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Investment protection in Oracle Forms

Get a clear picture of your application through PITSS.Analysis

Patrick Walther, Manager Consulting

London, 6. May 2015

The Oracle Modernization Experts

ORACLE Gold Partner

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PITSS: The Oracle Modernisation Expert

- Sites: Germany (Stuttgart, Bielefeld, Wolfratshausen), UK (Milton Keynes), USA (Troy, Michigan)

ORACLE Gold Partner

- Oracle Gold Partner
- Member of OMA – Oracle Modernization Alliance
- Oracle Forms Migrations Partner
- Oracle Forms Beta-Tester
- More than 15 years experience with Oracle Technologies
- More than 500 completed executable migration projects
- Customers in more than 50 countries

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The ORACLE® Specialist

- **More than 15 years of experience with Oracle technology**
- **Oracle Status:**
  - Oracle Gold Partner
  - Oracle Independent Softw
  - Oracle Modernization Alliance member
  - Oracle Preferred Migration Partner
  - Oracle Forms Beta-Tester
- **Customer around the world**

ORACLE Gold Partner

PITSS GmbH **PITSS America LLC**

www.pitss.com

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- Founded 1999
- Company Form GmbH / LLC
- Locations
  - Germany PITSS GmbH Stuttgart, Munich, Bielefeld, Milton Keynes (UK)
  - USA PITSS America LLC Troy Michigan

- Oracle Partner with more than 20 years of experience in Oracle technologies
- Member of OMA (Oracle Modernization Alliance), “preferred” migration partner
- Flagship solution PITSS.CON
- Expertise > 500 Oracle Forms projects, customers > 30 countries globally
- Memberships

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PITSS.CON Customers

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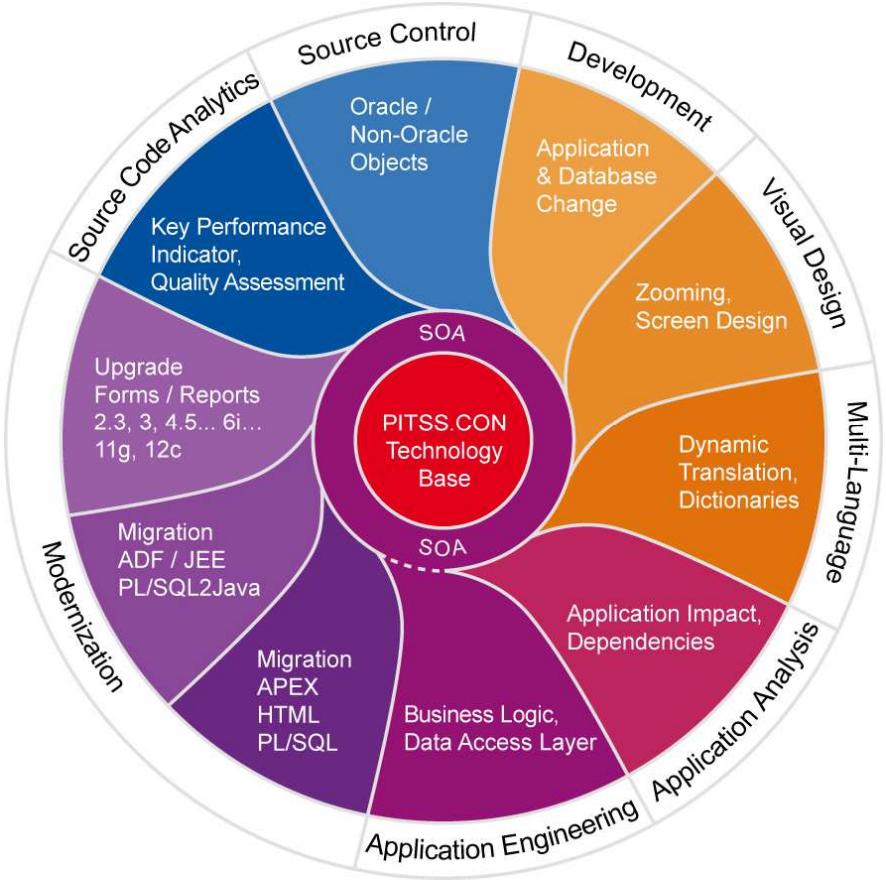
PITSS North & South American Customers

PITSS.CON overview

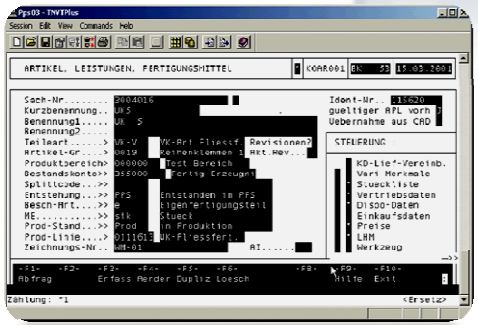
- Technology Base
- Maintenance / Development
- Visual Design
- Multi Language
- Application Analysis mechanisms
- Application Engineering for SOA
- APEX Assistant
- ADF-Assistant
- Automatic upgrading / migration
- Source Code Analytics
- Source Control



Introduction

- **My Ladder**
  - Very old
  - Build by my Grandpa
  - Not very well maintained

- **Oracle Forms**
  - Could be Very old
  - Could be Build by my Grandpa
  - Could be Not very well maintained



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How do we protect our investment?

