The University of Sydney

# CAPPS:
# ERP for the State of Texas
# Project

Research Project

## Group 8

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# Content

# 1.  Introduction

The Centralized Accounting and Payroll/Personnel System (CAPPS) is a success ERP system implement customized for the State of Texas, which is based on Oracle's PeopleSoft 9.1 suite and updated to version 9.2 in 2014. This system contains two modules, Financials and HR/Payroll, and two program models, central and hub. Large agencies can choose to run hub version by themselves; otherwise, these agencies can deploy centralized system. According to current plan, HP/Payroll module will include 58% full-time employee, and Financials module will cover 86% state payment by 2018. The whole project containing several sub-project started from 2010 and will end to 2020. We are going to analyze the first seven-year project.

# 2.  Scope

## 2.1.  Project Charter

| | |
|---|---|
| **Project Title:** CAPPS: ERP for the State of Texas Project | |
| **Project Start Date:** Financial Year 2010 | **Projected Finish Date:** Financial Year 2016 |
| **Budget Information:** The total cost is $285,727,000 included a 15% contingency which is $ 37,269,000. | |
| **Project Manager:** Department of Information Resources | |
| **Project Objectives:** Develop a system that allows reporting across agencies, providing executives and exchanging information more easily. Deliver security mechanisms that control access across all levels and facets of CAPPS applications. Make sure users with special needs can access the system with an accessibility tool. | |
| **Success Criteria:** This project will be successful if it provides a new ERP system with transparency, security and accessibility. It should also be completed on time, control the cost, be run professionally and meet all of the requirements. | |
| **Approach:**<br>• Consider work products, information and communications.<br>• Get reports from five ERP workgroups.<br>• Continue to meet on a monthly basis with the Comptroller.<br>• Continue to consult with the Information Technology Council for Higher Education (ITCHE) to get their advice.<br>• Develop a survey sent to all state agencies and institutions of higher education.<br>• Employ an independent consulting firm.<br>• Analyze three alternative scenarios. | |

**Roles and Responsibilities**

| Name | Role | Position |
|---|---|---|
| Terry Wooten | Financials User Group Chair | Application Service Provider Representative |
| Reggie Pegues | Financials User Group Member | Elected Medium-Sized Agency Representative |
| Chelsa Vinklarek | HR/Payroll User Group Chair | Application Service Provider Representative |
| Matt Martinez | HR/Payroll User Group Member | Elected Large-Sized Agency Representative |
| Sandra Woodruff | Steering Committee Chair | Comptroller of Public Accounts |

## 2.2.  Requirements Documentation

**Requirements Traceability Matrix**

| No. | Name | Category | Source | Status |
|---|---|---|---|---|
| 1 | Release Packs | Proposal | Scope Statement | In Progress |
| 2 | Major Upgrade Releases | Proposal | Scope Statement | In Progress |
| 3 | Core Module Changes | Report | Scope Statement | In Progress |
| 4 | CPA Approved Exceptions | Report | Scope Statement | In Progress |

## 2.3. Scope Statement

| |
|---|
| **Project Title:** CAPPS: ERP for the State of Texas Project |
| **Date:** 15 DEC 2008 |
| **Project Summary and Justification:** <br> Due to the existing systems are used for nearly 20 years and some of them are no longer supported by third- party vendors, the government of the state of Texas needs a new statewide ERP system to replace their current system which are Texas ID Number System (TINS), State Property Accounting (SPA) and Payroll Systems (SPRS, HRIS, USPS). This system will also resolve other issues such as the efficiency and effectiveness of its business processes and replacing Social Security numbers (SSNs). <br><br> The project will take 7 financial years to complete and will totally cost $285,727,000 with a 15% contingency included. |
| **Product Characteristics and Requirements:** <br> 1.    Release Packs: Comptroller of Public Accounts will provide Release Packs on a monthly basis. <br> 2.    Major Upgrade Releases: Major Upgrade Releases: CAPPS and CAPPS Government will release the major upgrade of Oracle/PeopleSoft product and the publish time schedule, which is planned by comptroller of Public Accounts through co-operates with vendor. <br> 3.    Core Module Changes: CAPPS Governance must provide specific CAPPS Government document to achieve all changes in CAPPS Core modules and report the impact of Core module to maintain the consistency between the application of fiscal policy and statewide reporting. <br> 4.    CPA Approved Exceptions: Comptroller of Public Accounts indicates that the internal initiatives or priorities, which are probably include in CAPPS Hub Agencies will make further influence to timelines in CACE Approach document. |
| **Product user acceptance criteria:** <br> The CAPPS system produced as part of this project will be considered successful if it is available within 7 financial years and the implementation of the project helps to improve the efficiency of the government the State of Texas as well as reduce the cost. |
| **Summary of Project Deliverables** |
| **Project management-related deliverables:** <br> Project charter, project characteristics and requirements, requirement traceability matrix, scope statement, cost report, maintenance and support services, WBS, Gantt Chart, milestone analysis, risk register, probability impact matrix, organization chart, human resource analysis and communication stakeholder analysis. |
| **Product-related deliverables:** <br> Basic Functions: <br> • General Ledger <br> • Accounts payable <br> • Accounts receivable <br> • Budgeting <br> • Inventory <br> • Asset management <br> • Billing <br> • Payroll <br> • Projects <br> • Grant <br> • Human resources, including administration of performance measures, time spent on tasks and other personnel and labor issues. <br> Additional Functions: Procurement, Fleet Management, Data Warehousing. |

# 3. Cost

Following tables illustrate the cost by project, including Financials, HR/Payroll and Financials implement, which is categorized by participating agencies, shared and internal cost of CPA and participating agencies. The second table shows cost for maintenance and support service by biennium, which is also categorized by software, hardware and staffing & contracting services.

