

Maintenance /  
Development

Visual Design

Source Control

Multi Language

Modernization  
Upgrade – Forms / Reports  
3,4,5... 6i... 11g

Modernization  
Migration  
ADF / JEE – PL/SQL 2 Java

Modernization  
Migration  
APEX

Application  
Engineering

Application  
Analysis

# Forms 11g, ADF & APEX Co-existence in Enterprise Applications – PART 2



The Future of Forms SIG Meeting  
May 15, 2012  
AMIS, Edisonbaan 15, Nieuwegein

Magdalena Serban  
Product Manager  
PITSS





## PITSS.CON Modernization Process

Quality Assurance

Documentation

Re-Engineering

Analysis

Cleaning  
Dead Code  
Redundancy

SOA

BL 2 DB

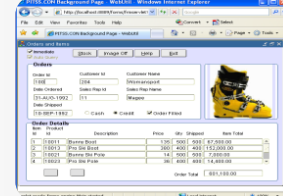
SOA

Migration

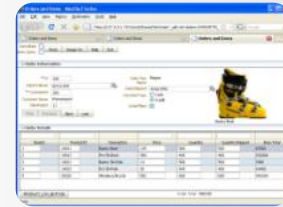
Iterations

Co-Existence of Technologies/ Partial Projects

Forms 11g



