FROM PTC TO JIRA

Introduction of Jira at Diebold Nixdorf
Agenda

1. Introduction
2. Where do we come from
3. The Project
4. Requirements Management
5. Test Management
Introduction
Ralph Volbert

- Graduated business economist, since 2010 in the company. More than 25 years of experience in software/hardware development, architecture and management in various companies and positions.

- Within Diebold Nixdorf's global IT, Senior Director of the Idea to Market (ItM) division. The responsibility includes all processes and tools used for hardware and software development within Diebold Nixdorf. The focus points are on Product Lifecycle Management (PLM) including M-CAD / E-CAD and Applications Lifecycle Management (ALM), including the associated processes.
Introduction
Building on a long tradition of delivering innovation to our customers

1859
Karl Diebold founds safe & lock company in Ohio

1930s
Diebold becomes publicly traded company

1940s
Eliot Ness, famed crime-fighter, became chairman of Diebold’s board

1952
Heinz Nixdorf establishes The Laboratory for Pulse Technology

1966
Diebold presents world’s first concept of ATM

1973
First electronic POS network system introduced in Europe

1987
Introduction of PC in ATMs

1989
First ATM with cellular communications

1995
Introduction of cash recycling technology

1998
Launch of PC/E multichannel software architecture and first WEB multivendor software solution

2001
Launch of AEVI cashless payment solutions

2003
Introduction of self-checkout solution

2008
Introduces mobile banking

2014
Introduction of omni-channel retail software

2015
Launch of world’s greenest ATM

2014
Introduces world’s greenest ATM

2015
Acquires multivendor software innovator Phoenix Interactive Design

2016
Diebold Nixdorf Combination

2015
Diebold Nixdorf Combination
Introduction
Global footprint

Presence in more than 130 countries

Global and local delivery resources

~25,000 Employees

Corporate offices in North Canton, Ohio & Paderborn, Germany

Diversified regional revenue mix

~50% Americas

~36% EMEA

~14% Asia Pacific

Note: Revenue by region is for the twelve months ending Dec 31, 2016.
Introduction
We deliver innovative solutions to banks and retailers

Services
- Maintenance Services
- Deployment and Implementation Services
- Managed Services
  - Cash Cycle Management
  - Store and Branch Modernization
- Global Service Delivery with Local Resources

Software
- Self-Service
- Omnichannel Banking and Retail Platform
- Marketing
- Operations/Asset Management
- Security and Monitoring
- Systems Integration

Systems
- Banking
  - Intelligent Deposit
  - Cash Recyclers and Dispensers
  - Teller Automation
- Retail
  - Electronic Point-of-Sale
  - Automated Checkout
  - Kiosks
- Postal and Transport

Reliable  Innovative  Secure  Cost-effective
Where we come from

**Current environment / Established processes (PTC)**
- Technical limit is reached (current configuration)
- Complicated to implement change request
- Very complex maintenance of master data
- Triggers negatively influence system performance
- etc.

**ALM core team**

**Agile team(s)**
- No single tool for the Agile process (memYak, Excel, Jira, …)
- Teams are worldwide located
- One tool for backlog managing
- Integration to other systems (SCM, EBS, …)
- Customer interface
- etc.

**Need for fundamental change**

**oneALM**
- JIRA / BitBucket / git

**Need for one supported tool**
Where do we come from
Vision Statement

Our goal is to evolve our computer tooling landscape to truly support cooperative work.

We consider the following guidelines to be relevant:
• Users and their interactions are most important
• We experiment and validate to find suitable solutions – together with users and continuously
• Any tool must be fast and reliable, lean is better than bloat
• We are striving for a balance between central standards and local freedom
The Project
Situation

As the Project started no JIRA Know how in Diebold Nixdorf was available

Need for external Partner necessary:

- Project consulting
- Solution Design
- Programming
- Add-Ons from CatWorkX (e.g. Project Metadata, Group-Management, Portfolio-Management, Issue Picker)

- Upgrading
- Appliance (operating the solution)
The Project Timeline

Offsite Workshop

- JIRA ready to use
- BitBucket / git ready to use
- Access for legacy Diebold
- Req. Mgmt R4J ready to use
- Test Management XRay (basic) ready to use
- Req. Mgmt with Confluence ready to use
- Connection to TFS

Feb 2016

June 2016

July 2016

Aug 2016

Sep 2016

Oct 2016

Nov 2016

Dec 2016

Jan 2017

Feb 2017

Mar 2017

Apr 2017
The Project
Timeline – Next steps

- Structure management in XRay ready to use
- External JIRA system ready to use
- Interface Oracle eBS - JIRA for Incident Mgmt

May 2017
June 2017
July 2017
Aug 2017
Sep 2017
Oct 2017

2018

PTC is read only
The Project Adaption

For every work stream / module we:

- define start set up → good enough ← not → “perfect solution”
- implement start set up
- teams start working and verifying
- request changes
- adjust set up

Start Setup: good enough to start

The changes will be managed by the JIRA change council
The Project
Roll Out

➢ No Big Bang
➢ Not location by location
➢ Not department by department

Team by team, project by project

Define a catalogue of criterias:

➢ Kind of project:
  Agile SW project, HW development project, organization project, manufacturing, etc.

