**UNIVERSITY OF ENERGY AND NATURAL RESOURCES**



ERP GROUP SIX WORK

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**IMPLEMENTATION PLAN FOR TROYES' ERP SYSTEM.**

Implementation plan provides a comprehensive approach to deploying the ERP system for Troyes, ensuring thorough preparation, user involvement, and post-implementation optimization. Each stage is designed to address key aspects of the implementation process, from initial planning to long-term system improvement.

1. Project Initiation (Week 1-2)

a) Form project team and define roles

* Appoint a project manager
* Identify key stakeholders from each department
* Assign roles technical lead, business analysts, change management specialist
* Create a RACI (Responsible, Accountable, Consulted, Informed) matrix

b) Conduct initial stakeholder meetings

* Organize kick-off meeting with all stakeholders
* Present project objectives, scope, and timeline
* Address initial concerns and gather high-level requirements
* Establish communication channels and meeting schedules

c) Finalize project scope and timeline

* Develop a detailed project charter
* Create a high-level project plan with major milestones
* Identify potential risks and develop mitigation strategies
* Establish success criteria for the project

1. Requirements Gathering and Analysis (Week 3-4)

a) Conduct detailed interviews with department heads

* Schedule one-on-one sessions with leaders from each department
* Document current workflows and pain points
* Identify opportunities for process improvement
* Discuss department-specific requirements and priorities

b) Document current processes and pain points

* Create process flow diagrams for existing workflows
* Identify inefficiencies and bottlenecks in current systems
* Analyze data from current systems to identify patterns and issues
* Conduct workshops to validate process documentation

c) Define specific requirements for each module

* Develop detailed functional and non-functional requirements
* Prioritize requirements using MoSCoW method (Must have, Should have, Could have, Won't have)
* Create use cases and user stories for key functionalities
* Establish measurable criteria for requirement fulfillment

1. System Design and Configuration (Week 5-8)

a) Configure core ERP modules based on requirements

* Set up company structure, chart of accounts, and fiscal periods
* Configure product catalog, pricing rules, and inventory settings
* Establish workflow rules and approval processes
* Set up user roles and initial access permissions

b) Design custom reports and dashboards

* Identify key performance indicators (KPIs) for each department
* Create report templates and dashboard layouts
* Configure data sources and calculation methods for reports
* Develop any necessary custom queries or scripts

c) Set up integration with existing systems

* Identify all systems requiring integration (e.g., legacy systems, third-party software)
* Develop and test API connections or data import/export processes
* Configure data mapping between systems
* Establish data synchronization schedules and methods

Functional Prototype Development (Week 8-9)

Functional Prototype using Tableau will provide Troyes with a powerful visual tool to monitor their key performance indicators and make data-driven decisions. It will serve as a tangible demonstration of the ERP system's analytical capabilities and help stakeholders visualize the benefits of the new system.

The development of this prototype will occur after the initial system configuration but before data migration, allowing for the use of representative data to showcase the dashboard's capabilities. This timing also allows for any insights gained from the prototype development to inform potential adjustments in the ERP system configuration or data structure.

a) Design Tableau dashboard layout:

* Identify key metrics and KPIs for each department (Production, Sales, Finance, HR)
* Create a wireframe of the dashboard layout
* Determine appropriate chart types for each metric (e.g., bar charts, line graphs, gauges)
* Design a cohesive color scheme and styling aligned with Troyes' branding

b) Develop data connections and calculations:

* Set up connections to relevant data sources (e.g., ERP database, spreadsheets)
* Create calculated fields for complex metrics
* Develop parameters for user-driven analysis (e.g., date ranges, product categories)
* Implement data refreshing schedules

c) Build interactive visualizations:

* Create individual charts and graphs for each KPI
* Implement filters and drill-down capabilities
* Add tooltips for detailed information on hover
* Develop cross-filtering between different visualizations

d) Incorporate key performance indicators:

* Production metrics:
  + Daily production volume
  + Manufacturing cycle time
  + Defect rate
  + Machine utilization
* Sales metrics:
  + Revenue by product line
  + Sales growth trend
  + Customer acquisition cost
  + Order fulfilment rate
* Financial metrics:
  + Gross profit margin
  + Inventory turnover
  + Cash flow forecast
  + Operating expenses
* HR metrics:
  + Employee productivity
  + Turnover rate
  + Training completion rate
  + Workforce capacity vs. demand

e) Implement advanced analytics features:

* Predictive analytics for demand forecasting
* What-if scenario modelling for production planning
* Anomaly detection for quality control issues
* Trend analysis for key business metrics

f) User testing and refinement:

* Conduct usability testing with key stakeholders
* Gather feedback on dashboard effectiveness and ease of use
* Make iterative improvements based on user input
* Ensure performance optimization for quick load times

g) Documentation and training:

* Create user guides for navigating and using the dashboard
* Develop training materials for creating and modifying visualizations
* Document data sources, refresh schedules, and calculation methodologies
* Prepare handover documents for the IT team to maintain the dashboard

h) Integration with ERP system:

* Ensure seamless data flow between the ERP and Tableau
* Set up automated data refresh processes
* Implement single sign-on (SSO) for easy access from the ERP interface
* Test integration to ensure data accuracy and timeliness

1. Data Migration (Week 9-10)

a) Cleanse and prepare existing data

* Identify all data sources and types to be migrated
* Develop data cleansing rules and procedures
* Remove duplicate records and standardize data formats
* Validate data integrity and completeness

b) Develop and test data migration scripts

* Create scripts for extracting data from legacy systems
* Develop transformation logic to match new system structure
* Build loading scripts for inserting data into the new ERP
* Implement error handling and logging in migration scripts

c) Perform trial migrations and validate data integrity

* Conduct multiple test migrations in a staging environment
* Verify data accuracy and completeness after migration
* Identify and resolve any migration issues or discrepancies
* Document migration process and results for each trial

1. User Acceptance Testing (UAT) (Week 11-12)

a) Develop test scenarios and scripts

* Create comprehensive test cases covering all key functionalities
* Develop step-by-step test scripts for each scenario
* Include positive and negative test cases to ensure robust testing
* Prepare test data sets for various scenarios

b) Conduct UAT with key users from each department

* Train UAT participants on test objectives and procedures
* Schedule and oversee UAT sessions for each module
* Provide support and clarification during testing
* Collect detailed feedback and bug reports from users

c) Document and address any issues or change requests

* Categorize and prioritize reported issues and change requests
* Assign developers to address critical issues
* Implement approved changes and enhancements
* Conduct regression testing after fixes are applied

1. Training (Week 13-14)

a) Develop training materials and user guides

* Create role-specific training manuals and quick reference guides
* Develop e-learning modules for self-paced training
* Prepare hands-on exercises and practice scenarios
* Design assessment tools to evaluate user proficiency

b) Conduct role-based training sessions

* Schedule training sessions for different user groups
* Deliver classroom-style training for core functionalities
* Provide hands-on workshops for practical experience
* Offer advanced training for power users and system administrators

c) Set up a help desk for user support

* Establish a ticketing system for tracking support requests
* Create a knowledge base of common issues and solutions
* Train help desk staff on the new ERP system
* Develop escalation procedures for complex issues

1. Go-Live and Support (Week 15-16)

a) Perform final data migration

* Execute the final data migration based on validated processes
* Conduct a thorough verification of migrated data
* Freeze legacy systems and perform final data synchronization
* Obtain sign-off from department heads on data accuracy

b) Switch to the new ERP system

* Develop a detailed go-live checklist and timeline
* Coordinate with all departments for the cutover process
* Activate new system access for all users
* Conduct final system checks and performance testing

c) Provide on-site support during the initial weeks

* Station support personnel in each department
* Establish a command center for coordinating support efforts
* Conduct daily stand-up meetings to address critical issues
* Provide extended help desk hours during the initial period

d) Monitor system performance and address any issues

* Continuously monitor system logs and performance metrics
* Quickly address any system errors or performance bottlenecks
* Gather user feedback on system usability and functionality
* Make necessary adjustments to configurations or workflows

1. Post-Implementation Review (Week 17-18)

a) Gather feedback from users and stakeholders

* Conduct surveys to assess user satisfaction and system effectiveness
* Hold debriefing sessions with department heads and key users
* Analyze help desk tickets to identify common issues or training gaps
* Review project metrics (time, budget, scope) against initial plans

b) Identify areas for improvement or additional features

* Compile a list of enhancement requests from users
* Assess the impact and feasibility of proposed improvements
* Prioritize enhancements based on business value and effort required
* Develop a roadmap for future system updates and feature additions

c) Develop a roadmap for future enhancements

* Create a phased plan for implementing approved enhancements
* Establish timelines and resource requirements for each phase
* Define success criteria and KPIs for measuring improvement
* Present the roadmap to stakeholders for approval and buy-in