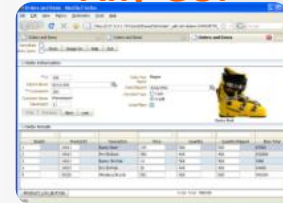
ADF



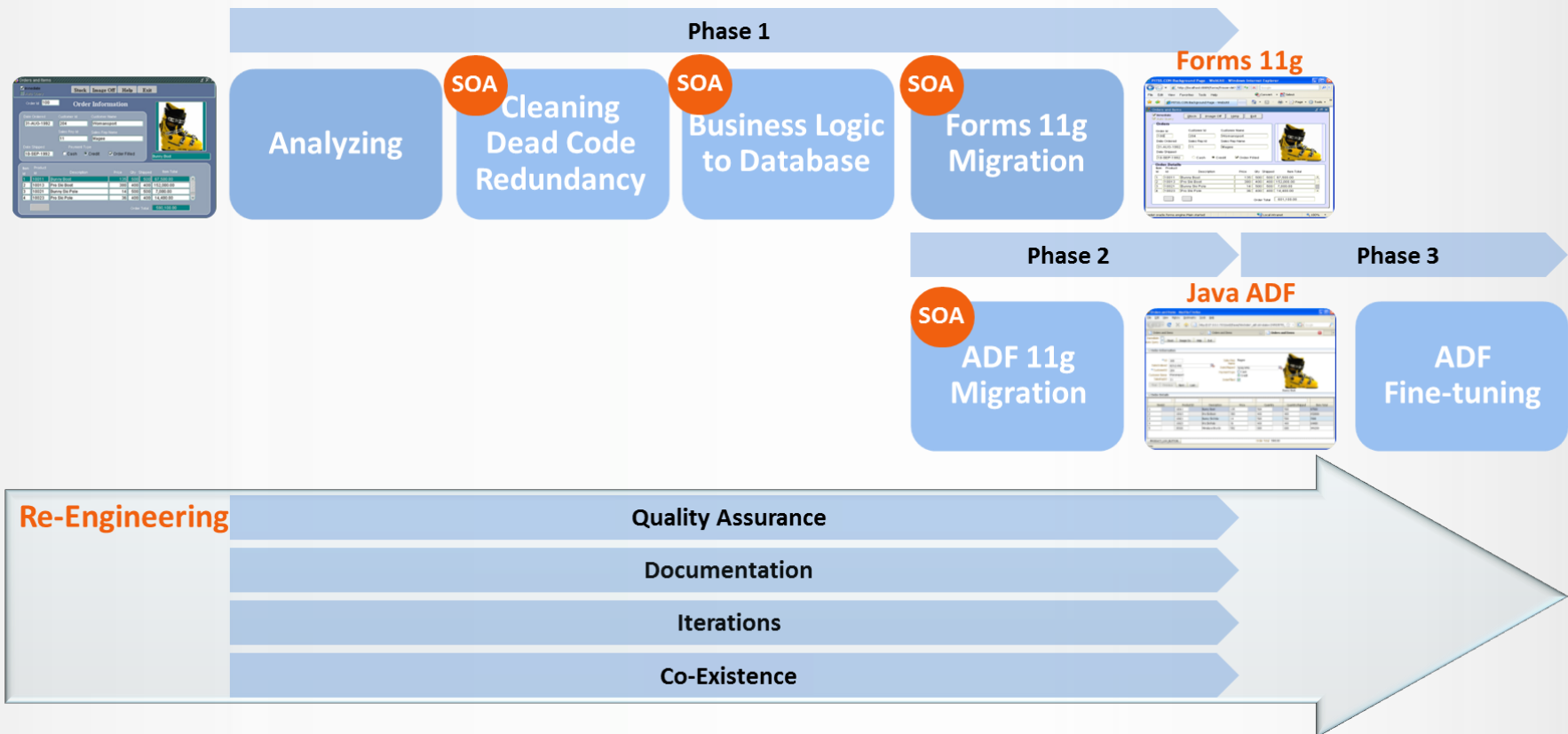
APEX



Any-GUI



## PITSS.CON Modernization Process in ADF Projects



## PITSS Recent ADF Projects

→ Boeing, US

→ Airas Intersoft, UK

in progress

600 Forms 10g to Forms 11g and ADF 11g

Designer-generated, very complex UI

→ ADF Migration Days Germany

2 x Year

→ USSOCOM

in progress

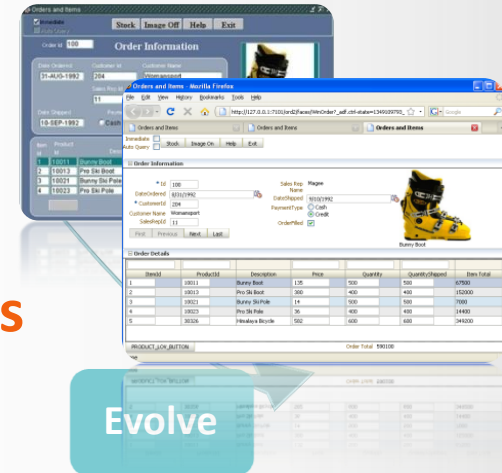
400 Forms 10g to ADF 11g

→ US Health Care Provider

completed

Forms 6i to ADF 11g

Complex UI, Webutil, LDAP security, Reports





## 1. Application Analysis

**How to estimate the efforts down to each individual module?**

All application components are important:

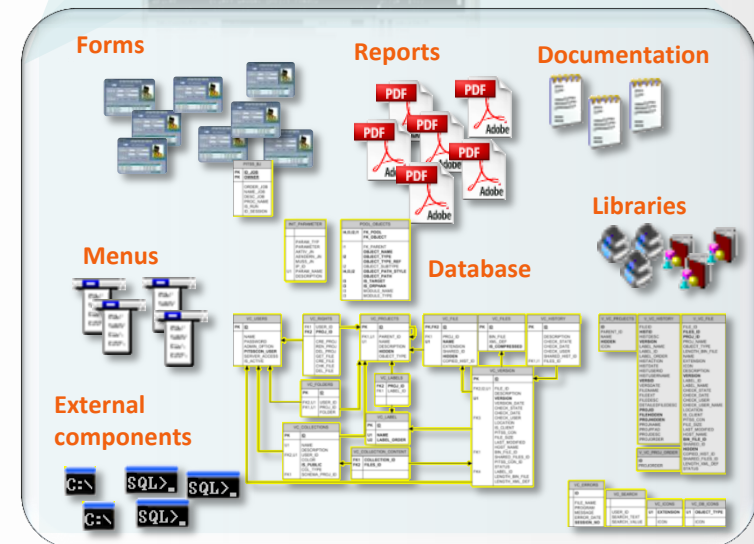
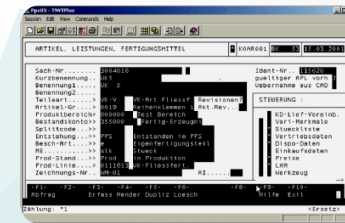
**FMB, MMB, PLL, OLB, DB, ...**