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PITSS.CON overview

- Technology Base
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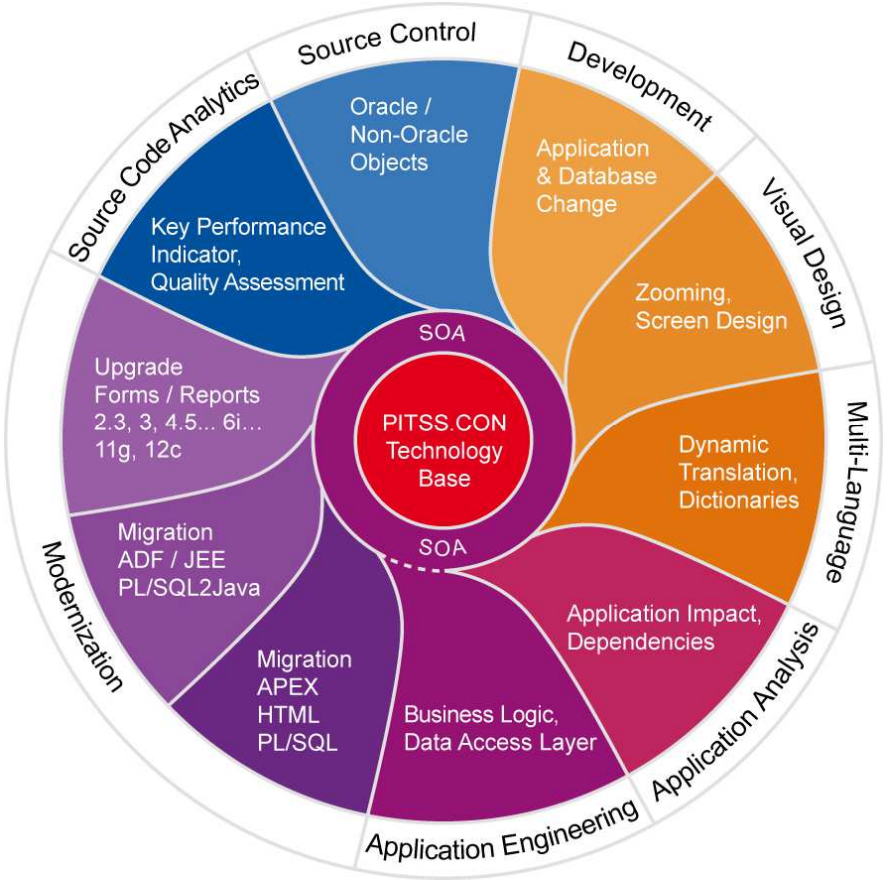
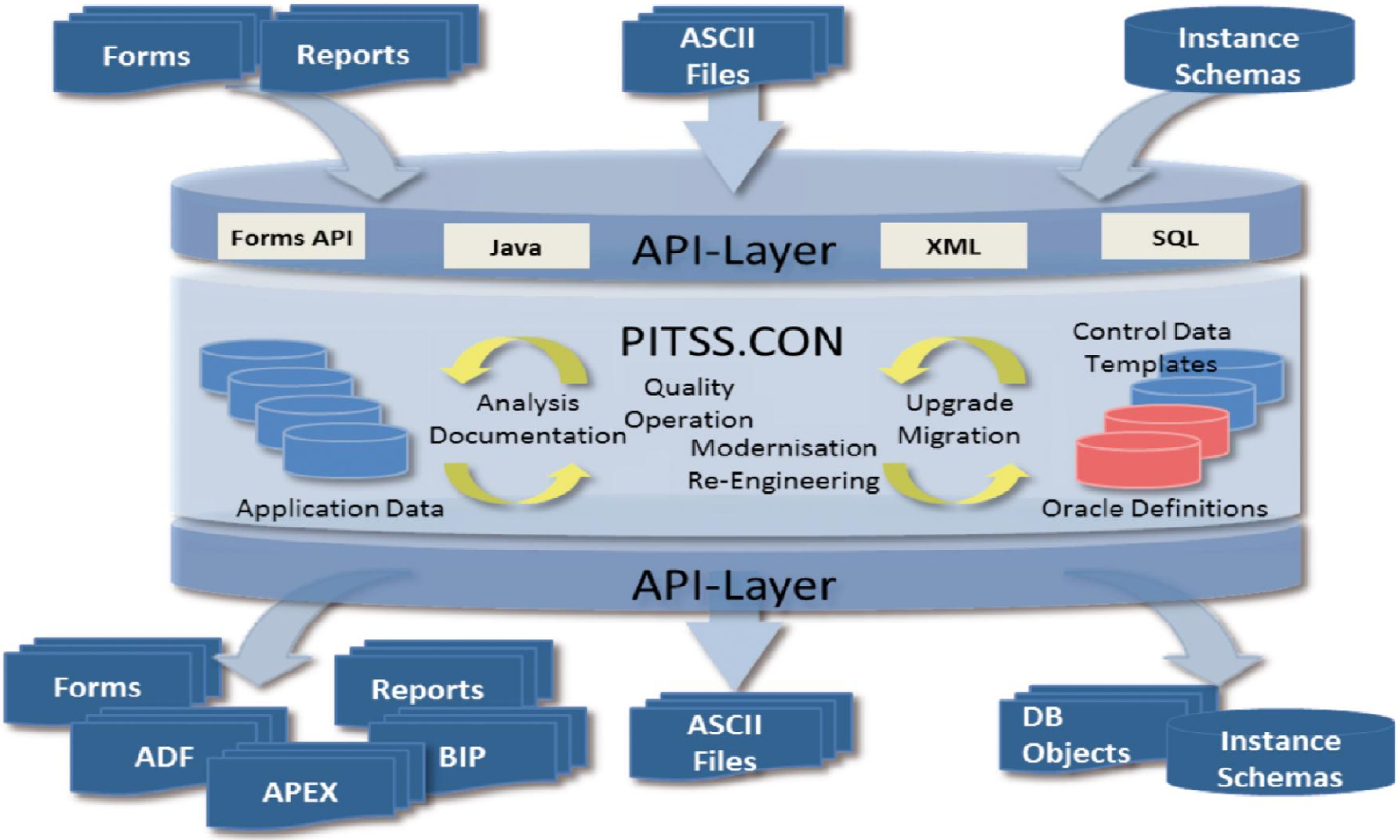