- Within the cost of project, category of Salary and Wages includes $502,992 CPA staffing costs and $811,814 participating agency cost to implement CAPPS HR/Payroll baseline project.
- Cost for CPA staff support, $2.8 to $3.1 million annually, is contributed by CPA
- CAPPS Hub agencies fund the CAPPS implementation and maintenance costs by themselves.

## 3.1. CAPPS Cost by Project (Fiscal 2010-2014)

| | Financials (FY10-13) | HR/Payroll (FY10-13) | Financials Implementation (FY14) | Subtotal | Total | Percentage of Total Cost |
|---|---|---|---|---|---|---|
| **Participating Agencies** | | | | | **$41,314,223** | **70.00%** |
| Project Expenses | $20,897,049 | $15,974,054 | $4,443,120 | $41,314,223 | | |
| **Total Agency Project** | **$20,897,049** | **$15,974,054** | **$4,443,120** | | | |
| **Shared Costs: CPA and Participating Agencies** | | | | | **$5,297,146** | **8.97%** |
| Training Cost | $810,502 | $294,038 | – | $1,104,540 | | |
| PeopleSoft Converted Licenses and Support | $2,096,303 | $2,096,303 | – | $4,192,606 | | |
| **Total Shared Costs** | **$2,906,805** | **$2,390,341** | **–** | | | |
| **Internal costs: CPA and Participating Agencies** | | | | | **$12,411,143** | **21.03%** |
| Capital Outlay | $360,000 | – | – | $360,000 | | |
| Communications & Utilities | $25,539 | $25,539 | – | $51,078 | | |
| Other Expenditures | $6,523 | $6,523 | – | $13,046 | | |
| Professional Fees and Services | $61,938 | $41,938 | – | $103,876 | | |
| Rentals and Leases | $112,009 | $112,479 | – | $224,488 | | |
| Repairs and Maintenance | $14,000 | $14,000 | – | $28,000 | | |
| Supplies and Materials | $15,000 | $18,000 | – | $33,000 | | |
| Travel | $5,000 | $2,000 | – | $7,000 | | |
| Salary and Wages | $4,985,505 | $5,129,108 | $1,476,042 | $11,590,655 | | |
| **Total Internal Agencies Cost** | **$5,585,514** | **$5,349,587** | **$1,476,042** | | | |
| **Total Budget in Dollars** | **$29,389,368** | **$23,713,982** | **$5,919,162** | | **$59,022,512** | **100%** |
| **Percentage of Total Budget** | **50%** | **40%** | **10%** | | | |
| **Status** | complete | complete | complete | | | |

## 3.2. CAPPS Maintenance and Support Services (Fiscal 2012–15)

| | FY12-13 Biennium | FY14-15 Biennium | Subtotal | Total | Percentage of Total Cost |
|---|---|---|---|---|---|
| **Software** | | | | **$23,875,579** | **37.26%** |
| New PeopleSoft Licenses | $4,140,009 | $1,600,000 | $5,740,009 | | |
| New PeopleSoft License Maintenance | $3,158,404 | $3,158,404 | $6,316,808 | | |
| Converted and Replaced Software Maintenance & Support | $4,338,103 | $4,247,838 | $8,585,941 | | |
| Other Software Maintenance and Support | $1,440,134 | $1,792,687 | $3,232,821 | | |
| **Hardware** | | | | **$3,545,202** | **5.53%** |
| Hardware Maintenance | $547,921 | $676,647 | $1,224,568 | | |
| Hardware Refresh | $253,029 | $2,067,605 | $2,320,634 | | |
| **Staffing & Contracting Services** | | | | **$36,664,383** | **57.21%** |
| Staffing | $194,051 | $913,152 | $1,107,203 | | |
| Contracting Services | $13,106,473 | $21,472,756 | $34,579,229 | | |
| Contingency | $290,011 | $687,940 | $977,951 | | |
| **Total** | | | | **$64,085,164** | **100.00%** |

# 4. Time

## 4.1. WBS

Please refer to Appendix for detailed information regarding project WBS.

## 4.2. Milestone Analysis

1. **Audit planning phase:**

   Project members need to do some researches about ERP. They required to prepare for necessary documents in the early stage of project, such as project scope, risk management and so on, as well as submit all reports to the stakeholders and managers.

2. **Release system for operation:**

   In this stage of milestone, project members have finish all steps of preparation phase. Most of functions in system have completed and go through the final test.

