Business Process Modeling
Providing context for software requirements

Overview
May 11th, 2011
Presentation Overview

• **Blueprint Requirements Center**
  – A complete Business Analyst Workbench for the definition and management of software requirements

• **This Presentation**
  – Business Process for the purpose of providing context for software requirements
  – To help develop the ‘right’ requirements for the business need
  – To help maintain alignment throughout the development lifecycle

• **BABOK**
  – Focus on the Business Analysis Planning & Monitoring Knowledge Area
  – This presentation:
    • Process Modeling (9.21) and Structured Walkthrough (9.30)
- Light-weight, fast & easy ‘sketching’ of business process
- Supports nested sub-processes
- Visio import/export
- Fully traced
Reference specific information in Word Documents, PDFs, and Excel Spreadsheets.
Traced with Business and Application Requirements

Business Process

Plan Flight Schedules → Manage Payload and Capacity → Plan Sales

Trace Relationships

Business Requirements, Objectives, and Rules

Application Requirements

Use Cases

User Interface Mockups

Data Definitions

External Documents & Files
Panel discussion: Meeting passenger needs on board

Jean-Pierre Leblans, Association of European Airlines; he questioned the safety element. Can a plane still be deregulated?

Andrew Clarke, European Regions Airline Association; they represent 60 airlines in 29 EU States. Themselves, Airbus. Due to the mobility of aviation U.S. standards have to be worldwide.

Ian Clayton, Eurojet; The unit costs for PRMs are higher than for other passengers. The Regulation does not allow travel, priority seating etc.

The main points from the discussion were:

- Some PRMs can get out of a plane in 90 seconds and much faster than an old person who may not be old enough.
- Some PRMs can get out of a plane in 90 seconds and much faster than an old person who may not be old enough.
- They should be more opportunities for the disabled on planes e.g. blind people being able to listen to videos and understand how to treat them.
- The current role of one person capable of assisting in an emergency evacuation to one person possibly not to understand instructions must travel with an attendant.
- It is illegal in Europe to put a limit on the number of disabled people on a plane but it is open to interpretation by governments.
- A data system could be developed which records the details of disabled people and this would help to prevent the issue of guidance.

Tim May, Department for Transport (DfT), UK, said that the Regulation needs to be enforceable. Member States are being applied. They want to educate the industry, on their obligations and passengers on their rights. Complaints have been made about the lack of information. In the UK the Civil Aviation Authority (CAA) will be the role in other countries. They will monitor complaints and ensure the correct sanctions are taken. Those penalties will have issued guidance to airlines when it is acceptable to refuse to embark PRMs for safety reasons. They are also of Practice "Access to Air Travel". It is crucial that experiences are shared in order to make the Regulation work.

<table>
<thead>
<tr>
<th>Use Cases</th>
<th>External Files</th>
<th>Data Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer</td>
<td></td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Business Needs</th>
<th>BP Mockups</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Actors</th>
<th>Use Cases</th>
<th>External Files</th>
<th>Data Definitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Customer</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Online Reservations | BP Air needs to reduce cost of sales by providing an online reservation system. | Approved | High |
| Online Flight Status | BP Air needs to improve customer satisfaction by providing quick access to flight status information. | Proposed | Med |
| Online Check-in      | BP Air needs to increase check-in efficiency by providing online check-in. | Approved | High |
| Online Account Management | BP Air needs to reduce customer service inbound calls by providing online account management. | Approved | High |
| Online Rewards Program | BP Air needs to improve customer retention by allowing customers to sign up for our rewards program online. | Deferred | Low |
| Online Payment       | Payment for booked flights will be made online and will account for all applicable taxes and service charges imposed by government, governmental agencies, and airports. | Proposed | High |
Trace Explorer

Set Traceability Filters

Select model elements to be traced and the types of the related objects to be displayed

Select Model Elements To Be Traced

- Requirements Model (BP Air)
- Requirement Folder
- Business Requirement
- BR3: Scope Summary
- BR4: Online Reservations
- BR5: Online Flight Status
- BR6: Online Check-in
- BR7: Online Account Management
- BR8: Online Rewards Program
- BR9: Online Payment
- BR10: Online Check-in
- BR11: Online Account Management
- BR12: Online Rewards Program
- BR13: Online Payment
- BR14: Online Check-in
- BR15: Online Account Management
- BR16: Online Rewards Program
- BR17: Online Payment
- BR18: Functional Requirement
- BR19: Quality of Service Requirement
- BR20: Business Rule
- BR21: Business Processes
- BR22: Data Objects
- BR23: UI Mockups

