

A large, light gray pyramid graphic composed of many horizontal steps, centered on the page. The text is overlaid on the middle steps of the pyramid.

Practical Tips for a Successful BI Project

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What is BI ?!?

- Beer Institute
- Brain Injury
- Bad Influence
- Birth Index
- Behavioral Interventions
- And 80 more meanings

Business Intelligence ?

Who am I?

- Project Manager

TechnoLogica (technologica.com)



- 16+ years experience with Oracle Technologies
- 15+ years experience in Project Management
- Certified Project Management Specialist (PMP) since 2008

- President

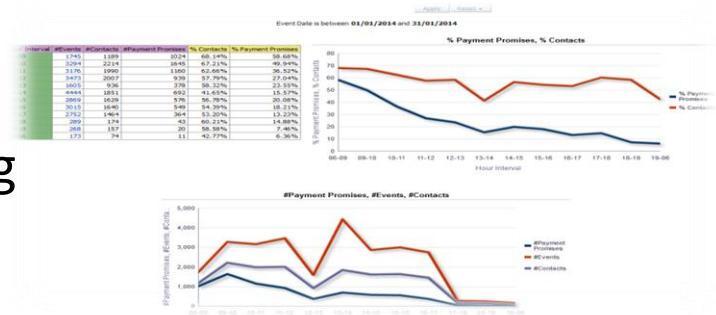
Bulgarian Oracle User Group (bgoug.org)



- 13 years, 2 conferences per year

My favorite projects

- Enterprise DW&BI Solution in CIBANK / 2013-2014
 - Oracle Database 11g
 - Oracle Data Integrator 11g
 - Oracle Business Intelligence Suite 11g



- BULRIS - Bulgarian River Information System / 2010-2013
 - Construction
 - Telecommunication Infrastructure
 - VHF Infrastructure
 - Hardware
 - Software



BI Projects Nature

- Deliver an “environment” to facilitate business users
 - To make better informed business decisions
 - To improve data quality and consistency
 - To improve customer satisfaction
 - To improve planning
- Technically this means
 - Delivery of integrated, well structured and quality data
 - Establishment of sophisticated and stable ETL processes
 - Implementation of well structured presentation layer
 - Development of compact and consistent reports
 - Delivery of intuitive tools for ad-hoc analysis and new reports generation



#1: Involve Business Users



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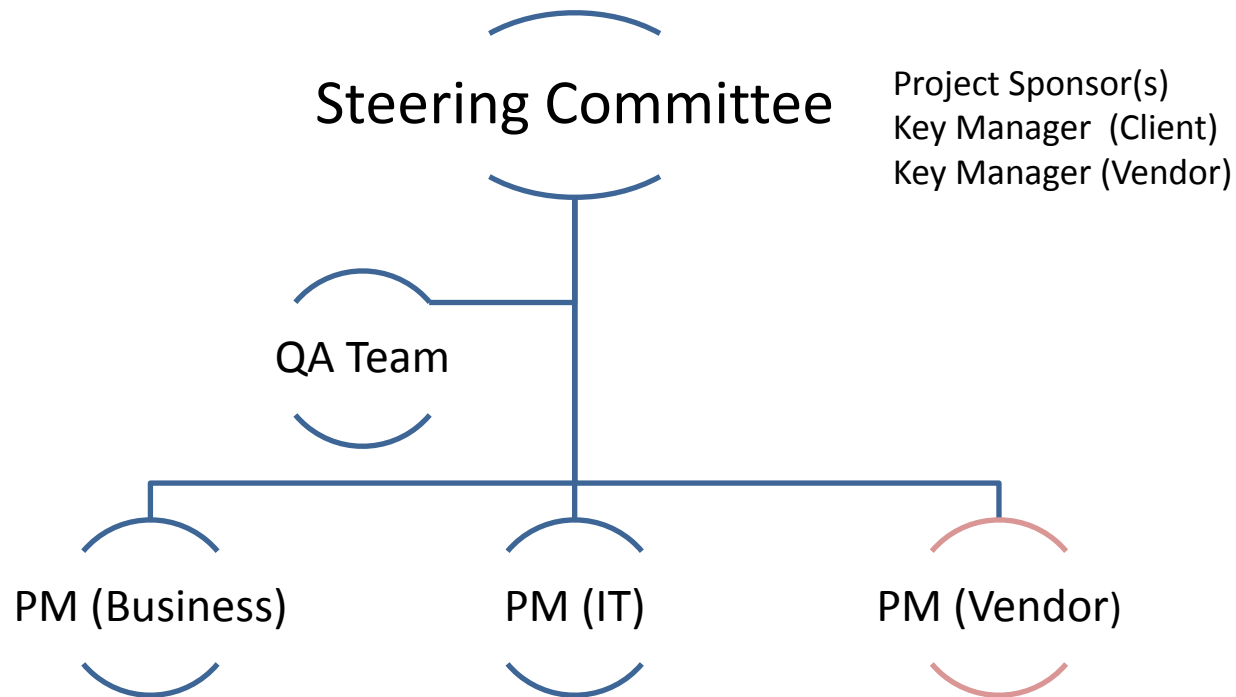
Project Definition Phase