# 5. Risk

## 5.1. Risk Register

| NO. | Risk & Description | Category | Consequences | Probability | Impact |
|-----|-------------------|----------|--------------|-------------|--------|
| 1 | Key project dependencies are not completed on schedule | Management | Due to the delay of key project dependencies the other parts cannot complete on time. | 0.2 | 0.6 |
| 2 | State requirements may change while the project is in progress. | Management | With the requirements changing, schedule and plan of project would change. | 0.2 | 0.8 |
| 3 | Lack of strong project management with appropriate authority | Management | The project cannot complete on time. It will take more funds and time to complete project. | 0.3 | 0.7 |
| 4 | The equipment damaged | Technical | Staffs have no equipment to use. Project will be delayed. | 0.4 | 0.5 |
| 5 | Information security | Technical | Information can be lost. Some important data can be stolen. | 0.3 | 0.6 |
| 6 | Nature disasters during project, such as flood, earthquake. | Natural | Project will shut down and be delay. Cost will increase. | 0.01 | 0.9 |

**Risk description:** There are three major risks (management, technical and natural risks) that should be pay more attention to in the project. In terms of management risks which can be lack strong project management, changing the requirements or delay of key project, they will lead to plan changing, cost increasing and time waste. In management risks, most of probability are low that are about 0.2 and impact is high that are about 0.7. For technical risks, the equipment damaged and information security are common. Probability of these risks is about 0.3 and impact is about 0.6. Natural risks, such as flood or earthquake, has an extremely low probability (0.1) and high impact (0.9). When natural risks happen the project have to shut down and cost of the project will increase.

**Possible response:** For the management risks, the project committee should discuss to improve the management. If some delays caused by the key project dependencies happen manager should make a suitable plan for the changes. For the technical risks, managers of project should repair equipment or buy new equipment as soon as possible to ensure the project running well. Also, the security department of project should manage and encrypt core data to avoid stealing. No one can forecast the natural disaster. Manager should keep staffs and equipment safe and help the project run again in a short time after natural risks happen.

## 5.2. Probability/Impact Matrix
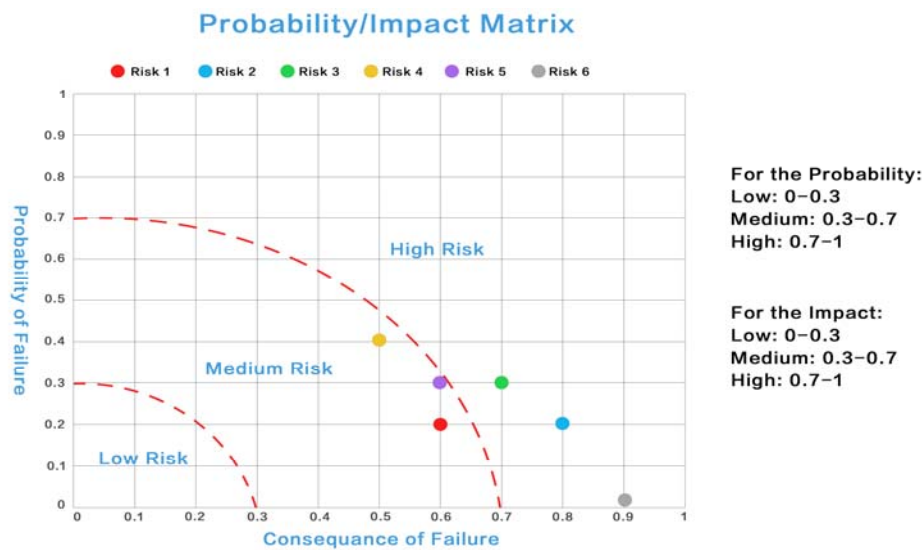


Figure 1 probability/ impact matrix (created by group 8)

# 6. Human Resource

Generally, it would need a great number of people to complete a large IT project like CAPPS. At the same time, these individuals often possess a wide variety of skills and come from different background. It would be difficult to manage such a diverse of staffs, so it is significantly important to make a clear structure for the project.

In the project of CAPPS, the Human Resource of the whole project is divided to several committee and groups such as CAPPS executive committee, CAPPS steering committee, CAPPS financials user group, CAPPS HR/Payroll user group and so on. Each department has a specific function and responsibility to help the project achieve success. By dividing governance into committee and group, the huge managing task is passed to the smaller group rather than the whole project. Meanwhile, the number of people in each team would be ensured in a reasonable ranges and the subproject managers of these department can have a good communication and collaboration with staffs. On the other word, the managers can find and meet the requirements of staffs more easily. After the requirements are met, the staffs would have a huge improvement of both efficiency and performance in their job. They can find the problems quickly so that solving them in time. This method of governance makes the work more effective and efficient.

## 6.1. Organizational Chart
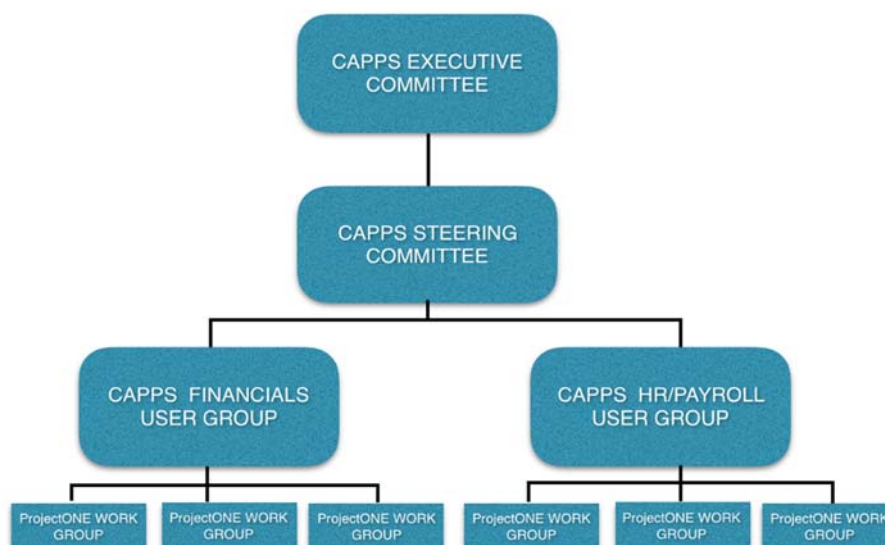


Figure 2 organizational chart (created by group 8)

## 6.2. Definition of the major three decision makers

1. CAPPS Executive Committee:
It is the Agency head to help those agencies that are building CAPPS, using CAPPS and CAPPS Hub Agencies that are in the process of implementing CAPPS. In this committee, membership mirrors the representation at the Steering Committee level. CAPPS Executive Committee is chaired by CPA.