⇒ **Dependency Analysis**

⇒ **Forms Flow Analysis**

⇒ **Application**

**Assessment Report**



## 1. Application Analysis

How to estimate the efforts down to each individual module?

All application components are important:

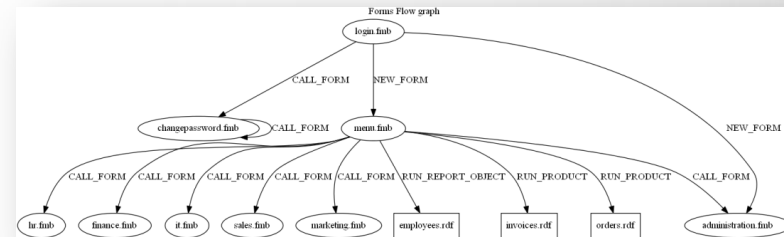
FMB, MMB, PLL, OLB, DB, ...

⇒ Dependency Analysis

⇒ Forms Flow Analysis

⇒ Application

Assessment Report



### Analysis Report

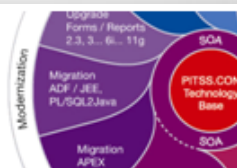
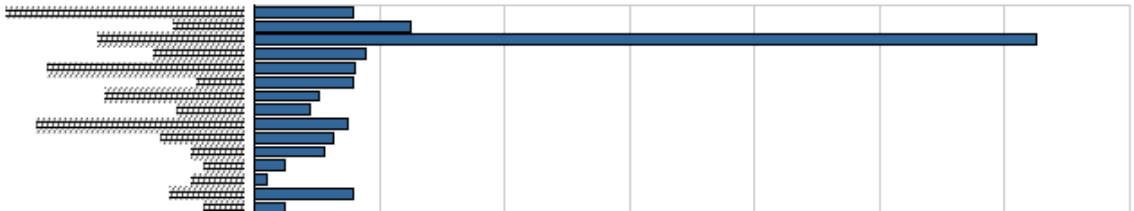
PITSS.CON User  
PITSS.CON Module

XXXXXXXXXX  
ADF Assistant

Report

Application Assessment Report

#### Summary



## 2. Cleaning

**How to eliminate safely the unused or redundant objects**

Reaching an average of 30% less objects

⇒ PITSS.CON Application Engineering

⇒ Unused Objects Analysis

The screenshot displays a web-based 'Analysis Report' interface. At the top right, there is a circular diagram with segments labeled 'Upgrade Forms / Reports 2.3.3... 6... 11g', 'Migration ADF / JEE, PL/SQL2 Java', 'Migration APEX', and 'SOA'. The central part of the diagram is labeled 'PITSS.CON Technology Base'. The main content area shows the report title 'Analysis Report' in large red font, followed by 'Unused Objects Analysis Report' in blue. Below this, there is a table with two columns: 'PITSS.CON User' and 'PITSS.CON Module'. The first row shows 'PITSS.CON User' as 'XXXXXXXXXX' and 'PITSS.CON Module' as 'Application Engineering'. The second row shows 'Report' as 'Unused Objects Analysis Report'. Below the table, there is a tree view under 'Applications' showing 'FORM MODULES', 'P1\_SUMMIT ORDERS\_initial C:\pitsscon\p1\_summit\fmb\', 'Program Unit', and 'CHECK\_WINDOW\_SIZE (X)'. In the bottom left corner, there is a logo for 'ORACLE Partner'.

