.
* Practical exercises will reinforce learning and improve confidence in system usage.
* Live simulations will cover real-world project scenarios, ensuring staff are well-prepared for daily operations.

# **10.0 Metrics for Success**

## **10.0.1 Implementation Success:**

The system will be considered successfully implemented if it is operational on the target date with minimal downtime.

User acceptance will be gauged through surveys and feedback sessions conducted after the training.

Data migration success will be measured by ensuring complete and accurate transfer of data from the old system.

## **10.0.2 Training Success:**

Pre- and post-training assessments will be conducted to measure the knowledge gained by staff.

Training effectiveness will be evaluated through feedback surveys and observations during hands-on sessions.

User satisfaction with the training program will be measured through surveys

# **11.0 RESISTANCE TO CHANGE**

As we all know different people react differently to change thus it is always good to be

cognizant of that fact. Our new system is faced with resistance from the staff due to the fear

of the unknown or system failures. Thus, the success of the system is determined by the

willingness of the staff to embrace change and adapt to it. Therefore, in order to evade or

reduce such resistance we have to device several ways of doing so:

1. First, by offering assurance to our staff that there would be constant training support and help where needed. By doing so the staff would embrace the system with the surety that incase of problems they would get help
2. Secondly, the training sessions as discussed above are made highly interactive as

possible, this enabled the curious staff to ask as many questions regarding the system. This also enable them interact with the system during training

1. In case of system updates or change the management would take ample time to introduce the changes to the staff
2. Lack of communication (communication gap) can also cause resistance. It is

important to cultivate a culture of transparency whenever feasible and to share

information as often as possible with staff, especially when trying to navigate a

change. Without it, staff can become defensive, lack trust in leadership, and not

have adequate time to process the information, which leads to further pushback

1. Fear of failure - Change can bring about a fear that it will be unsuccessful or that

the individuals involved will personally fail as a result of the changes that are

made. Employees often worry this will negatively impact their performance

reviews, their job security, and even have implications for pay. In turn, this

can lead to poorer outcomes at work, in both output and the quality of the work

being completed. Thus, to evade this staff are taught about the value of change.

# **12.0 SOFTWARE MAINTENANCE**

Software maintenance is the process of changing, updating and modifying a system in order

to fulfill customer needs. It is usually done after the product has been launched either to boost

performance, correct bugs or improve the overall system. In order to maximize our software maintenance, we have a customer support contact availed to our staff during training such that

should there arise any issues regarding the system the staff would be able to notify the

customer support. The customer support would then contact the resident expert in order to determine the way forward. Furthermore, PC maintenance will be carried out monthly, this will enable us to put viruses and malware which might attack the system at bay and keep our computers in a good working condition for maximum productivity.

Some of the maintenance to be carried out include:

1. Corrective maintenance – this is meant to rectify and repair faults that have arisen within the system. This will ensure that the system is backtracked to its previous normal working state.
2. Adaptive maintenance – many factors can change an applications environment be it

security issues or hardware issues, thus adaptive maintenance is performed to ensure

that the system is still usable after a change to its operating environment.

1. Perfective maintenance – this is the modification of the system to respond to users

additional or changing needs. This ensures that the system caters for the need of all its

users thus boosting company operations.

Software maintenance is also to ensure that the staff get the updated system manuals and documentation whenever available.

Advantages of software maintenance:

1. Improved performance.
2. Fixing emerging and existing bugs.
3. Up to date with changing technologies and current trends.
4. Reduces cost of adding new features.
5. Increased security of data
6. Ensures continuity of the system

# **13.0 Rollout and Maintenance**

## **Go/No-Go Criteria for System Launch**

Here are some criteria to determine if the new system is ready to be rolled out:

**Functionality:** All core functionalities of the system are thoroughly tested and working as intended.

**Performance:** The system meets performance benchmarks in terms of speed, response time, and scalability.

**Data Migration:** Data from the old system has been successfully migrated to the new system with accuracy and completeness verified.

**User Acceptance Testing (UAT):** Staff have been trained on the new system and have successfully completed UAT, demonstrating their comfort level and identifying any outstanding issues.

**Bug Resolution:** Critical bugs have been identified and fixed, and any remaining bugs are documented and have workarounds in place to minimize disruption.

**Documentation:** Comprehensive user manuals, training materials, and troubleshooting guides are available.

## **2.Metrics for Performance Measurement**

Since the CAP alert feed seems specific to your system, replacing it with a more general example, here are some metrics you can use to measure system performance:

**System Uptime:** Percentage of time the system is operational and accessible to users.

**Response Time:** Average time it takes for the system to respond to user actions.

**Number of Errors:** Frequency of system errors and crashes.

**Data Processing Speed:** How quickly the system can process and generate reports.

**User Logins and Activity:** Track user adoption by monitoring login frequency and usage patterns.

## **3. Ongoing Maintenance**

The new system will require ongoing maintenance to ensure its continued functionality, security, and performance. Here are some key aspects:

**Bug Fixes:** Address any bugs or issues identified after launch.

**Security Updates:** Regularly update the system software and firmware to address security vulnerabilities.

**Performance Optimization:** Monitor system performance and implement optimizations when necessary.

**Data Backups:** Regularly backup system data to prevent data loss in case of emergencies.

**New Feature Development:** Consider future needs and user feedback to develop new features and functionalities.

**User Support:** Provide ongoing support to users through a knowledge base, help desk, or other channels.

By establishing clear Go/No-Go criteria, performance metrics, and a maintenance plan, you can ensure a smooth rollout and ongoing success for your new system.

# **14.0 CONCLUSION**

In summary, in our rapidly evolving world where technical expertise is increasingly crucial, the realm of employee attendance is not immune to these advancements. Technology in this area is constantly evolving, with new trends emerging regularly. As these patterns shift and improve, it's imperative for us to adapt accordingly.

The utilization of advanced employee attendance systems is paramount for ensuring accountability and efficiency in managing workforce attendance. These systems facilitate the swift and accurate tracking of employee attendance data, streamlining processes and making the task of accountability significantly more manageable.

By leveraging employee attendance systems, organizations can ensure timely and accurate attendance recording, monitor attendance trends, and efficiently manage leave requests. Moreover, these systems provide valuable insights into workforce productivity and attendance patterns, enabling informed decision-making and resource allocation.

In essence, adopting modern employee attendance systems not only enhances accountability but also fosters a culture of efficiency and productivity within the organization, ultimately contributing to its overall success in today's dynamic business landscape.