2. CAPPS Steering Committee:
It is the department that help those agencies that are building CAPPS, using CAPPS and CAPPS Hub Agencies that are implementing CAPPS. In this committee, membership is determined by election. CAPPS Steering Committee is chaired by CPA's Director of Fiscal Management.

3. CAPPS User Groups:
Subject Matter Expert designates CAPPS User Group to help those agencies that are building CAPPS, using CAPPS and CAPPS Hub Agencies are implementing CAPPS. In CAPPS User Group, membership is determined by election from the CAPPS agencies. CPA's Fiscal Management Subject Matter Experts chairs these bodies.

# 7. Communication

## 7.1. CAPPS User Group
**Content:**
1. Supervise the internal processes and procedures are adjusted as needed.
2. Ensure the resources of changes provided adequately.
3. Ensure the security and the integrity of data in the system.

**Members:**
Terry Wooten, Reggie Pegues, Brian Roth, Bary Hobbs, Joe Meyer, Sergio Rey, Sergio Rey, Brian Wetzig, Ai-Ching Reed, Ken Ming.

**Conveying methods:**
The meetings provide the process of CAPPS in a forum and allow the agencies to review, prioritize and approve changes to project.

## 7.2. CAPPS Steering Committee
**Content:**
1. Make final decision for the changes
2. Ensure the balance both in the current project and the later-stage maintenance.

**Members:**
Sandra Woodruff, Nick Villalpando, Jim Macek, Wei Wang, Nancy Clark, James Bass, Mike Meyer, Warren Collier, Carol Anne Harley.

**Frequency:**
Group members often have meeting on the second Tuesday of the month.

## 7.3. CAPPS Executive Committee
**Content:**
1. Verifying the changes made in system are related to the approved technologies.
2. Address the issues with authority methods

**Frequency:**
The meeting time depends on a legislative session.

## 7.4. ERP Agency Executive Management
**Content:**
1. Communicate the updates of ProjectONE and CAPPS.
2. Discuss for the scheme after centralized the accounting and CAPPS.

**Members:**
Agency Heads, Chief Financial Officers, Chief Information Officers, Human Resource Directors, Information Resource Managers.

**Frequency:**
No specific meeting time. The meeting allows members attend in person or via conference call.

# 8. Stakeholder

## 8.1. Stakeholder Analysis

| Name | Power/Interest | Current Engagement | Potential Management Strategies |
|---|---|---|---|
| Department of Information Resources (DIR) | High/High | Leading | DIR engages in the use of CAPPS financial and HR system. It is a member of steering committee who grantee the change of system |
| Texas Department of Insurance (TDI) | High/Low | Supportive | TDI is one of steering committee members who support CAPPS system change and maintenance |
| Texas Procurement and Support Services (TPASS) | Low/Low | Unware | TPASS fund the CAPPS but do not employ the system |
| Health and Human Services Commission (HHSC) | High/High | Leading | HHSC is one of the largest funder of CAPPS host and also the user of this system. It is responsible for ensuring the system internal process and procedures are managed as need. |
| Texas Comptroller of Public Accounts (CPA) | High/Medium | Leading | CPA is the financial and HR central agency who employ the system to provide resources about changes. It is the Application Service Provider of CAPPS and provides large amount of fund to host CAPPS and maintain PeopleSoft converted license. |
| Department of Family and Protective Services (DFPS) | Medium/ Low | Neutral | DFPS is the HR/Payroll hub agency. |
| Texas Department of Housing & Community Affairs (TDHCA) | Low/Low | Unware | TDHCA provides part of fund to CAPPS system but do not engage in the developing and employing process. |
| Texas Education Agency (TEA) | High/ Low | Supportive | TEA is the financial hub agency and one of financial user group member who are responsible for successful implement of system. |
| Texas Attorney General's Office (OAG) | Low/ Low | Unware | OAG provides little fund for the CAPPS but do not use the system |
| Texas Workforce Commission (TWC) | Medium/ Low | Supportive | TWC engages in CAPPS steering committee who has the right to vote for system change. |

# 9. Conclusion

According to the analysis about CAPPS in 7 areas mentioned above, the success of the project lays on mainly 4 factors. First, CAPPS is funded by Texas government departments, the budget is sufficient. Second, the preparation volume period of the project is plentiful so that all the details and risks are well considered. Third, the clear job division of each department brings an efficient group work. Fourth, the communication is efficient among all the departments evolved in both developing and implementing process.