**Analysis Report**

PITSS.CON User: XXXXXXXXXX  
PITSS.CON Module: Application Engineering

Report: Unused Objects Analysis Report

**Applications**

- FORM MODULES
  - P1\_SUMMIT ORDERS\_initial C:\pitsscon\p1\_summit\fmb\
  - Program Unit
    - CHECK\_WINDOW\_SIZE (X)

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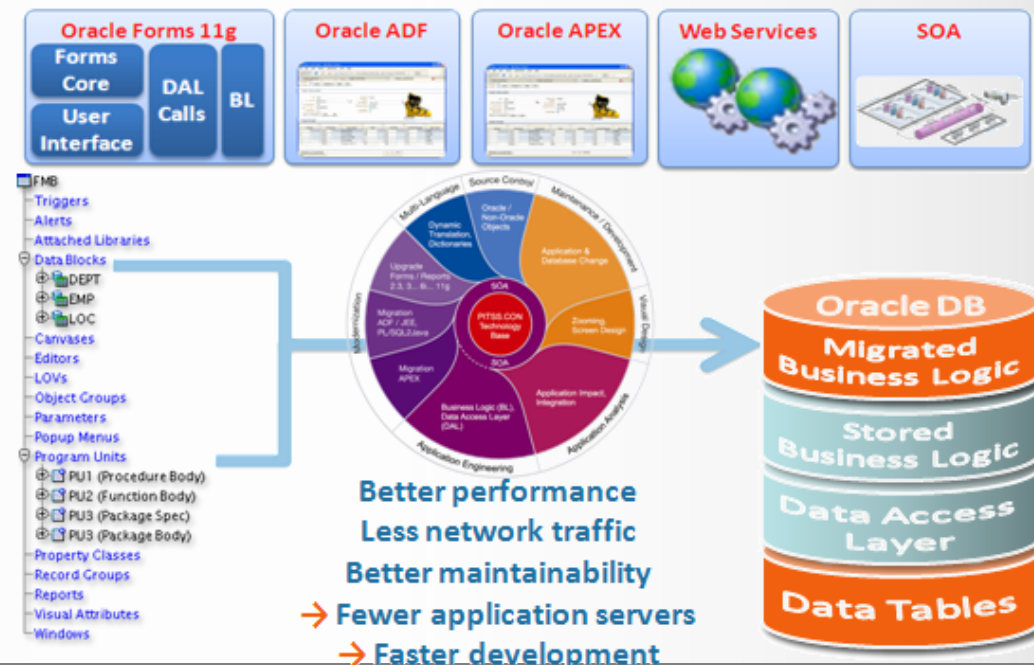
## 3. Migrating the Business Logic

**How to preserve the business logic investment?**

⇒ PITSS.CON Application Engineering

⇒ Business Logic Assistant

⇒ ADF Assistant PL/SQL2Java



# Forms 11g, ADF & APEX: Co-Existence in Enterprise Applications

ARTIKEL, LEISTUNGEN, FERTIGUNGSMITTEL

KONRAD

Orders and Items

Order Information

Order Id: 100

Date Ordered: 31-AUG-1992

Customer Id: 204

Customer Name: Womansport

Date Shipped: 10-SEP-1992

Payment Type: Cash

Item Id	Product Id	Description	Price	Qty	Shipped	Item Total
1	10011	Bunny Boot	135	500	500	67,500.00
2	10013	Pro Ski Boot	380	400	400	152,000.00
3	10021	Bunny Ski Pole	14	500	500	7,000.00
4	10023	Pro Ski Pole	36	400	400	14,400.00
						Order Total: 590,100.00