PITSS.CON - Repository



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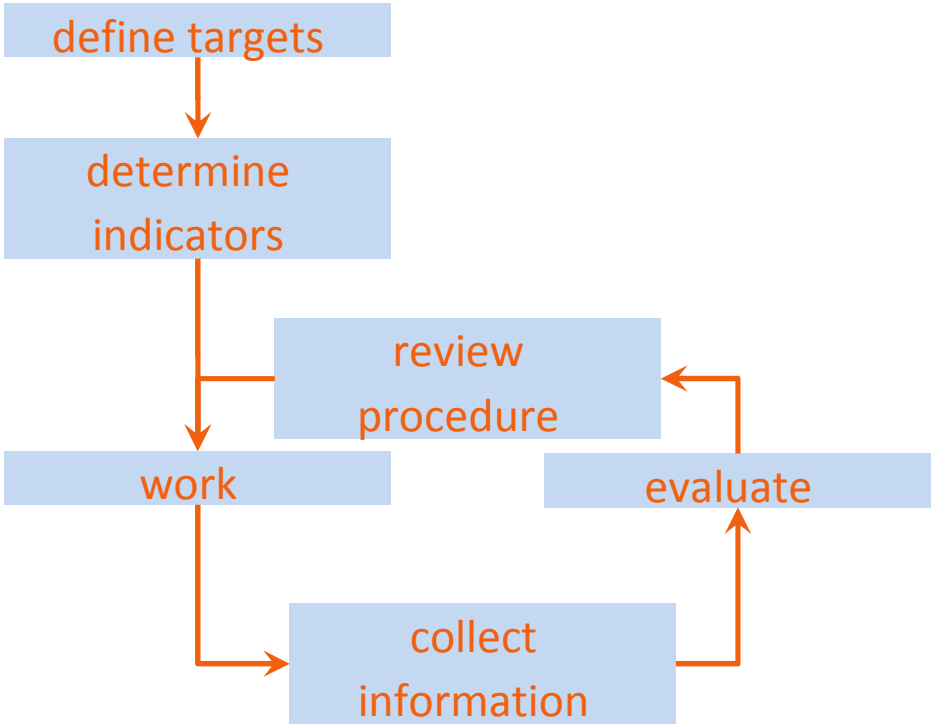
What does quality signify?

Quality is defined according to the standard EN ISO 9000:2005 (the valid standard to quality management), as *"rate, in that a set of inherent (measurable) features fulfils requirements "*.

Source: Wikipedia



- **process metrics**
  - development time
  - required resources
- **product metrics**
  - **dynamic**
    - period
    - error count
  - **static**
    - software metrics
    - architecture
    - naming conventions

