



**NATIONAL ENGINEERING CENTER**  
University of the Philippines  
Diliman, Quezon City

	Fans	Front Office	Coaches	Regular Line-Up							Special Teams					
	Business Users	Business Sponsor / Business Driver	DW/BI Director / Program Manager	Project Manager	Business Project Lead	Business Analyst	Data Steward / QA Analyst	Data Architect / Data Modeler / DBA	Metadata Manager	ETL Architect / ETL Developer	BI Architect / App Developer / Portal Developer	Technical Architect / Tech Support Specialist	Security Manager	Lead Tester	Data Mining / Stats Specialist	Educator
Project Task																
PROJECT/PROGRAM LAUNCH AND MANAGEMENT																
PROJECT DEFINITION																
1 Assess DW/BI readiness		○	○	●	●	◆		◆								
2 Develop preliminary project scope/charter		○	○	●	●	◆		◆		◆	◆	◆				
3 Build business justification	◆	○	◆	●	●	◆		◆		◆	◆	◆				
PROJECT PLANNING & MANAGEMENT																
1 Establish project identity		◆	◆	●	●											
2 Identify project resources				●	●											
3 Prepare project plan		□	□	●	●		○	○	○	○	○	○	○	○	○	○
4 Develop project communication plan		◆	◆	●	●											
5 Conduct project team kick-off & planning		◆	◆	●	●		○	○	○	○	○	○	○	○	○	○
6 Develop process to manage scope/control changes		◆	◆	●	●											
7 Develop process to measure success		○	○	●	●											
8 User acceptance/project review	□	○	○	●	●		○	□	□	□	□	□	□	□	□	□
9 Ongoing project management	□	□	□	●	●		○	○	○	○	○	○	○	○	○	○
PROGRAM PLANNING & MANAGEMENT																
1 Establish governance responsibility/process	□	○	●	○	○	□	□	□	□	□	□	□	□	□	□	□
2 Establish program communication plan		○	●	○	○											
3 Establish enterprise data stewardship		□	●	○	○		○	○	○	○	○					
4 Establish program best practices			●	○	○		○	○	○	○	○	○	○	○	○	○
5 Conduct periodic program assessments	◆	○	○	○	○		○	○	○	○	○	○	○	○	○	○
6 Ongoing program management	□	○	●	○	○	□	□	□	□	□	□	□	□	□	□	□
BUSINESS REQUIREMENTS DEFINITION																
1 Identify and prepare interview team				●	○	○										
2 Select interviewees		◆	◆	●	●	○	◆				◆					
3 Schedule interviews				○	○	○										
4 Prepare interview questionnaires				○	○	○	◆	◆		◆	◆				◆	
5 Conduct user kick-off & prepare interviewees	○	○	○	●	●	○	◆	◆		◆	◆	◆				
6 Conduct business user interviews		○	○	○	○	●	○	○		○	○				○	
7 Conduct IT data audit interviews				○	○	●	○	○		○	○					
8 Publish interview write-ups and incorporate feedback.	□			○	□	○	□	□	□	□	□					
9 Analyze interview findings				○	○	○	○	○		○	○					
10 Document findings and review		◆	◆	○	○	○	○	○		○	○					
11 Publish requirements deliverables	□	○	□	○	○	○	□	□	□	□	□	□	□	□	□	□
12 Prioritize and revise project scope	◆	○	○	●	●	○	◆	◆		◆	◆	◆				
13 User acceptance/project review	□	○	○	●	●	○	□	□	□	□	□	□	□	□	□	□
DW/BI TECHNICAL ARCHITECTURE																
APPLICATION ARCHITECTURE DESIGN																
1 Create architecture task force				○	○							●				
2 Gather & document technical requirements												●				
3 Review current technical environment				○		○		○		○	○	○				
4 Develop architecture implications document						○		○		○	○	○				
5 Create architecture model						◆		○		○	○	○				
6 Determine phased implementation approach				○	○							●				
7 Define and specify subsystems								○		○	○	○				
8 Create the architecture plan										○	◆	○				
9 Develop configuration recommendations								◆		◆	◆	○				
10 User acceptance/project review	□	□	□	●	○	□	□	□	□	□	□	○	□	□	□	□
PRODUCT SELECTION																
(Repeat for each selection area)																
1 Develop evaluation matrix				●	●	○		○				●				
2 Research candidate products				○	○	○		○			○	○	○	○	○	○
3 Develop product short list				○	○	○		○				○	○	○	○	○
4 Evaluate product options	◆			○	○	○		○			○	○				
5 Optional prototype (may repeat for multi products)																
Select business process / data for evaluation				●	●	○		○								
Define completion criteria				●	●							○				
Acquire resources (internal/vendor)				○	○											
Determine test configuration								○			○	○				
Install evaluation prerequisites & components						○		○		○	○	○				
Train the evaluation team	○			●	○	○		○		○	○	○				○
Develop & tune prototype				○	○	○		○		○	○	○				
Conduct tests	◆			○	◆	○	◆	○		○	○	○				
Analyze & document results	◆			○	○	○	◆	○		○	◆	○				◆
6 Determine product recommendation	◆	□	□	●	●	○		○		○	○	○				
7 Present findings/results to management		□	□	●	●	○										
8 Enter trial phase	○			○	○	○				○	○	○	○			
9 Negotiate contract		○	○	○	○				○	○	○	○				
10 User acceptance/project review	□	□	□	○	●	○	○	□	○	□	□	○	□	□	□	○
MANAGE METADATA																
Inventory metadata elements, locations, and relationships	○			○	○	○	○	○	●	○	○	○	○	○	○	○
2 Educate team on metadata situation and responsibilities	○			○	○	○	○	○	○	○	○	○	○	○	○	
3 Identify key elements to manage	○			○	○			○		○						
4 Create systems to capture additional metadata									○	○						
5 Create tools to synchronize metadata									○	○		○				
6 Design and implement metadata delivery system									○	○		○				
7 Document metadata strategy				○						○						
8 Ongoing metadata management and monitoring										○						
9 User acceptance/project review	□	□	□	●	○	□	□	□	●	□	□	○	□	□	□	□
IMPLEMENT TACTICAL SECURITY MEASURES																
1 Develop tactical security plan				○	○							○	●			
2 Secure physical environment				○	○							○	○			
3 Secure access into environment				○	○							○	○			
4 Secure access out of environment				○	○							○	○			
5 Implement rigorous password scheme				○	○							○	○			
6 Implement controls for software installation				○	○							○	○			
7 Audit security violations				○	○							○	○			
8 Monitor security privileges by individual				○	○							○	○			
9 User acceptance/project review	□	□	□	●	○	□	□	□	□	□	□	○	○	□	□	□
DEVELOP STRATEGIC SECURITY PLAN																
1 Design security architecture				○								○	●			
2 Implement access services				○								○	○			
3 Implement authentication services				○								○	○			
4 Implement external access services				○								○	○			
5 Centralize authentication and access control				○								○	○			
6 Implement security monitoring and compliance sys				○								○	○			
7 User acceptance/project review	□	□	□	●	○	□	□	□	□	□	□	○	○	□	□	□
CREATE INFRASTRUCTURE PLAN																
1 Create draft infrastructure model and plan				○								○	●			
2 Review/update plan with key IT groups				○								○	○			
3 Create final version of initial plan				○								○	○			