- Involve Management in the definition of the business needs and business goals
- Involve Key Business Users (subject matter experts) in the definition of the initial scope
- Involve Management and Key Business Users in the vendor selection process

#1: Involve Business Users

Organizational structure



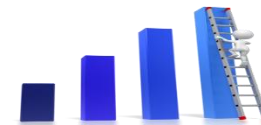
#1: Involve Business Users

Project Timeline



- Develop the project timeline with involvement of the project members
- Adjust it in regard to the company reporting periods
- Evaluate the risk that the business users first priority is their everyday work

Quarter End



January

February

March

April



#1: Involve Business Users

Analysis



- Provide an initial training session on the BI product
- Establish regular meetings for interactive requirements gathering
- Perform gap analysis between requirements and the BI tool capabilities in parallel
- Summarize the results and regularly email to business users for review and approval
- Get a formal sign off for the requirements specification document

#1: Involve Business Users

Design and Implementation

- Consult the design and implementation decisions related to business users
- Communicate regularly the forthcoming activities and deliverables – when, what, who, how
- Plan and execute short learning and training sessions early and often
- Identify and work with active and creative users



#1: Involve Business Users

Transition and Production

- Trained key business users to train all users
- Organize support
 - Tools, processes, people, responsibilities
 - To be ready and working on the Go-live date
- Establish BI committee with regular meetings
 - Report usage of the system
 - Discuss and resolve issues and gaps
 - Discuss feedback and ideas for improvement
 - Plan and prioritize next implementations





#2: Choose Incremental Approach



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Phase Your Project

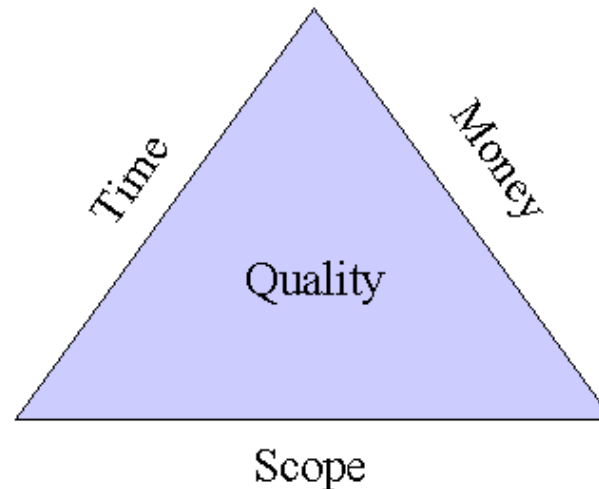


- Phase your project – 120 day rule
 - Work together with customer
 - Break down the BI solution (departments, data sources, etc.)
- Initial phase
 - Pick a strategic business area(s) which are important to the business but not too complex
 - Take time to analyze on a high level the whole BI solution
 - Design the shared dimensions with rigor
- Subsequent phases
 - Allow flexibility when defining the scope
 - Validate the results and consider user feedback
 - Allow lessons learned

#2: Choose Incremental Approach

Allow Scope Flexibility

- Allow 'agile' scope definition
- Be flexible but never compromise the deadlines !!!