ORDERS

Order Information

Order Id: 100

Date Ordered: 31-AUG-1992

Customer Id: 204

Customer Name: Womansport

Date Shipped: 10-SEP-1992

Payment Type: Cash

Item Id	Product Id	Description	Price	Quantity	Quantity Shipped	Item Total
1	10011	Bunny Boot	135	500	500	67500
2	10013	Pro Ski Boot	380	400	400	152000
3	10021	Bunny Ski Pole	14	500	500	7000
4	10023	Pro Ski Pole	36	400	400	14400
5	30326	Himalaya Bicycle	582	600	600	349200
						Order Total: 590100

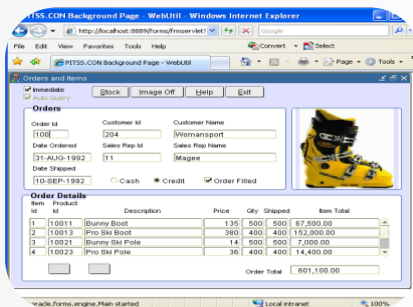
→ Decision Time

# The Technology Choice Challenge

## Decision factors

- \* Business needs
- \* Application complexity
- \* Skills

## Forms11g



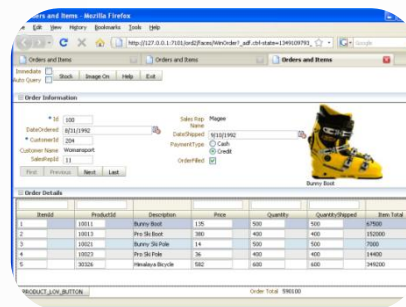
Quick development  
tested technology

low-risk

SQL, PL/SQL

Forms, Weblogic

## ADF, Java



Fusion, open standards  
DB independent

Rich User Interface

Java, XML, SQL PL/SQL

ADF, JDeveloper, JavaScript

## APEX



tightly integrated: Oracle DB  
huge community

Freeee

SQL, PL/SQL

HTML, JavaScript, CSS

# Redesign Decision

## Full Rewrite or Tool-supported?

### Decision factors

- \* Business needs
- \* Application complexity
- \* Skills

```
if Rewrite then read_first (  
    „How To Survive a Software Rewrite*“);  
  
elsif Tool then check_tool (  
    „Manage Entire Application: fmb,mmb,pll,olb,DB,etc“ ,  
    „No Forms Engine in ADF“ ,  
    „No Proprietary Components Inside“);  
  
end if;
```

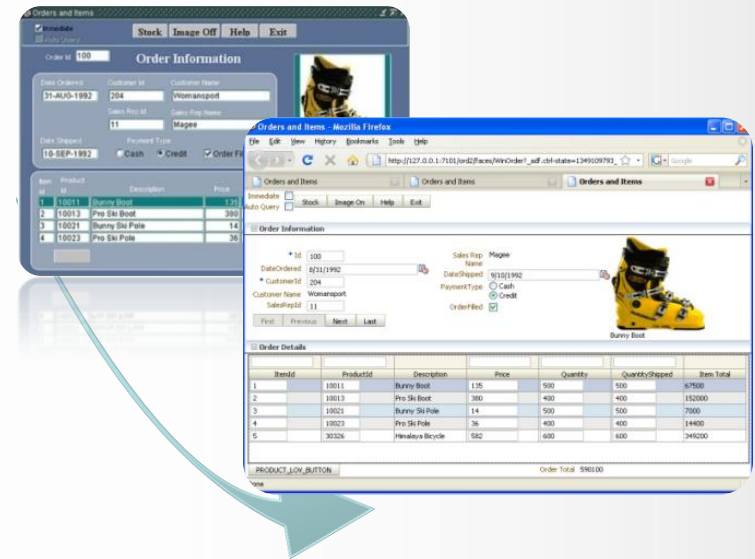
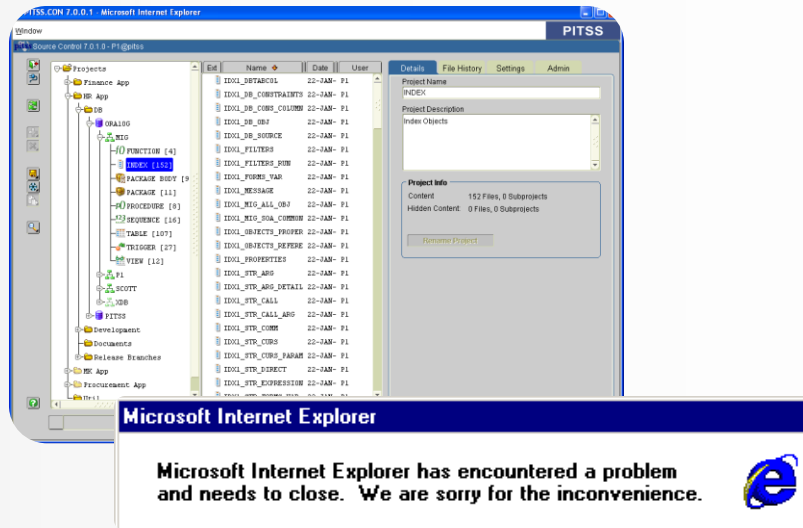
\* <http://jamesshore.com/Blog/How-to-Survive-a-Rewrite.html>