# Reference

Texas Comptroller of Public Accounts, *CAPPS Governance - Maintaining the Centralized Accounting and Payroll/Personnel System*, viewed 13 October 2016, <https://fmx.cpa.texas.gov/fmx/capps/CAPPS_Governance.pdf>

Texas Comptroller of Public Accounts, *Report to the 84th Legislature CAPPS ERO in Texas,* viewed 13 October 2016, <http://www.txprojectone.org/reports/84th_leg/ReportTo84thLeg.pdf>

ERP Advisory Council, *A Plan for the Implementation of Enterprise Resource Planning (ERP) for the State of Texas,* viewed 13 October 2016, <http://txprojectone.org/documents/ERP_Advisory_Council_Report.pdf>

Texas Comptroller of Public Accounts, *CAPPS Centralized Accounting and Payroll/Personnel System: Benefits for Texas FY 2012-2018,* viewed 13 October 2016, <http://www.txprojectone.org/newsroom/ERPCapps_booklet_Dec_11_2014.pdf>

*CAPPS Steering Committee Meetings* 2015, Texas Comptroller of Public Accounts, Texas, viewed 13 October 2016, < https://fmx.cpa.state.tx.us/fmx/capps/meetings/steering.php>

*CAPPS Modules,* Texas Comptroller of Public Accounts, Texas, viewed 13 October 2016, <http://www.txprojectone.org/project_details/modules.php>

*CAPPS Program Modules,* Texas Comptroller of Public Accounts, Texas, viewed 13 October 2016, <http://www.txprojectone.org/project_details/ model.php>

*CAPPS Governance & Meetings,* Texas Comptroller of Public Accounts, Texas, viewed 13 October 2016, <http://www.txprojectone.org/project_details/ governance.php>