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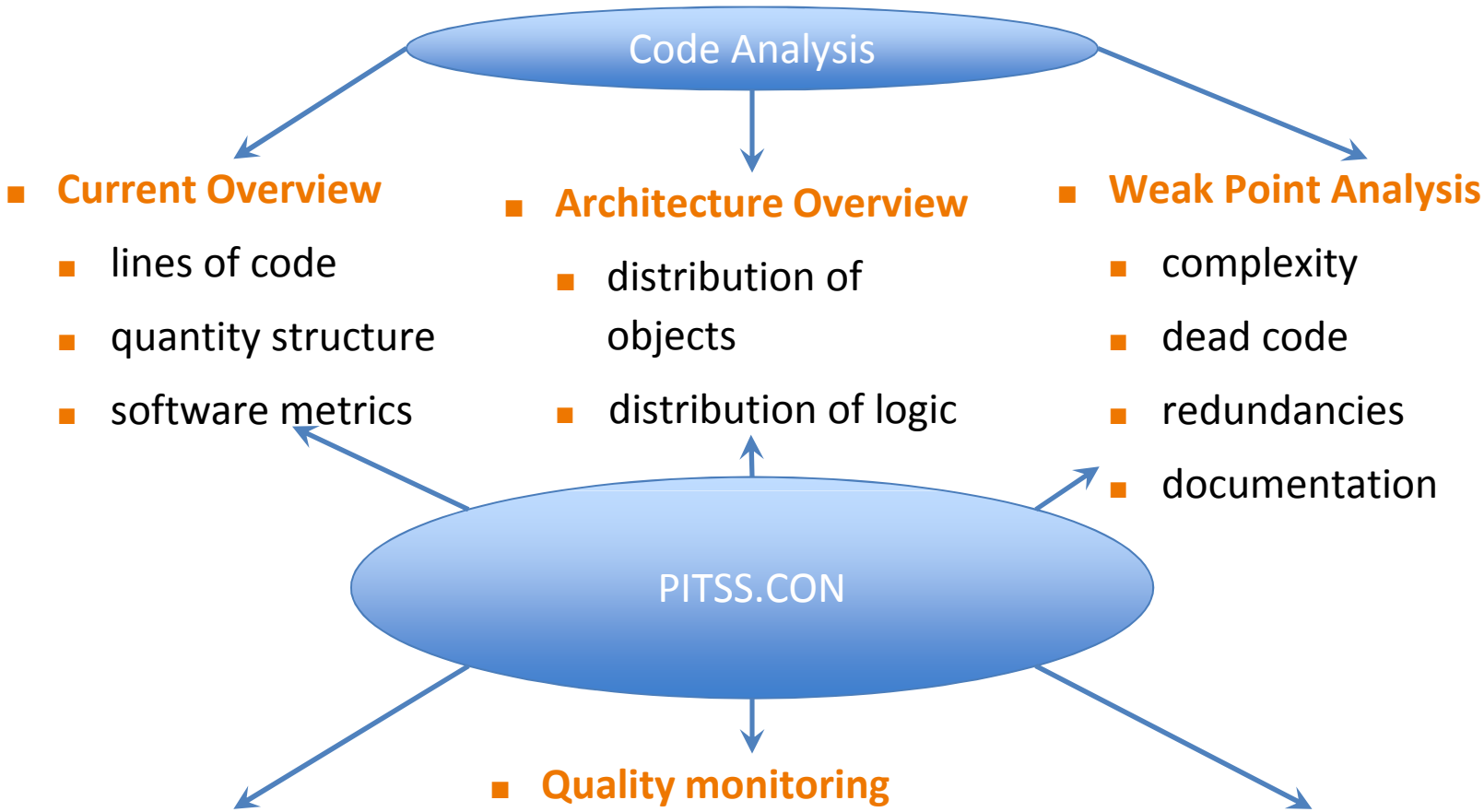
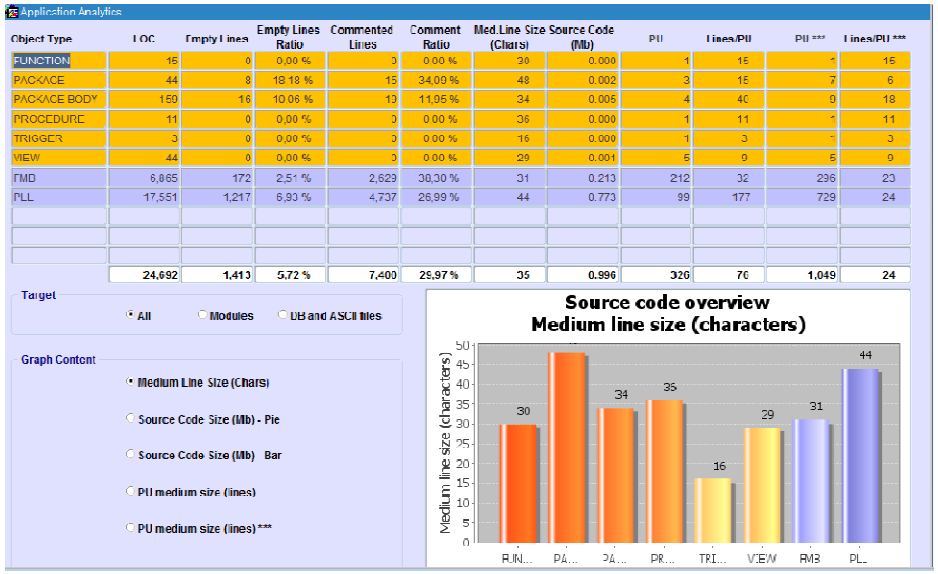
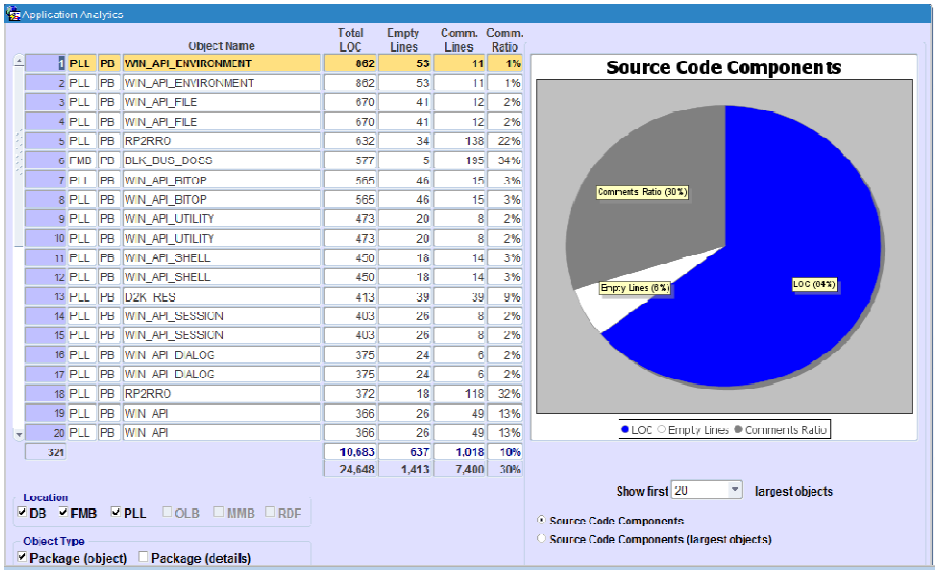
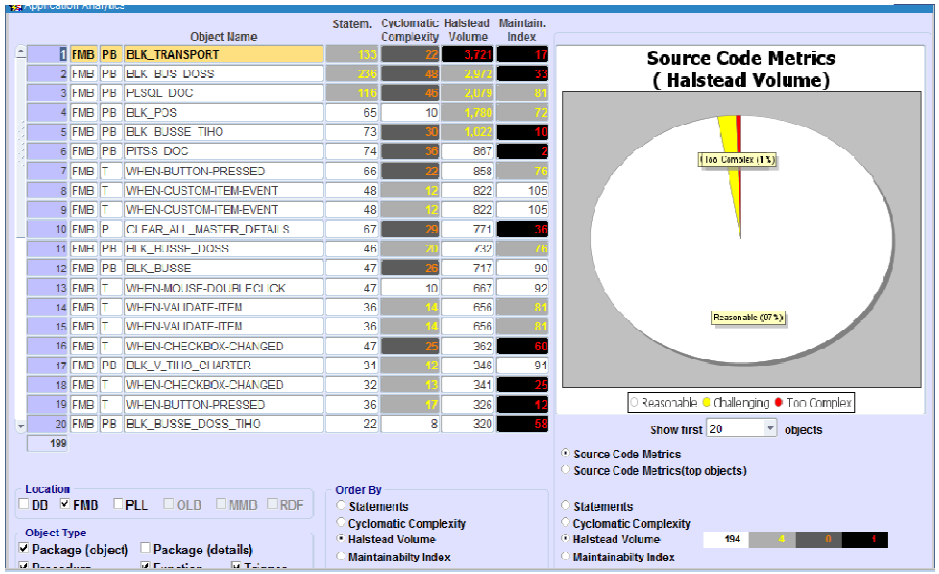
Targets