## The Browser Challenge

**No Applet? Redesign UI to meet Browser Standards:**

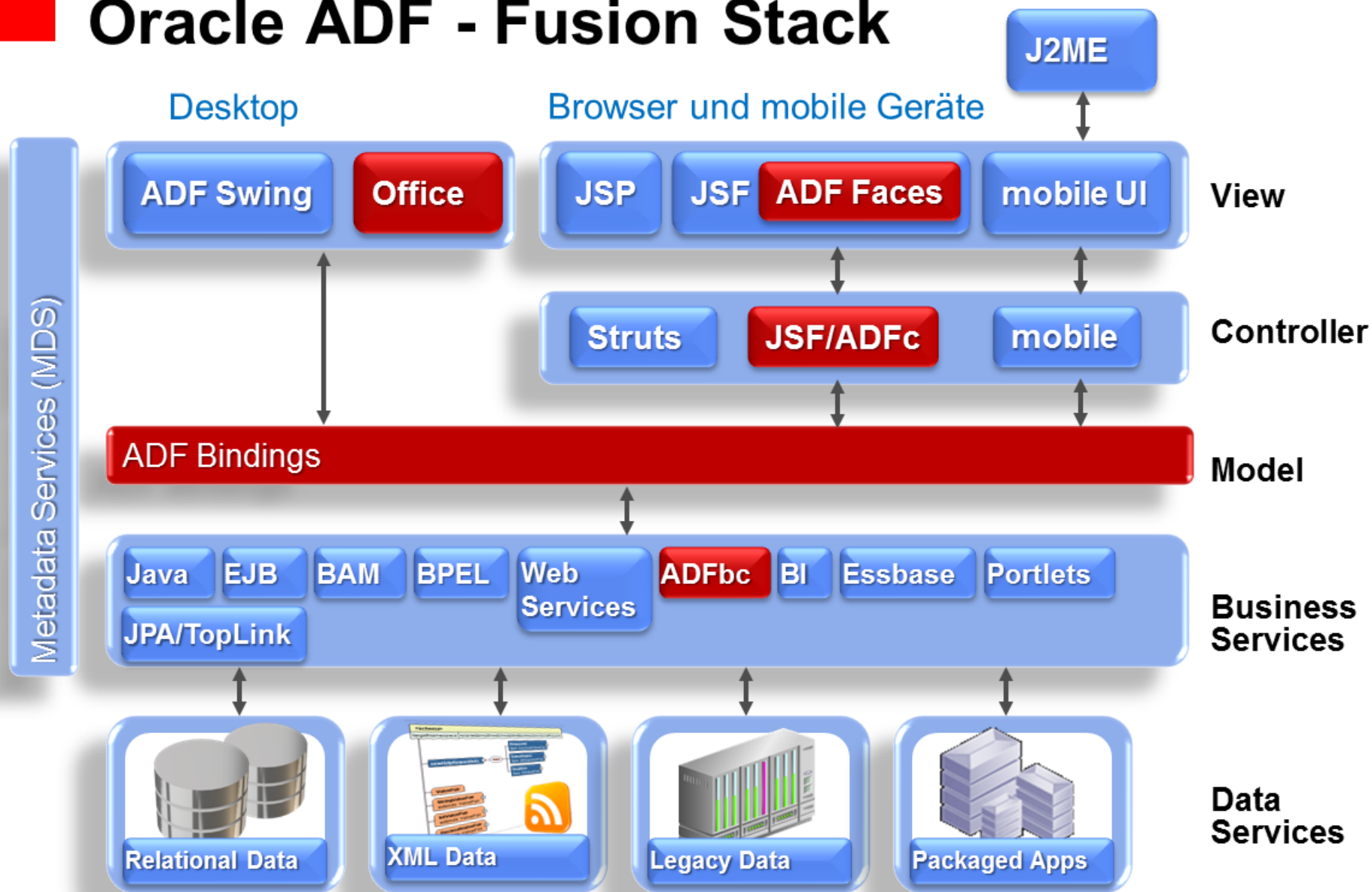
→ No 100+ fields or records

→ No pixel-based UI





# Oracle ADF - Fusion Stack



# Forms 11g, ADF & APEX: Co-Existence in Enterprise Applications

A screenshot of a legacy Forms 11g application window. It displays a complex data entry form with multiple tabs and fields. The form is titled 'ARTIKEL, LEISTUNGEN, FERTIGUNGSMITTEL' and contains various input fields for product details, pricing, and customer information. The interface is typical of older Oracle Forms applications, with a dense layout of text and form elements.

A screenshot of an ADF (Oracle ADF) application window. It displays an 'Order Information' form with a table of items. The form includes fields for 'Order Id', 'Customer Id', 'Customer Name', 'Date Ordered', 'Date Shipped', and 'Payment Type'. The table lists items with columns for 'Item Id', 'Product Id', 'Description', 'Price', 'Qty', 'Shipped', and 'Item Total'. The interface is modern and clean, with a clear separation between the form fields and the data table.