#2: Choose Incremental Approach

Scope Definition Example



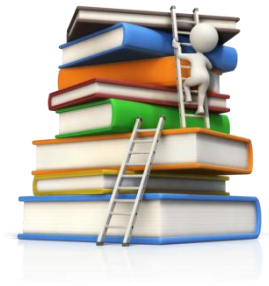
Phase I

Organizational Structure	Customers	Nomenclatures	Account Balances	Transactions
Employees	Accounts	Attracted Funds	Cash operations	Payments

Phase II

Loan Types	Loans	Guarantees	E-channels	Collaterals
POS Terminals	Cards and POS	Securities	Provisions	Insurances

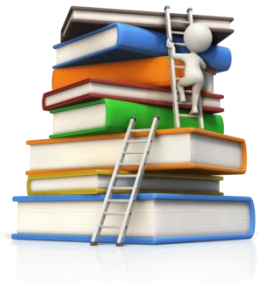
- Start preparing Phase II scope in advance
- Work with customer to agree on scope that will fit the deadlines and resources



#3: Follow Proven Practices

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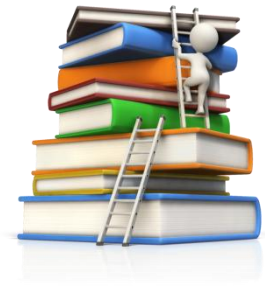
Solution Architecture



- Stress on data delivery not on reports and KPIs
- Create a Data Warehouse as a basis for the BI solution
- Implement a presentation layer to allow creation of new reports by business
- Deliver a good sample of predefined reports
- Design the solution for future use

#3: Follow Proven Practices

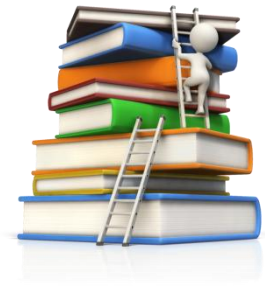
Data Layer



- Follow proven DW models – Kimball / Inmon
 - Design for future use and expansion
 - Use conformed dimensions
- Create and promote standardized naming conventions, terminology and design patterns
- Create proper test scenarios to test delivered data (correctness, integration, quality) not final reports

#3: Follow Proven Practices

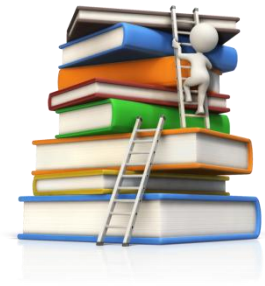
Integration Layer



- Create and promote common rules and naming conventions
- Assure continuity and traceability of the ETL process
- Move calculations to ETL process
 - Develop calculation engines for complex outputs
 - Calculate important KPIs and metrics here, not in the presentation layer