# Appendix

| ID | Task Mode | Task Name | Duration | Start | Finish |
|---|---|---|---|---|---|
| 1 | | **1 Planning phase** | **255 days** | **Wed 10/5/19** | **Tue 11/5/10** |
| 2 | | **1.1 Project scope** | **30 days** | **Wed 10/5/19** | **Tue 10/6/29** |
| 3 | | 1.1.1 Project definition | 30 days | Wed 10/5/19 | Tue 10/6/29 |
| 4 | | 1.1.2 Project obectives | 30 days | Wed 10/5/19 | Tue 10/6/29 |
| 5 | | 1.1.3 Project strategy | 30 days | Wed 10/5/19 | Tue 10/6/29 |
| 6 | | **1.2 Project organization** | **30 days** | **Wed 10/5/19** | **Tue 10/6/29** |
| 7 | | 1.2.1 Organizational structure | 30 days | Wed 10/5/19 | Tue 10/6/29 |
| 8 | | 1.2.2 Steering committee | 30 days | Wed 10/5/19 | Tue 10/6/29 |
| 9 | | 1.2.3 Project management | 30 days | Wed 10/5/19 | Tue 10/6/29 |
| 10 | | 1.2.4 Project team | 30 days | Wed 10/5/19 | Tue 10/6/29 |
| 11 | | 1.2.5 Projects | 30 days | Wed 10/5/19 | Tue 10/6/29 |
| 12 | | 1.2.6 IT team | 30 days | Wed 10/5/19 | Tue 10/6/29 |
| 13 | | 1.2.7 Consulting team | 30 days | Wed 10/5/19 | Tue 10/6/29 |
| 14 | | **1.3 Project resources** | **30 days** | **Wed 10/5/19** | **Tue 10/6/29** |
| 15 | | 1.3.1 Human resources | 30 days | Wed 10/5/19 | Tue 10/6/29 |
| 16 | | 1.3.2 Consulting | 30 days | Wed 10/5/19 | Tue 10/6/29 |
| 17 | | 1.3.3 Cost | 30 days | Wed 10/5/19 | Tue 10/6/29 |
| 18 | | **1.4 Project administration** | **60 days** | **Wed 10/5/19** | **Tue 10/8/10** |
| 19 | | 1.4.1 Reporting | 33 days | Wed 10/5/19 | Fri 10/7/2 |
| 20 | | 1.4.2 Time recording | 33 days | Wed 10/5/19 | Fri 10/7/2 |
| 21 | | 1.4.3 Meeting management techniques | 33 days | Wed 10/5/19 | Fri 10/7/2 |
| 22 | | 1.4.4 Information and communication | 33 days | Wed 10/5/19 | Fri 10/7/2 |
| 23 | | 1.4.5 Project facilities | 33 days | Wed 10/5/19 | Fri 10/7/2 |
| 24 | | 1.4.6 Project standards and procedures | 33 days | Wed 10/5/19 | Fri 10/7/2 |
| 25 | | 1.4.7 Project handbook | 45 days | Wed 10/6/9 | Tue 10/8/10 |
| 26 | | **1.5 Project implementation plan** | **30 days** | **Fri 10/7/2** | **Thu 10/8/12** |
| 27 | | 1.5.1 Create implementation schedule | 30 days | Fri 10/7/2 | Thu 10/8/12 |
| 28 | | 1.5.2 Discuss implementation schedule | 30 days | Fri 10/7/2 | Thu 10/8/12 |
| 29 | | 1.5.3 Finalize implementation schedule | 30 days | Fri 10/7/2 | Thu 10/8/12 |
| 30 | | **1.6 Concepts** | **195 days** | **Wed 10/8/11** | **Tue 11/5/10** |
| 31 | | 1.6.1 As-is concept | 60 days | Wed 10/8/11 | Tue 10/11/2 |
| 32 | | 1.6.2 To-be concept | 135 days | Wed 10/11/3 | Tue 11/5/10 |
| 33 | | 1.6.3 Reorganization | 66 days | Tue 11/2/8 | Tue 11/5/10 |
| 34 | | 1.6.4 Coordinate activies with other modules/department | 66 days | Tue 11/2/8 | Tue 11/5/10 |
| 35 | | 1.6.5 Set up responsibilities | 66 days | Tue 11/2/8 | Tue 11/5/10 |
| 36 | | **1.7 Technical environment** | **105 days** | **Thu 10/6/17** | **Wed 10/11/10** |
| 37 | | 1.7.1 Define strategy for technical environment | 45 days | Thu 10/6/17 | Wed 10/8/18 |
| 38 | | 1.7.2 Analyze system load | 45 days | Thu 10/6/17 | Wed 10/8/18 |
| 39 | | 1.7.3 Determine software | 45 days | Thu 10/6/17 | Wed 10/8/18 |
| 40 | | 1.7.4 Determine hardware | 60 days | Thu 10/8/19 | Wed 10/11/10 |
| 41 | | 1.7.5 Network (LAN, WAN) | 60 days | Thu 10/8/19 | Wed 10/11/10 |
| 42 | | **1.8 Training** | **165 days** | **Wed 10/9/22** | **Tue 11/5/10** |
| 43 | | 1.8.1 Discuss training needs for SC and PT members | 165 days | Wed 10/9/22 | Tue 11/5/10 |
| 44 | | 1.8.2 Check on external and internal training possibilities | 165 days | Wed 10/9/22 | Tue 11/5/10 |
| 45 | | 1.8.3 Organize external or internal trainings | 165 days | Wed 10/9/22 | Tue 11/5/10 |
| 46 | | 1.8.4 Learn SAP functions | 165 days | Wed 10/9/22 | Tue 11/5/10 |
| 47 | | **1.9 Project control** | **60 days** | **Wed 11/2/16** | **Tue 11/5/10** |
| 48 | | 1.9.1 Organization of internal controlling | 60 days | Wed 11/2/16 | Tue 11/5/10 |
| 49 | | 1.9.2 Organization of external controlling | 60 days | Wed 11/2/16 | Tue 11/5/10 |
| 50 | | 1.9.3 Organization of progress control | 60 days | Wed 11/2/16 | Tue 11/5/10 |
| 51 | | 1.9.4 Organize time control | 60 days | Wed 11/2/16 | Tue 11/5/10 |
| 52 | | **1.10 Risk management** | **60 days** | **Wed 11/2/16** | **Tue 11/5/10** |
| 53 | | 1.10.1 Risk identification | 60 days | Wed 11/2/16 | Tue 11/5/10 |
| 54 | | 1.10.2 Risk analysis | 60 days | Wed 11/2/16 | Tue 11/5/10 |
| 55 | | 1.10.3 Risk response | 60 days | Wed 11/2/16 | Tue 11/5/10 |
| 56 | | **1.11 Change management** | **60 days** | **Wed 11/2/16** | **Tue 11/5/10** |
| 57 | | 1.11.1 Discuss change management actions | 60 days | Wed 11/2/16 | Tue 11/5/10 |
| 58 | | 1.11.2 Develop change management strategy | 60 days | Wed 11/2/16 | Tue 11/5/10 |
| 59 | | **1.12 Interfaces and conversions** | **165 days** | **Wed 10/9/22** | **Tue 11/5/10** |
| 60 | | 1.12.1 Define interfaces to other systems | 165 days | Wed 10/9/22 | Tue 11/5/10 |
| 61 | | 1.12.2 Design interfaces to other modules | 165 days | Wed 10/9/22 | Tue 11/5/10 |
| 62 | | 1.12.3 Design conversion of open orders | 165 days | Wed 10/9/22 | Tue 11/5/10 |
| 63 | | 1.12.4 Set up rough conversion plan | 165 days | Wed 10/9/22 | Tue 11/5/10 |
| 64 | | 1.13 Audit planning phase | 0 days | Tue 11/5/10 | Tue 11/5/10 |
| 65 | | **2 Realization phase** | **258 days** | **Thu 11/5/26** | **Mon 12/5/21** |
| 66 | | **2.1 Organizational structure** | **3 days** | **Thu 11/5/26** | **Mon 11/5/30** |
| 67 | | 2.1.1 Set up organizational structure | 3 days | Thu 11/5/26 | Mon 11/5/30 |
| 68 | | **2.2 Customizing basics** | **9 days** | **Thu 11/5/26** | **Tue 11/6/7** |
| 69 | | 2.2.1 User maintenance | 9 days | Thu 11/5/26 | Tue 11/6/7 |
| 70 | | 2.2.2 Customize organizational structure | 9 days | Thu 11/5/26 | Tue 11/6/7 |
| 71 | | 2.2.3 Customize material master data | 9 days | Thu 11/5/26 | Tue 11/6/7 |
| 72 | | 2.2.4 Customize customer master data | 9 days | Thu 11/5/26 | Tue 11/6/7 |
| 73 | | 2.2.5 Classification | 9 days | Thu 11/5/26 | Tue 11/6/7 |
| 74 | | 2.2.6 Factory calendar | 9 days | Thu 11/5/26 | Tue 11/6/7 |
| 75 | | **2.3 Customizing specials** | **240 days** | **Mon 11/6/13** | **Fri 12/5/11** |
| 76 | | 2.3.1 Module specific customizing | 240 days | Mon 11/6/13 | Fri 12/5/11 |
| 77 | | **2.4 Conversion and interfaces** | **90 days** | **Tue 11/11/29** | **Mon 12/4/2** |