A screenshot of an APEX (Oracle APEX) application window. It displays an 'Order Information' form with a table of items. The form includes fields for 'Order Id', 'Customer Id', 'Customer Name', 'Date Ordered', 'Date Shipped', and 'Payment Type'. The table lists items with columns for 'Item Id', 'Product Id', 'Description', 'Price', 'Quantity', 'Quantity Shipped', and 'Item Total'. The interface is modern and clean, with a clear separation between the form fields and the data table. The APEX application is shown running in a web browser, with the URL 'http://127.0.0.1:7101/ord2/faces/WinOrder?\_afz\_cdi-state=1349109793' visible in the address bar.

→ **Modernisation Demo**

**Migrate and Integrate**

**Forms 11g, ADF, APEX, Reports, ....**

# Forms 11g, ADF & APEX: Co-Existence in Enterprise Applications

PITSS.CON Background Page - WebUtil - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://localhost:8889/forms/firmservlet?config=pitsscon

Start PITSS.CON Orders and Items Complex UI

Fenster

Complex UI

Procurement HR Marketing IT Sales Finance Engineering

Employees

Id 11 Manager Id 3  
 Last Name Magee Title Sales Representative  
 First Name Colin Dept Id 31  
 Userid cmagee Salary 1400  
 Start Date 14-MAY-2090 Commission Pct 10  
 Comments

Customers

Id	Name	Phone	City	State	Country	Zip Code	Credit Rating	Sales Rep Id	Region Id	Comments
204	Womansport	1-206-104-0103	Seattle	Washing	USA	98101	EXCELLEN	11	1	
209	Beisbol Sil	809-352689	San Pedro de M		Dominican F		EXCELLEN	11	1	