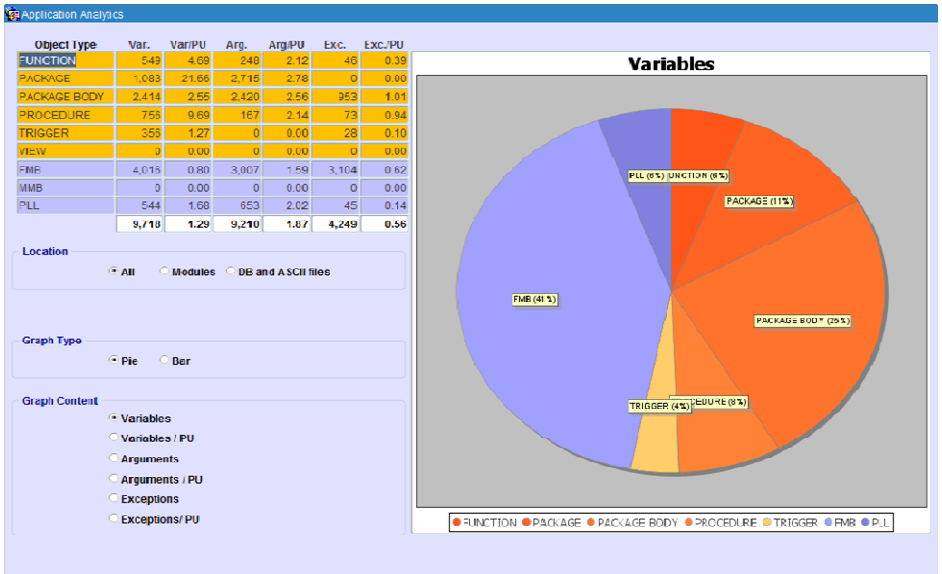

Code Analysis
Current Overview
lines of code
quantity structure
software metrics
Architecture Overview
distribution of objects
distribution of logic
Weak Point Analysis
complexity
dead code
redundancies
documentation
PITSS.CON
Regular Reporting
management
developer
Quality monitoring
target agreements
improvement plans
commission / bonus
QS as part of the Product Lifecycle
Auditor
Documentation

Current Overview – PITSS.CON (LIVE)