| 78 | | 2.4.1 Define interfaces to other systems | 90 days | Tue 11/11/29 | Mon 12/4/2 |
| 79 | | 2.4.2 Design interfaces to other modules | 90 days | Tue 11/11/29 | Mon 12/4/2 |
| 80 | | 2.4.3 Design conversion of open orders | 90 days | Tue 11/11/29 | Mon 12/4/2 |
| 81 | | 2.4.4 Set up conversion handbook | 90 days | Tue 11/11/29 | Mon 12/4/2 |
| 82 | | 2.4.5 Test conversion and interfaces | 90 days | Tue 11/11/29 | Mon 12/4/2 |
| 83 | | **2.5 Forms** | **90 days** | **Tue 11/11/29** | **Mon 12/4/2** |
| 84 | | 2.5.1 Gather requirements of forms needed | 90 days | Tue 11/11/29 | Mon 12/4/2 |
| 85 | | 2.5.2 Design forms | 90 days | Tue 11/11/29 | Mon 12/4/2 |
| 86 | | 2.5.3 Program forms | 90 days | Tue 11/11/29 | Mon 12/4/2 |
| 87 | | 2.5.4 Test forms | 90 days | Tue 11/11/29 | Mon 12/4/2 |
| 88 | | 2.5.5 Get usser acceptance | 90 days | Tue 11/11/29 | Mon 12/4/2 |
| 89 | | **2.6 Reports** | **90 days** | **Tue 11/11/29** | **Mon 12/4/2** |
| 90 | | 2.6.1 Gather requirements of reports needed | 90 days | Tue 11/11/29 | Mon 12/4/2 |
| 91 | | 2.6.2 Design reports | 90 days | Tue 11/11/29 | Mon 12/4/2 |
| 92 | | 2.6.3 Program reports | 90 days | Tue 11/11/29 | Mon 12/4/2 |
| 93 | | 2.6.4 Test reports | 90 days | Tue 11/11/29 | Mon 12/4/2 |
| 94 | | 2.6.5 Get user acceptance | 90 days | Tue 11/11/29 | Mon 12/4/2 |
| 95 | | **2.7 Authorizations** | **30 days** | **Tue 12/3/13** | **Mon 12/4/23** |
| 96 | | 2.7.1 Gather requirement from line manager | 30 days | Tue 12/3/13 | Mon 12/4/23 |
| 97 | | 2.7.2 Set up authorizations | 30 days | Tue 12/3/13 | Mon 12/4/23 |
| 98 | | 2.7.3 Test authorizations | 30 days | Tue 12/3/13 | Mon 12/4/23 |
| 99 | | 2.7.4 Transport authorizations to productive system | 30 days | Tue 12/3/13 | Mon 12/4/23 |
| 100 | | **2.8 Prototype** | **36 days** | **Mon 12/4/2** | **Mon 12/5/21** |
| 101 | | 2.8.1 Set up test procedure | 36 days | Mon 12/4/2 | Mon 12/5/21 |
| 102 | | 2.8.2 Test prototype | 36 days | Mon 12/4/2 | Mon 12/5/21 |
| 103 | | 2.8.3 Get user acceptance | 36 days | Mon 12/4/2 | Mon 12/5/21 |
| 104 | | **3 Preparation phase** | **129 days** | **Thu 12/5/24** | **Tue 12/11/20** |
| 105 | | **3.1 Planning productive system** | **66 days** | **Thu 12/5/24** | **Thu 12/8/23** |
| 106 | | 3.1.1 Verify implementation schedule | 66 days | Thu 12/5/24 | Thu 12/8/23 |
| 107 | | 3.1.2 Check user and project member availability | 66 days | Thu 12/5/24 | Thu 12/8/23 |
| 108 | | 3.1.3 Racalculate expected system load | 66 days | Thu 12/5/24 | Thu 12/8/23 |
| 109 | | 3.1.4 Build up hardware if necessary | 66 days | Thu 12/5/24 | Thu 12/8/23 |
| 110 | | **3.2 User documentation** | **66 days** | **Thu 12/5/24** | **Thu 12/8/23** |
| 111 | | 3.2.1 Create/update manuals | 66 days | Thu 12/5/24 | Thu 12/8/23 |
| 112 | | 3.2.2 Update other module documentation | 66 days | Thu 12/5/24 | Thu 12/8/23 |
| 113 | | **3.3 Productive environment set-up** | **66 days** | **Thu 12/5/24** | **Thu 12/8/23** |
| 114 | | 3.3.1 Check hardware and software | 66 days | Thu 12/5/24 | Thu 12/8/23 |
| 115 | | 3.3.2 Customize productive system | 66 days | Thu 12/5/24 | Thu 12/8/23 |
| 116 | | **3.4 Reorganization and archiving** | **66 days** | **Thu 12/5/24** | **Thu 12/8/23** |
| 117 | | 3.4.1 Set up reorganization and archiving procedures | 66 days | Thu 12/5/24 | Thu 12/8/23 |
| 118 | | 3.4.2 Customize reorganization and archiving | 66 days | Thu 12/5/24 | Thu 12/8/23 |
| 119 | | 3.4.3 Test reorganization and archiving procedures | 66 days | Thu 12/5/24 | Thu 12/8/23 |
| 120 | | **3.5 System administration** | **66 days** | **Thu 12/5/24** | **Thu 12/8/23** |
| 121 | | 3.5.1 Set up application management | 66 days | Thu 12/5/24 | Thu 12/8/23 |
| 122 | | 3.5.2 Write application manual | 66 days | Thu 12/5/24 | Thu 12/8/23 |
| 123 | | **3.6 User training** | **129 days** | **Thu 12/5/24** | **Tue 12/11/20** |
| 124 | | 3.6.1 Check user avaliability for training | 66 days | Thu 12/5/24 | Thu 12/8/23 |
| 125 | | 3.6.2 Set up training schedule | 66 days | Thu 12/5/24 | Thu 12/8/23 |
| 126 | | 3.6.3 Prepare training documentation | 66 days | Thu 12/5/24 | Thu 12/8/23 |
| 127 | | 3.6.4 Prepare training environment | 66 days | Thu 12/5/24 | Thu 12/8/23 |
| 128 | | 3.6.5 Carry out taining sessions | 63 days | Fri 12/8/24 | Tue 12/11/20 |
| 129 | | **3.7 Integration tests** | **129 days** | **Thu 12/5/24** | **Tue 12/11/20** |
| 130 | | 3.7.1 Set up test schedule | 66 days | Thu 12/5/24 | Thu 12/8/23 |
| 131 | | 3.7.2 Define test data | 66 days | Thu 12/5/24 | Thu 12/8/23 |
| 132 | | 3.7.3 Prepare system environment | 66 days | Thu 12/5/24 | Thu 12/8/23 |
| 133 | | 3.7.4 Carry out integration test | 63 days | Fri 12/8/24 | Tue 12/11/20 |
| 134 | | **3.8 Data transfer to productive system** | **129 days** | **Thu 12/5/24** | **Tue 12/11/20** |
| 135 | | 3.8.1 Check project member availability for weekend wor | 66 days | Thu 12/5/24 | Thu 12/8/23 |
| 136 | | 3.8.2 Set up conversion time schedule | 66 days | Thu 12/5/24 | Thu 12/8/23 |
| 137 | | 3.8.3 Carry out conversion according to 2.4 | 63 days | Fri 12/8/24 | Tue 12/11/20 |
| 138 | | 3.8.4 Transport reports ans documents | 63 days | Fri 12/8/24 | Tue 12/11/20 |
| 139 | | **3.9 Manual data maintenance and entry** | **63 days** | **Fri 12/8/24** | **Tue 12/11/20** |
| 140 | | 3.9.1 Check stock entry | 63 days | Fri 12/8/24 | Tue 12/11/20 |
| 141 | | **3.10 Quality check productive system** | **63 days** | **Fri 12/8/24** | **Tue 12/11/20** |
| 142 | | 3.10.1 Set up and check test plan | 63 days | Fri 12/8/24 | Tue 12/11/20 |
| 143 | | **3.11 Release system for operational start** | **0 days** | **Tue 12/11/20** | **Tue 12/11/20** |
| 144 | | **4 Productive phase** | **525 days** | **Mon 12/11/26** | **Fri 14/11/28** |
| 145 | | **4.1 System optimization** | **135 days** | **Mon 12/11/26** | **Fri 13/5/31** |
| 146 | | 4.1.1 Optimize system settings | 135 days | Mon 12/11/26 | Fri 13/5/31 |
| 147 | | 4.1.2 Optimize technical operations | 135 days | Mon 12/11/26 | Fri 13/5/31 |
| 148 | | **4.2 Post-project activities** | **387 days** | **Thu 13/6/6** | **Fri 14/11/28** |
| 149 | | 4.2.1 Initiate follow-up projects | 387 days | Thu 13/6/6 | Fri 14/11/28 |
| 150 | | 4.2.2 Finalize project goals | 387 days | Thu 13/6/6 | Fri 14/11/28 |
| 151 | | 4.2.3 Improve processes and procedures | 387 days | Thu 13/6/6 | Fri 14/11/28 |