➢ Analyze dependencies:
  are all necessary modules available, are the needed project template defined, etc.

➢ New or running project:
  remaining period, state before or after M6 / QG 6, finished before September 17, etc.

➢ at the end we are calculation with around 6.000 users using the system
Introduction
Volker Schiller

• Degree in technical computer science; with Diebold Nixdorf since 1986.
• Many years of experience in software development, HW development, PLM and ALM topics.
• Within Diebold Nixdorf’s global IT, consulting for R&D HW processes and application architecture.
The focus points are on Product Lifecycle Management (PLM) including M-CAD / E-CAD and Applications Lifecycle Management (ALM), especially Requirement and Test Management.
Product-to-Market process Milestones and Toolchain

Sub-process

- **Product definition**
  - Business requirements

- **Project definition**
  - Product spec. / master test plan

- **Component specification**
  - Component spec. / detail test plan

- **Component development**
  - Development:
    - Sprints, tests, final test plan

- **Component verification**
  - SIT (system integration test)

- **Integration and testing**
  - Released – documentation ready

- **Manufacturing setup**

- **Customer acceptance**

- **Mass-production**

- **Maintenance**

Requirements management
- Agile development (stories, sprints, defects …)
- SCM
- Test management
- Project space
- Issue tracking (incidents, problems…)

Interface to the customer: Oracle eBS
SAMPLE TOPICS

Requirements HW
Test Management
R4J is a product for Requirement Management within Jira from ease-Solutions.

We have chosen this Add-on for our Requirement and Spec-Handling in the HW Development, after researching different other plugins and also after prototyping an own solution.

An update of R4J in the decision phase brought the functionality, that we were looking for.
Usage of Tree View

- business requirements
- product specifications
- component specification
- predefined templates available
- visualized in a structure
- standard issue types
Different possibilities to create a new requirement or edit an existing

Bidirectional Excel interface
Baselines can be created and compared
Scope at a milestone can be saved
Changes after Milestone Definitions can be identified
Traceability and Coverage in R4J Coverage View, Suspect notification

Coverage View
- Overview regarding the related issues
- Possibility to create, link and delete issues
- Suspect Notification
- Suspect Reports
Documents can be exported with own templates including linked items
Manage Requirements with R4J

Main Use cases:

- Document Tree Structure
- Traceability and Coverage
- Suspect notifications
- Baseline functionality

One major topic was missing at the time of decision –

- Output of Requirement Documents.

This was already in development and is now already delivered and used with success. With a customized Word-template we are able to output all necessary documents.

We are working closely together with ease solutions for new requirements for further releases and appreciate the good collaboration.
Xray is an Add-On for Jira for Test Management from Xpand IT.

We have chosen this Add-on for Test Management in SW and HW Development.

We researched different other plugins and also had productive installations within a short-list.

TestRail, Kanoah, Xray

Xray was chosen after direct discussion with the staff of Xpand-IT in Lisbon, with these main reasons:

- The items used and created by Xray are native Jira issues and Xray is a native Jira plugin.
- Automated tests can be connected via REST-API.
- Test status are configurable and visible on Requirements, KanBan, Scrum Boards, and all of the Xray Issue types. Highly configurable use scenarios are possible.
- Reports for Requirement Coverage are available for Dashboards or also as Confluence Macros.
Component specification / detail test plan

Create Tests, Test Sets, Test Executions, Test plans and Pre-Conditions
Execute Tests
Gathering Results and create Defects
Tests can be tracked and viewed in the stories or requirements and visualized on a board.
Dashboard and reports Requirements Coverage with drill in possibilities
### SIT (system integration test) – Overview of Status and Requirement Coverage

#### Traceability Report

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Tests</th>
<th>Test Runs</th>
<th>Defects</th>
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<tbody>
<tr>
<td>HRMPLAY-1319</td>
<td>UNCOVERED</td>
<td></td>
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<tr>
<td>Version: 1.300</td>
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<td>Test BIT</td>
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<tr>
<td>HRMPLAY-68</td>
<td>IN PROGRESS</td>
<td>FAIL</td>
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<td>Version: 1.400</td>
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<td>Component Test Spec</td>
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<tr>
<td>PLAYTMHW-729</td>
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<tr>
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</tr>
<tr>
<td>Test Another Test</td>
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</tbody>
</table>

Many other reports and gadgets available.
One major topic was missing at the time of decision – **Structuring of test cases**.

We decided for **Xray** after receiving a LOI to also implement a structure for test cases. This was delivered already in combination with the *Structure plugin from almworks*.

A native solution is in development. This will be rolled out with Xray 3.x.

We are working closely together with Xpand IT also developing a migration tool for Test cases out of PTC. We had several good contacts for support or consulting and appreciate the good collaboration!
THANK YOU FOR LISTENING TO THIS PRESENTATION.