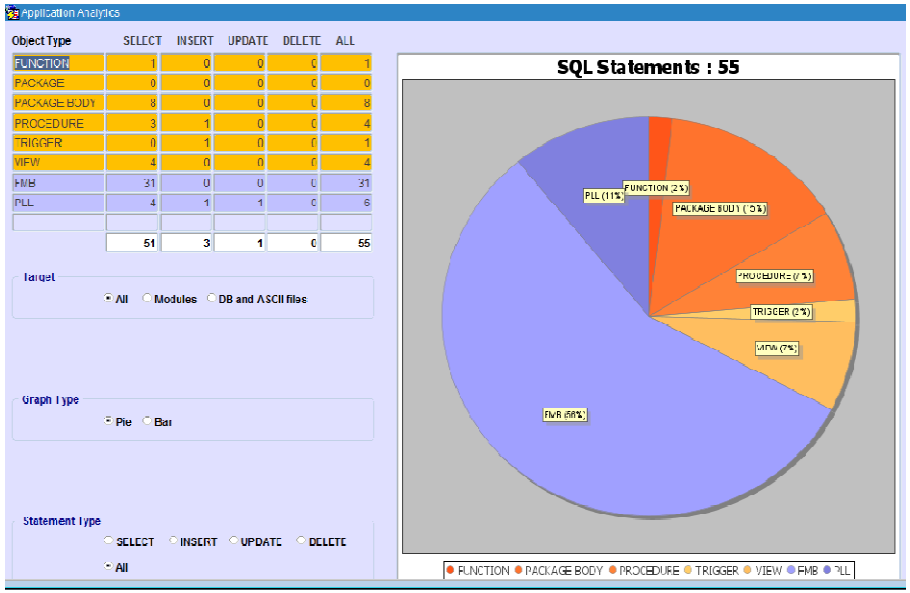


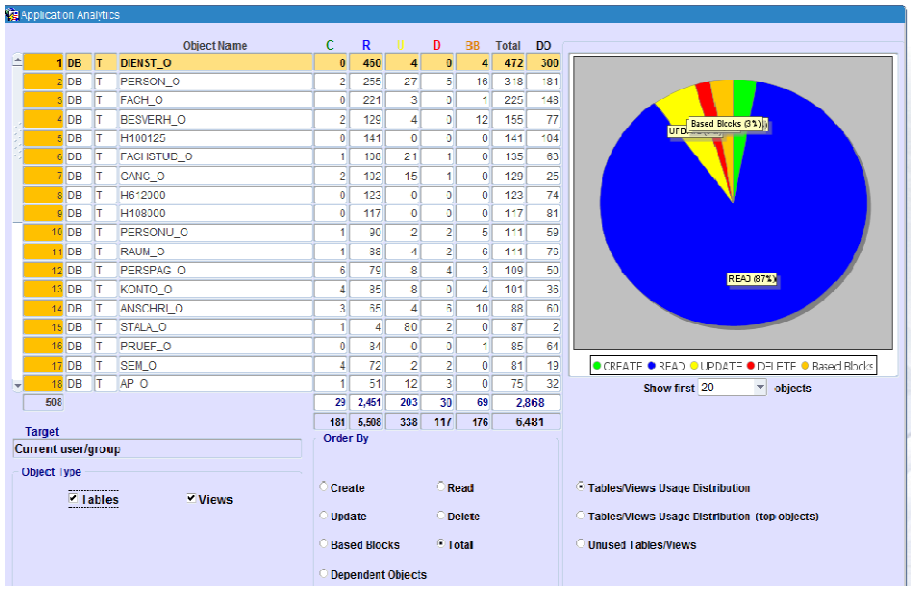


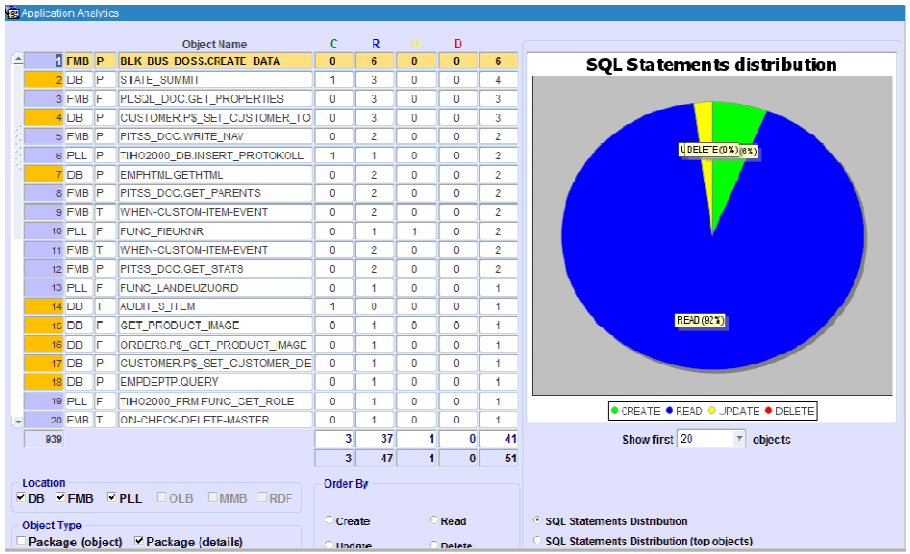


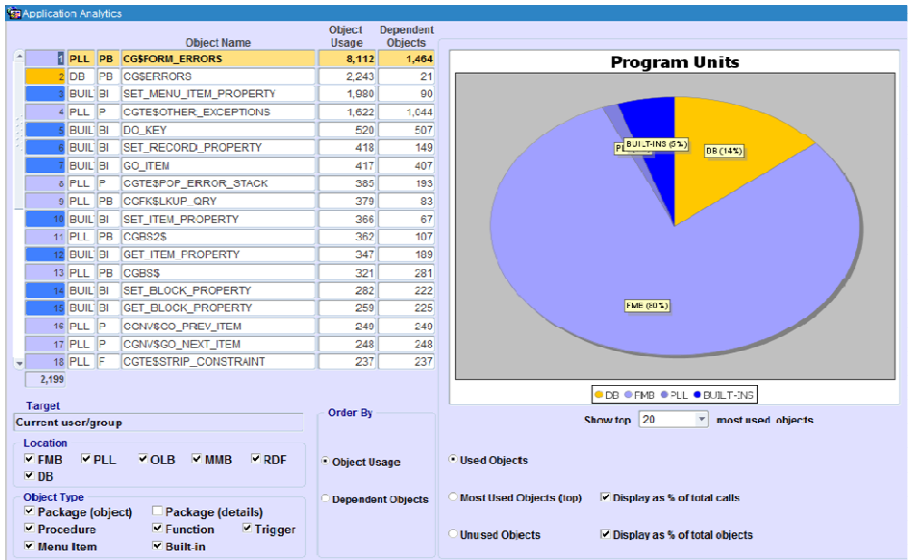


Architecture Overview – PITSS.CON (LIVE)