#3: Follow Proven Practices

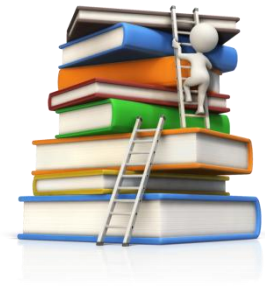
Presentation Layer



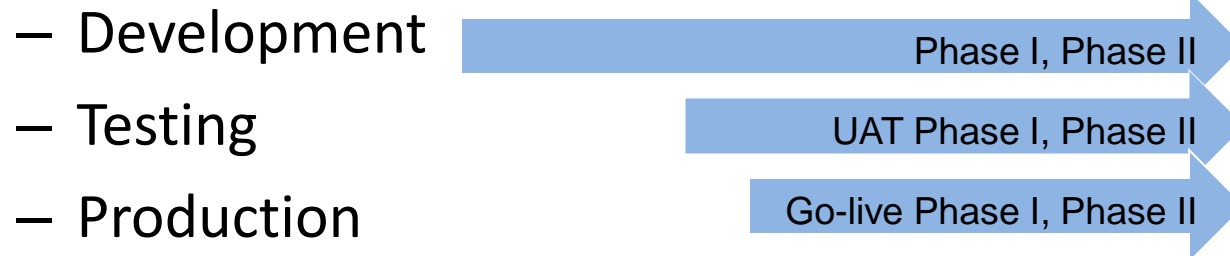
- Create a well structured presentation layer
 - Work with business to define the subject areas and names
 - Establish and follow clear principles
- Keep user interface simple, intuitive, familiar
- Create attractive reports and dashboards
- Provide right information to right people on time
- Allow easy and efficient access to the information
 - Ensure easy access to the dashboards and reports (shortcuts, indexes, number of clicks, etc.)
 - Provide user documentation
 - Create interactive hints and help

#3: Follow Proven Practices

Configuration management



- Implementation Environments



- Plan your configuration management strategy early (@ Analysis phase) based on:

- Available customer resources
- Available tools and mechanisms for synchronization of all layers (database, integration, BI)



#4: Strong Project Management



#4: Strong Project Management

Project Manager

- Experienced PM from vendor side
- Good understanding of the processes, challenges, risks and dependencies in BI projects
- Evaluate the risk project manager not have enough power



#4: Strong Project Management

Project Documentation

- Create detail Project Management Plan
- Keep records for
 - Issues, Risks, Deliverables, Change requests, etc.
 - Status reports and project progress
 - Official correspondence
- Keep track of project deliverables and versions
- Collect acceptance documents and protocols
- Document lessons learned and best practices



#4: Strong Project Management

Monitoring and Control

- Weekly status reports and meetings
 - Keep project schedule up-to-date
 - Work proactively with the team to discover possible issues and risk occurrence
- Monthly status reports
 - Detail description of the work done, status of the deliverables, issues, risks, change requests, etc.
- Monthly meetings of the Steering Committee
 - Give management summary of project progress
 - Escalate issues and risks that cannot be solved at PM level
 - Prioritize, give solutions and options not only issues



#4: Strong Project Management

Change Management

- Define project boundaries clearly
 - Scope – Requirements specification & WBS
 - Time, Money – Project schedule, Contract
 - Quality – Acceptance criteria, Quality Measures
- Establish formal process how to manage changes in time, scope, money, quality
- Strictly follow the change management process
- Keep track of all project changes
- Don't allow scope creep