**LEGEND:**  
 ● Primary responsibility  
 ○ Involved  
 ◆ Provides input  
 □ Informed of results

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Project Task																
4 Monitor and update plan																
5 User acceptance/project review																
PRODUCT INSTALLATION																
(Repeat for each product)																
1 Installation planning																
2 Meet prerequisites																
3 Install hardware / software																
4 Test hardware / software																
5 User acceptance/project review																
IMPLEMENTATION																
DIMENSIONAL DATA MODEL DESIGN																
1 Review business requirements																
2 Review/develop data warehouse bus matrix																
3 Select business process																
4 Declare fact table grain																
5 Identify dimensions																
6 Identify metrics																
7 Develop high level model diagram																
8 Document attributes list																
9 Identify candidate data sources																
10 Profile data																
11 Develop base and derived metrics																
12 Design detailed dimensional model																
13 Review data model with IT																
14 Review data model with business users																
15 Review design recommendations for BI Tool																
16 Review design recommendations for DBMS																
17 Finalize logical design documentation																
18 Draft source to target data map																
19 User acceptance/project review																
PHYSICAL DATABASE DESIGN																
1 Define standards for physical objects																
2 Design physical tables & columns																
3 Finalize the source to target map																
4 Estimate database size																
5 Design development database																
6 Design auditing and staging tables																
7 Develop initial index plan																
8 Design the OLAP database																
9 Develop initial aggregation plan																
10 Develop initial partitioning plan																
11 User acceptance/project review																
PHYSICAL DATABASE IMPLEMENTATION																
1 Install and setup the RDBMS																
2 Build physical storage structure																
3 Implement table partitioning																
4 Complete table and index sizing																
5 Create tables and indexes																
6 Create OLAP database																
7 User acceptance/project review																
ETL SYSTEM DESIGN																
1 Design high level ETL process																
2 Test, choose and implement an ETL tool																
3 Develop default strategies for extracting data																
4 Develop default strategies for archiving extracted data																
5 Develop default strategies for policing data quality																
6 Develop default strategies for dimension change mgmt																
7 Design strategy to meet availability requirements																
8 Design data auditing subsystem																
9 Design the structure of the ETL staging area																
10 Develop plan for maintaining dimension hierarchies																
11 Design detailed ETL plans for each table																
12 Set up initial job sequencing																
13 Document the ETL system specification																
14 User acceptance/project review																
ETL SYSTEM DEVELOPMENT																
1 Build dimension table surrogate key mgmt system																
2 Build the audit system or template																
3 Load the date table and other static dimensions																
4 Build historic loads for type 1 dimension tables; test																
5 Build historic loads for type 2 dimension tables; test																
6 Build fact table surrogate key pipeline																
7 Build historic fact table loads; test																
8 Build dimension attrib incremental change mgmt sys																
9 Build dimension table incremental loads; test																
10 Build fact table incremental loads; test																
11 Build agg table load/OLAP cube processing; test																
12 Design, build and test ETL system automation																
13 User acceptance/project review																
BI APPLICATION DESIGN																
1 Create application standards and templates																
2 Identify and prioritize candidate applications																
3 Document detailed BI application specifications																
4 Design navigation framework																
5 Validate the applications and data model																
6 Review BI application specs with business users																
7 Revise BI application specs																
8 Develop BI application test plans																
9 User acceptance/project review																
BI APPLICATION DEVELOPMENT																
1 Review application specifications and standards																
2 Populate BI tool metadata																
3 Create business metadata																
4 Test BI tools																
5 Set up user security																
6 Set up report process metadata system																
7 Develop BI applications																
8 Validate data model and data																
9 Provide data accuracy & cleanliness feedback																
10 Develop BI portal																
11 Set up report execution scheduling																
12 Test BI applications and verify data																
13 Document BI applications																
14 Develop BI application maintenance procedures																
15 Develop BI application deployment procedures																
16 User review/project acceptance																