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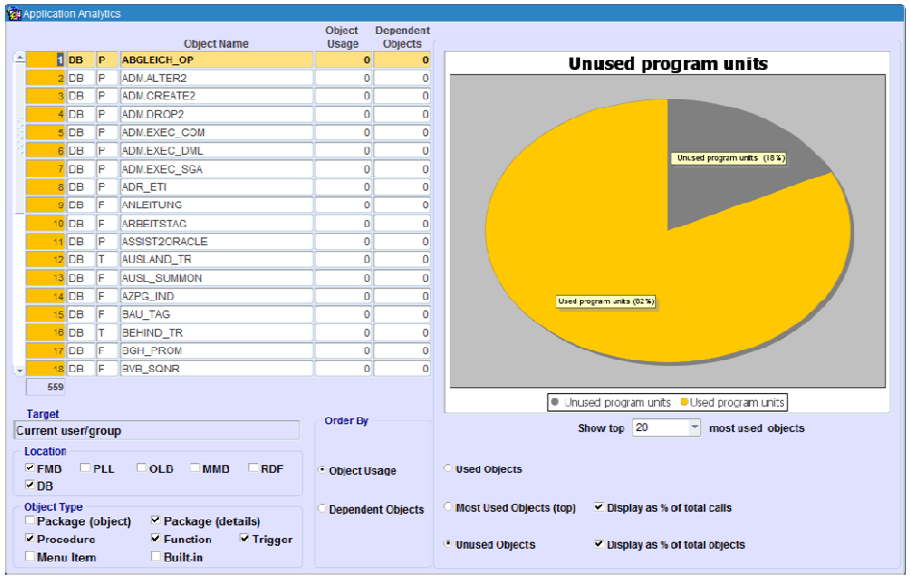
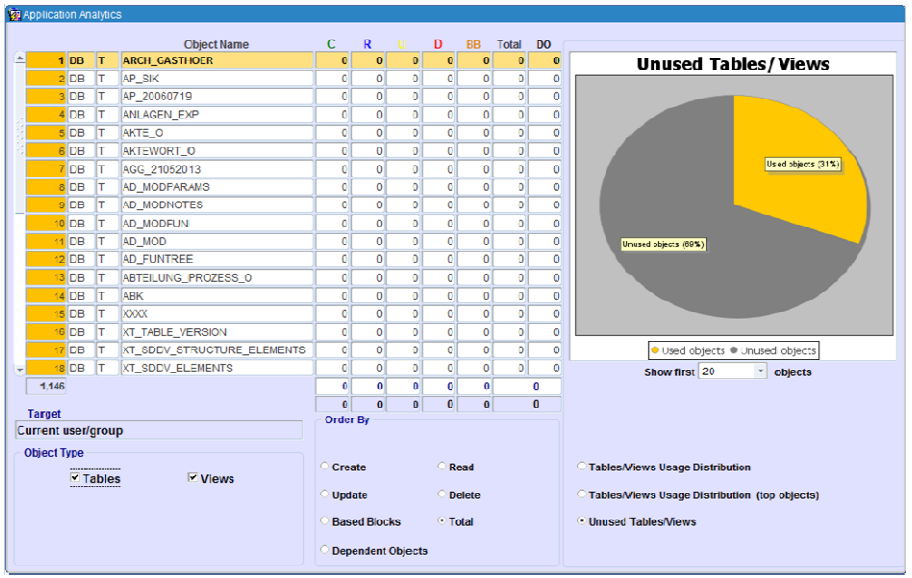
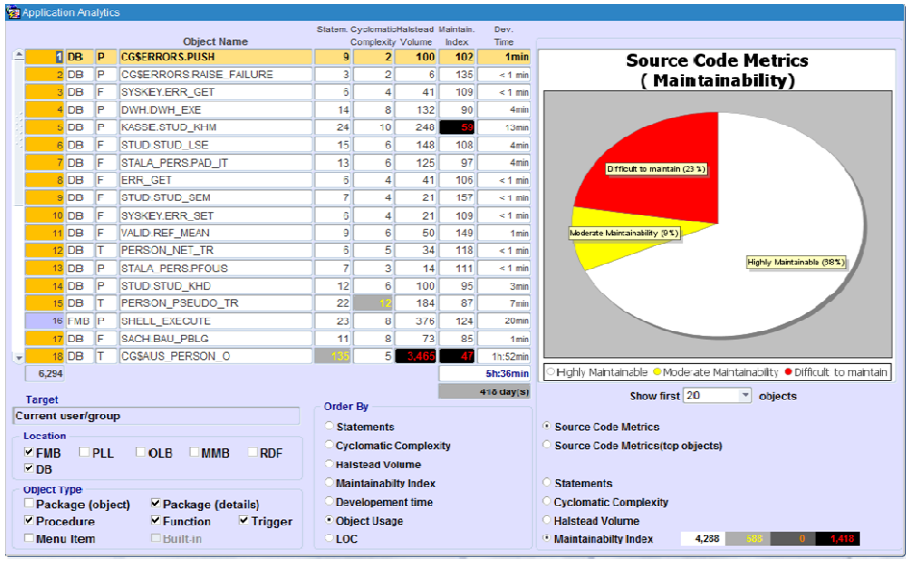
Weak Point Analysis – PITSS.CON (LIVE)







- **Scientific accepted software metrics**
  - Halstead
  - McCabe
  - Maintainibility
- **Standard Metrics**
  - Statements

Code Analysis by PITSS

	StausQuo	Quality	Development	Forms Upgrade	ADF	APEX
Quantity Structure	✔					
Code Distribution	✔					
Program Size	✔					
Program Structure	✔					
LOC / LOD	✔					
Comment Ratio		✔				
Object Distribution		✔	✔			
Program Use			✔			
Table Use			✔			
Quality Metrics		✔				
Maintainability		✔				
Naming Conventions		✔				
Exception Handling			✔			
Security Issues			✔			
Library Use			✔		✔	✔
Complexity Reflection	✔				✔	✔
Dead Code			✔		✔	✔
Redundancy			✔		✔	✔
Expenditure Estimate			✔	✔	✔	✔
Optimization Potential	✔	✔	✔	✔	✔	✔
Recommendations		✔	✔	✔	✔	✔