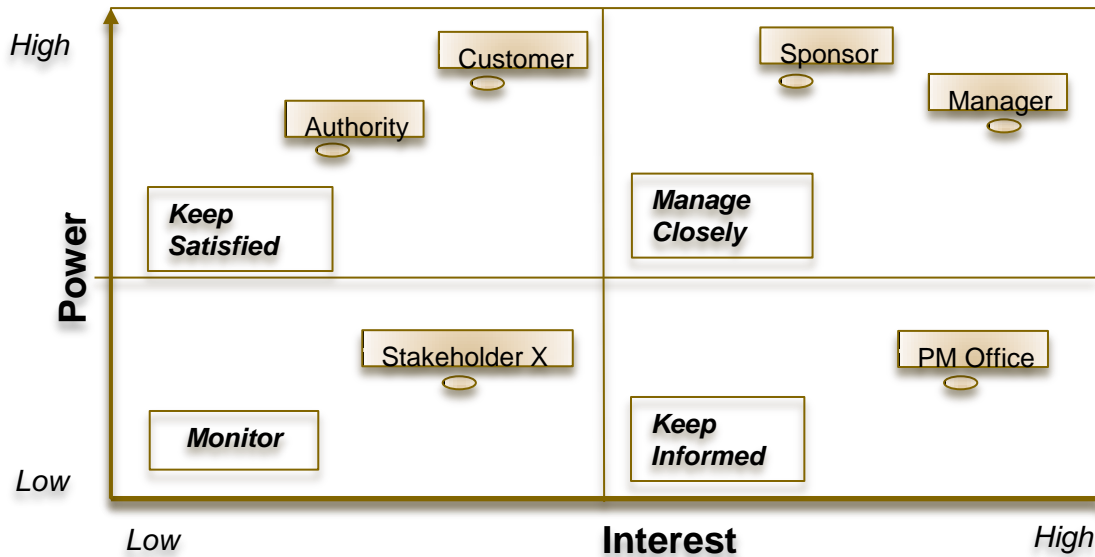


#4: Strong Project Management

Stakeholder management



- Identify all stakeholders



- Manage their engagement

Stakeholder	Unaware	Resistant	Neutral	Supportive	Leading
John	C			D	
Katte				D C	
Bond		C		D	

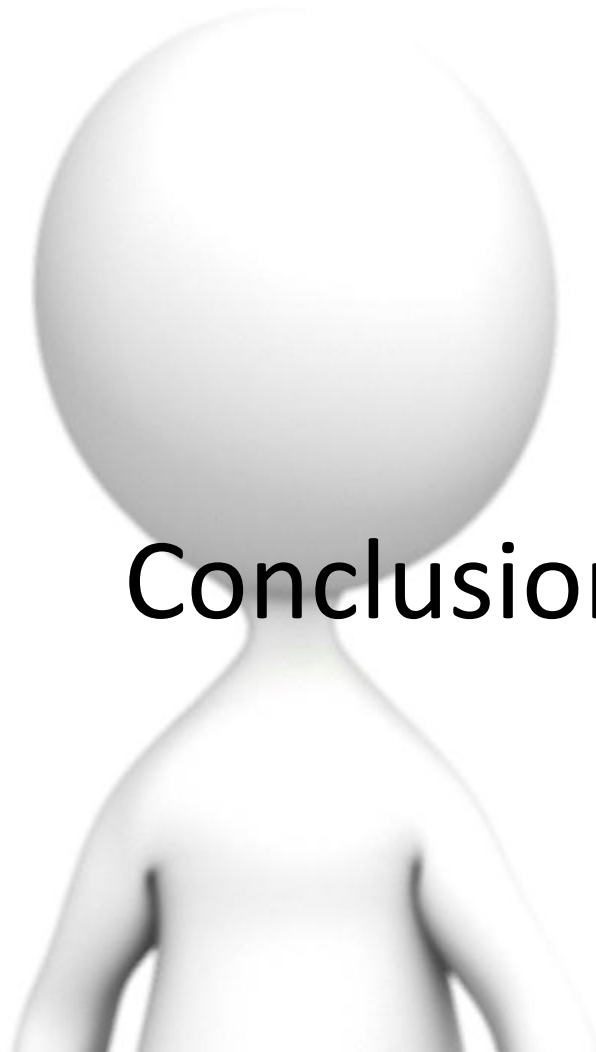
#4: Strong Project Management

Build a strong team

- Define clear roles and responsibilities
- Assure knowledge transfer to customer
- Cross train your team
(ETL, BI tool, Data model, Business area)
- Communicate and disseminate



Project Sponsor	Project Manager	Solution Architect	Technical Architect	Build Manager	Configuration Manager
Business Analyst	ETL Architect	Information Architect	Analytics Architect	QA Manager	System Administrator
Analysts	ETL developer	Data Modeler	Analytics Developer	QA Experts	End Users



Conclusion

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- How did you succeed to implement an enterprise DW&BI solution in such tight deadlines?

“Well defined scope

Complete support from management and business units

Strong project management

Well planned and justified budget

Right choice of technologies, tools and BI vendor”

Conclusion



- DW&BI implementation is a project so DON'T forget all general tips for a successful project
 - Always obtain formal sign-off
 - Requirements must be SMART
 - Avoid scope creep
 - Manage proactively
 - Communicate
 - Create plans and procedures and follow them
 - Test your solution
 - *And many many others*



Thank You