Select Relationships to be displayed

- All Relationships
- Requirements (All Types)
- Business Processes
- Actors
- Use Cases
- Data Objects
- UI Mockups

Include steps, conditions, and business process objects

Apply Filter
Cancel
Structured Walkthrough - Live Simulation

Narrative

Interactive Screen Mockups

End-to-End Workflow

Traced Business Requirements, Rules, Process

Comments & Discussion
Structured Walkthrough - Blueprint Reader

**Business Analyst**
Author & Prepare

Blueprint Requirements Center

Requirements Package

Feedback & Approvals

**Stakeholders**
Review & Approve

Blueprint Reader

Blueprint Reader

Blueprint Reader

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Structured Walkthrough via Generated Documents

Fully Configurable Word Format
- Tables of Contents, Styles, etc.

Business Processes:

Customer (Actor: Customer)

<table>
<thead>
<tr>
<th>ID</th>
<th>Name:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>S1</td>
<td>Start Point</td>
<td>This task is the initial step for comparison shopping.</td>
</tr>
<tr>
<td>T1</td>
<td>Initiate Comparison Shopping</td>
<td>This task involves initiating comparison of flights which includes providing credentials and selecting sources.</td>
</tr>
<tr>
<td>T2</td>
<td>Provide Flight Departure, Destination, date, and other preferences</td>
<td>This task involves specifying the preferences which will identify the flights to be compared.</td>
</tr>
<tr>
<td>T3</td>
<td>Consider results and place order</td>
<td>This task involves performing an analysis of the presented results and placing an order with one of the airlines.</td>
</tr>
<tr>
<td>E1</td>
<td>End Point</td>
<td></td>
</tr>
</tbody>
</table>

BP Air (Actor: BP Air)

<table>
<thead>
<tr>
<th>ID</th>
<th>Name:</th>
<th>Description:</th>
</tr>
</thead>
<tbody>
<tr>
<td>T3</td>
<td>Validate Inputs and Route</td>
<td>This task involves validation of the input data and selected route.</td>
</tr>
<tr>
<td>T4</td>
<td>Query BP Air flight database</td>
<td>This task involves querying the BP Air flight database with the flight parameters for comparison.</td>
</tr>
</tbody>
</table>
Optional redlines show changes since previous walkthrough/review – automatically!

### Detailed Specification

<table>
<thead>
<tr>
<th>ID</th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>SP1</td>
<td>Traveller Booking</td>
<td>This purchase involves the booking of travel for the Traveller.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Link to sub process: SP2 Traveller Booking</td>
</tr>
<tr>
<td>SP2</td>
<td>Agent Booking</td>
<td>This purchase is for the booking of travel for a group or agent on behalf of a Traveller.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Link to sub process: E1 Agent is booking</td>
</tr>
</tbody>
</table>

#### Key Dependencies
- This initiative is dependent on the IT modernization initiative begun in January/December 2006. Planning of this project must be synchronized with the needs of the IT modernization initiative at all major milestones. Please refer to Project Management Office for details.

#### Scope
- This project encompasses all work related to developing and provisioning the online booking system for Blueprint customers. It will not involve any modifications or updates to the airline database system but may interact with the database modernization project team to ensure compatibility.

### Flight Operations

- [Diagram of Flight Operations]

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Integration with HP Quality Center

Blueprint Requirements Center

Business Process

Application Requirements

Generated Tests

HP Quality Center

Completely Traced Business Process, Requirements & Tests.
Version Control & Multi-User Access

- Multi-User Access
- Security
- Version Control
- History
- Comparison
1. AUTHOR

- Requirements Lists Editor
- UI Mockup Editor
- Business Process Diagram Editor
- Use Case Editor
- Data and Rules Editor
- Glossaries

Blueprint Integrated Model

2. VALIDATE

- Simulate All Requirements (UI, process, data)
- Capture Feedback into System
- Track and Incorporate Changes

3. COMMUNICATE

- Auto-generate Microsoft Office Documents
- Generate 100% of Functional Test Scenarios
- Integrated with ALM Solutions
More Information About Blueprint ...

• Blueprint
  – Requirements Center: most comprehensive RDM platform
    • [www.blueprintsyst.com/products](http://www.blueprintsyst.com/products)
  – IIBA Certified RDM Courses
    • [www.blueprintsyst.com/services](http://www.blueprintsyst.com/services)

• How Requirements Center supports BABOK