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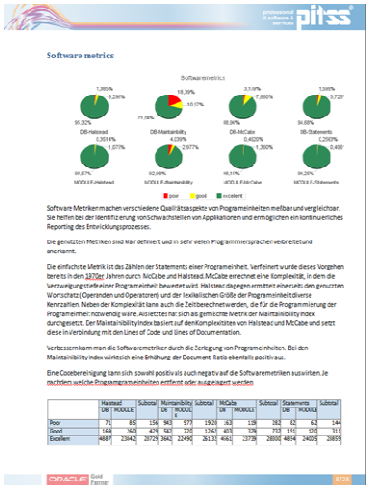
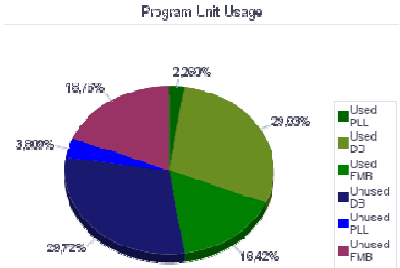
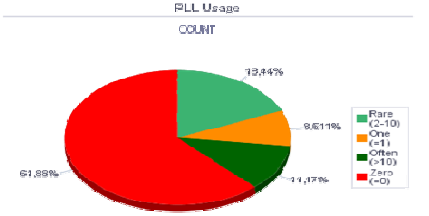
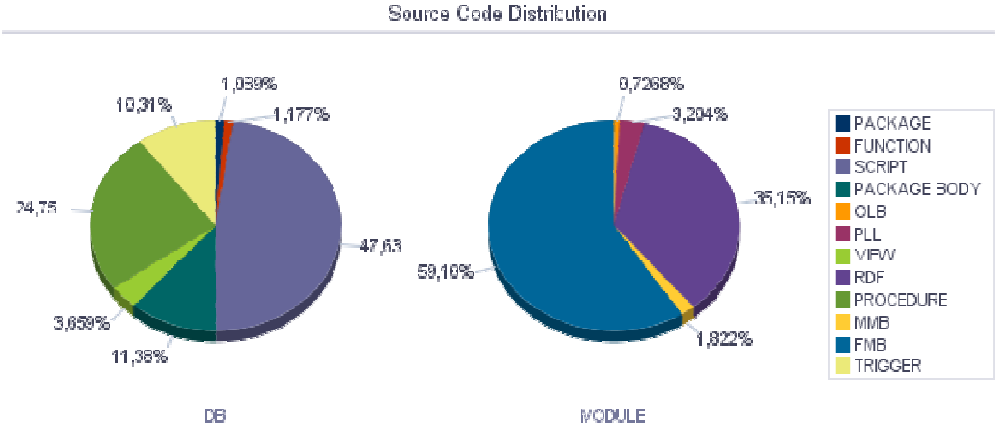
Code Analysis by PITSS

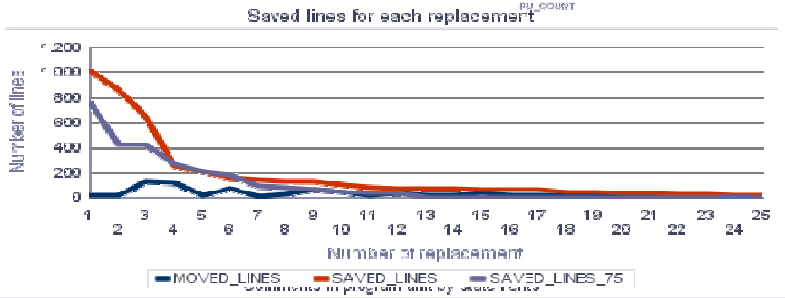
Results in one document and one presentation

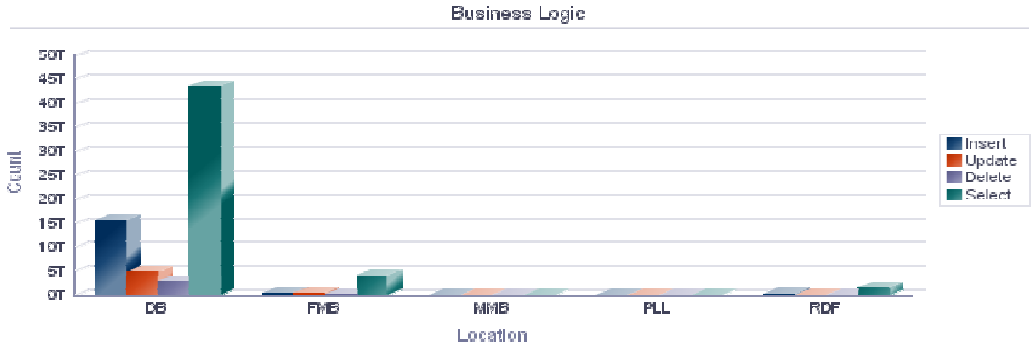


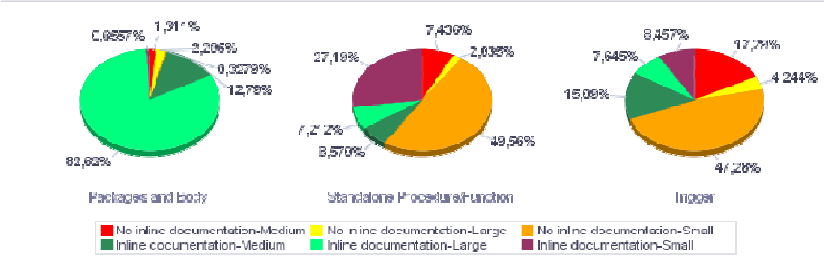












Step	Group	Type	Time to fix [h]	Count	Technical Debt [h]
1	Remove Global Variable:	1 times used	0,08	17	1,42
		2 times used	0,25	25	6,25
2	Remove Unused Objects:		8,00	1	8,00
3	Redundance (>3):		0,25	71	17,75
4	* Split and doc.:	Maintainibility DB	0,50	438	109,50
		Maintainibility MODULE	0,50	151	37,75

Improvement paths / Possibilites of improvement:

- **„The quality attack“**
  - identify weak points
  - stop the development and process weak points
  - control of results
- **Implementation of Quality Management**
  - identify weak points
  - plan time and improvement in defined intervals
  - control of results and plan the next interval

- **„Good to know“**
  - improvements are executed, if resources are once availabe

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Results of Quality Management

- reduces maintenance costs
- accelerates development process
- reduces error probability
- ensures that you can handle the application

- Reduces training periods
  - new employees
  - replacements (holiday, sickness)

Benefits of PITSS.CON within the Quality Management

- **PITSS.CON considers the whole application**
  - Forms (FMB, MMB, PLL,OLB)
  - Reports (RDF)
  - Database (Tables, views, procedures, functions, packages …)
  - SQL Files
  - C, ProC, Cobol Code
- **Repeatable tests**
- **Check and implementation of coding standards**
- **Supports code reviews (especially important at outsourcing)**
- **Completes the documentation of the application**

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Questions and answers

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Vielen Dank für Ihre Zeit.

The Oracle Modernization Experts

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