Orders

Id	Customer Id	Date Ordered	Date Shipped	Sales Rep Id	Total	Payment Type	Order Filled
100	204	31-AUG-2092	10-SEP-2092	11	601100	CREDIT	Y
111	204	09-SEP-2092	21-SEP-2092	11	2770	CASH	Y

Items

Ord Id	Item Id	Product Id	Price	Quantity	Quantity Shipped
100	1	10011	135	500	500
100	2	10013	380	400	400

Complex UI - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://127.0.0.1:7101/test15/faces/adf.task-flow?adf.tid=complexinterface-flow&adf.tfi

Start PITSS.CON Orders and Items Complex UI

Procurement HR Marketing IT Sales Finance Engineering

Employees

\* Id 11  
 \* Last Name Magee  
 First Name Colin  
 Userid cmagee  
 Start Date 14.05.2090  
 Comments  
 Manager Id 3  
 Title Sales Representative  
 Dept Id 31  
 Salary 1400  
 Commission Pct 10  
 First Previous Next Last

Items

Ansicht Zuordnung aufheben

Ord Id	Item Id	Product Id	Price	Quantity	Quantity Shipped
100	1	10011	135	500	500
100	2	10013	380	400	400

Orders

Ansicht Zuordnung aufheben

Id	Customer Id	Date Ordered	Date Shipped	Sales Rep Id	Total	Payment Type	Order Filled
100	204	31.08.2092	10.09.2092	11	601100	CREDIT	Y
111	204	09.09.2092	21.09.2092	11	2770	CASH	Y

Customers

Ansicht Zuordnung aufheben

Id	Name	Phone	City	State	Country	Zip Code	Credit Rating
204	Womansport	1-206-104-0103	Seattle	Washington	USA	98101	EXCELLENT
209	Beisbol Sil	809-352689	San Pedro de Ma		Dominican Repub		EXCELLENT

## Where to Start? Pilot projects

- 1-2 Forms modules of middle complexity
- migrate to Forms11g, APEX, ADF
- typical duration: 1-2 weeks

### Re-Engineering

Analyzing

Cleaning  
Dead Code  
Redundancy

SOA

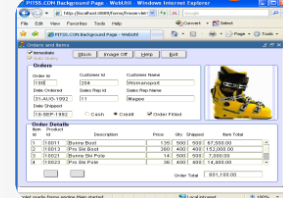
BL 2 DB

SOA

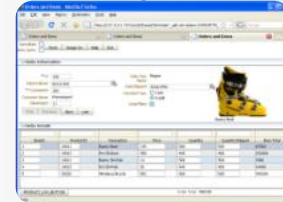
Modernizing

- ⇒ avoid big-bang projects risks
- ⇒ be confronted with 80% of the future project challenges
- ⇒ make accurate estimations
- ⇒ take decisions based on FACTS

### Forms 11g



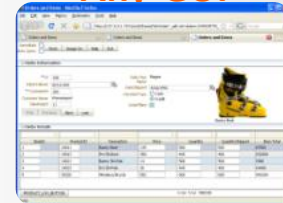
### ADF, Java



### APEX



### Any-GUI





## Challenge us!

- ✓ Upgrade to Forms 11g
- ✓ Migration to ADF, APEX or Any-GUI
- ✓ Pilot/ Full migration projects

PITSS International

[www.pitss.com](http://www.pitss.com)

### To Do

- \* Download  
Jdeveloper, APEX
- \* Start learning
- \* Write how it  
worked



Source Control

Multi Language

**Modernization**  
Upgrade – Forms / Reports  
3,4,5... 6i... 11g

**Modernization**  
Migration  
ADF / JEE – PL/SQL 2 Java

**Modernization**  
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APEX

Application  
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Application  
Analysis