Legend:
Task — Summary — External Milestone — Inactive Summary — Manual Summary Rollup — Finish-only — Manual Progress
Split — Project Summary — External Tasks — Inactive Task — Manual Task — Manual Summary — Deadline
Milestone — Milestone — External Tasks — Inactive Milestone — Duration-only — Start-only — Progress

# Group Contribution Statement

| Group member name and SID | Contribution to the final report | Signature |
|---|---|---|
| YING YE 450272745 | Role: Coordinator<br>Research the data about Stakeholder.<br>Analyze engagement, power and strategy.<br>Analyze the successful reasons of CAPPS.<br>Present communication and conclusion. | |
| LEI CHEN 460184319 | Role: Driver<br>Read relevant books and search the information of project.<br>Collect data and charts.<br>Analyze and complete the cost of project<br>Present introduction and cost. | |
| SHICHEN HUANG 450085972 | Role: Implementer<br>Research and analyze the data about scope.<br>Complete the project chart and scope statement.<br>Analyze requirements of CAPPS and requirements traceability matrix.<br>Present analysis of scope. | |
| HUIXIN CHEN 450103302 | Role: Supporter<br>Research and analyze the data about time.<br>Complete milestone, WBS and Gantt Chart<br>Collect and analyze data about communication and complete the communication part.<br>Present analysis of time. | |
| YANG LIU 450510706 | Role: Finisher<br>Research and analyze data about Human Resource and Risk<br>Analyze structure of CAPPS and complete organizational chart.<br>Collect and analyze data of risk and complete risk register and probability/impact matrix.<br>Present analysis of risk. | |