Project Task	Fans	Front Office	Coaches	Regular Line-Up							Special Teams				
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DEPLOYMENT & OPERATIONS															
Pre-Deployment Testing															
1 Develop a plan for implementing testing		◆		○	○	○		○	○				●		
2 Purchase and implement test management tools						●	○	○	○				○		
3 Develop test datasets						●	○	○	○				○		
4 Define tests						●	○	○	○				○		
5 User acceptance/project review	□	□	□	●	○	○	○	□	○	□	○	□	○	□	○
Data and Process Testing															
1 Test historic load	○			○	○	●	○		○					○	
2 Test primary dataset for incremental load				○	○	●	○		○					○	
3 Conduct live tests with real data	○			○	○	○	○		○					○	
4 Test overall process and system integration				○	○	○	○		○				●		
5 Test month-end or other unusual conditions	○			○	○	○	○		○				○		
6 User acceptance/project review	□	○	□	●	○	○	○		○	○	○		○		○
Performance Tuning															
1 Test conformance to Service Level Agreements				●	○	○	○		○	○				○	
2 Test performance of data loads				○		○	○		○					○	
3 Improve performance of data loads				○		○	○		○					○	
4 Test query performance				○	○		●		○	○			○		
Improve query performance via new indexes and/or aggregations				○		○	●		○				○		
End-to-end testing of system after performance-related changes				○	○	○	○		○	○	○		○		
7 User acceptance/project review	□	○	□	●	○	○	○	□	○	○	○	□	○	□	□
Other Testing															
1 Usability testing of BI applications and portal	○			○	○	○				○					
2 Confirm desktop readiness				○						○	○				
3 User acceptance/project review	□	□	□	○	●	○	○	○	○	○	○				○
System Deployment															
1 Develop playbook for relational DW deployment				○	○	○	●	○			○	○			
2 Develop playbook for ETL system deployment				○	○	○	○	○	●		○	○			
3 Develop playbook for OLAP database deployment				○	○	○	○	○			○	○			
4 Develop playbook for BI application deployment				○	○	○	○			○		○			○
5 Deploy new or changed system				○	●					○		○			
6 User acceptance/project review	□	○	□	○	●	○	○	○	○	○	○				○
User Facing Deployment															
1 Develop documentation				○	○	○	○	◆	○	○	○	◆		○	●
2 Develop training				○	○	○	○	◆	○	○	○	◆		○	●
3 Deliver training	○			○	○	○	◆	◆	◆	◆	○	◆		◆	●
4 User acceptance/project review	□	□	□	○	●	○	○	○	◆	○	○	○	□	◆	○
Back Room Operations															
1 Develop back room operations plan				○			●								
2 Maintain physical database and disks							●								
3 Maintain indexes and partitions							●								
4 Perform regular backups and test recovery							●								
Front Room Operations															
1 Develop support plan			○	○							●				
2 Ongoing BI portal maintenance	◆				◆					●	◆				
Ongoing user guidance for developing queries and reports					○					○	●				
3 reports	◆				○										
4 Ongoing standard report development	◆				○					●	◆				