Using Business Scenarios in the Software Development Process

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Agenda

- Why Business Scenarios?
- What is a Business Scenario?
- Understanding who is doing what?
- What is a Technical Scenario?
- Influencing the Software Development Process
- Results
Evolution of e-business

Access | Publish | Transact | Integrate Internally | Integrate Externally | Adapt Dynamically
Why Business Scenarios?

- Provide the context of how the products will be used
- Reduce the complexity of what developers need to consider
- Focus on solutions to customer problems rather than the “nice to have”s
Market Dynamics

*From management of transactions to horizontal integration for e-business on demand*

...efficiency and flexibility

Collaboration with partners, suppliers...

*adapt to change*

strengthen relationships...

...new business models

...mergers, consolidations, acquisitions
Evolving Business Scenarios

- Phase 1 – Identify scenarios based on business problem
  - Representative of a large number of customer solutions
  - Representative of a small number of large customer solutions
  - Addresses a number of known customer issues
- Phase 2 – Validate that they are important strategically
  - Review with marketing
  - Review with architects
- Phase 3 – Identify architectural issues in products
  - Prototype enough of the scenario to drive out architectural issues
  - Identify line items for products
- Phase 4 – Ensure scenario can be implemented
  - Test scenario by implementing to ensure it works
What is a Business Scenario

- Business Scenario (revenue potential, customer profile, business pains, etc.)
  - Business Use Cases
    - Steps (business role, duration, description)
  - Technical Solution (architecture, technical issues, existing infrastructure, etc.)
    - Technical Scenarios (products, components, design, etc.)
    - Technical Use Cases (views)
      - Steps (technical role, duration, description)
  - Line Items
Sample Business Scenarios

**Private Exchange Scenario Objective**
- Provide a one-stop shopping exchange for a set of suppliers and buyers by making product information available to the exchange participants.

**Customer Benefits**
- Reduce costs associated with multiple manual data entry processes.
- Improve quality/accuracy of product information.
- Reduce cycle time to get product information to the market -- including new products.

**Mergers & Acquisitions Scenario Objective**
- Expand market opportunity by acquiring a channel to the web. Must increase profitability by reducing infrastructure costs.

**Customer Benefits:**
- Create a single, complete view for each customer.
- Quickly converge administration processes of acquired companies.
- Minimize the impact of convergence and costs on IT infrastructure.

**Customer Loyalty Scenario Objective**
- Aggregate the customer view across the total portfolio to provide consistent support/service.
- Provide customer access anywhere and anytime....clicks & mortar.

**Customer Benefits**
- Improve profitability by maintaining customer base & increasing number of services.
- Increase customer service & marketshare.
Lord General Insurance (LGI) acquiring DirectCar for access to its successful web channel operations and for its relevant IT skills. LGI needs to quickly consolidate the customer records and policy information to enable a single face to the customer and improved target marketing.
Who is doing what
Business Use Case: Investigate Claim

The Claims Handler requests and collates various sources of information pertaining to the claim from internal and external sources.

<table>
<thead>
<tr>
<th>Step</th>
<th>Role</th>
<th>Step Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Claims Handler</td>
<td>Claim Handler logs into the Business Process Management system and is presented with a view of claims in a ‘Valid Claim’ status. The Claim Handler selects a Claim and retrieves details for that Claim.</td>
</tr>
<tr>
<td>2</td>
<td>Claims Handler</td>
<td>Check previous claim history -&gt; Alert-. Claims exceeding $30000</td>
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<tr>
<td></td>
<td></td>
<td>NOTE: other external 3rd party checks could include</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- A Medical Examination,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>- An Assessment for another vehicle in addition to the policy holder’s vehicle</td>
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<tr>
<td></td>
<td></td>
<td>- A Legal document from a solicitor</td>
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<tr>
<td></td>
<td></td>
<td>- If claimant stated police were involved, it may have been necessary to request a police report.</td>
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<tr>
<td></td>
<td></td>
<td>All checks should be completed before moving to the next activity.</td>
</tr>
<tr>
<td>3</td>
<td>Claims Handler</td>
<td>Send externally for detailed Assessment of damage</td>
</tr>
<tr>
<td>4</td>
<td>Claims Handler</td>
<td>Check 3rd party and Assessor report (Assumed in Auto to be unstructured), although standard assessor reports could be sent via EDI.</td>
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Today’s Enterprise IT Environment

*IT environments are becoming increasingly heterogeneous and complex.*

The role of modern middleware is to integrate and simplify
Technical Roles

Technical user roles:

I. Business Analysis
   Business Analyst

II. Up & Running
   Product Installer

III. Solution Development & Deployment
   Solution Architect
   Security Architect
   Application Developer
   User Interface Developer
   Information Developer
   Internal Tools Developer
   Solution Integrator
   Solution Tester
   Solution Deployer

IV. System Administration & Operation
   System Administrator
**Technical Use Case: Production Environment install**

The production environment is sacred. Therefore the products need to be installed and backed out quickly if they cause any adverse impact on existing products or solutions.

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<tbody>
<tr>
<td>1</td>
<td>Solution Deployer</td>
<td>Back up existing software and data</td>
</tr>
<tr>
<td>2</td>
<td>Systems Administrator, Solution Deployer</td>
<td>Review hardware and software levels across the entire production environment</td>
</tr>
<tr>
<td>3</td>
<td>Solution Deployer</td>
<td>Apply prereqs and test</td>
</tr>
<tr>
<td>4</td>
<td>Solution Deployer</td>
<td>Install solutions/products on the production environment</td>
</tr>
<tr>
<td>5</td>
<td>Solution Deployer</td>
<td>Apply any urgent quickfixes and test</td>
</tr>
<tr>
<td>6</td>
<td>Solution Deployer</td>
<td>Prepare to back out to previous level if problems occur</td>
</tr>
</tbody>
</table>
Influencing the Software Development Process

- Adding business use cases to the product “theme” documents
- Adding use cases to the component design documents
- Building samples around business scenarios
- Building testcases around technical use cases
- Product architects using business scenarios to make tactical decisions so that they fit with strategy
- Use business scenarios to prototype new technologies
- Use business scenarios to incrementally add new component features
An Example of how it Helps Development

- **Business use case**
  On every logon, the user’s information is displayed to the user. They can change it if it is incorrect.

- **Technical use case**
  Retrieve the data for the customer from the “Customer” Entity EJB

- **Problem:**
  Developer focussing on how to optimize ejbCreate implementation
  However, scenario shows following usage pattern:
  - ejbCreate called 4% of the time
  - ejbLoad called 70% of the time
  - ejbStore called 25% of the time
  - ejbDelete called 1% of the time
  Therefore, based on scenario, developer should focus on optimization mechanism for ejbLoad rather than ejbCreate
Results

- Changing the development culture to focus on customer solutions
- Helping make the “is-it-nice” or “is-it-necessary” kind of decisions
- More general knowledge of what customers are trying to do with our products

- Interesting side-effects
  - Customers interested in the process
  - Using business scenarios to build their own platform
  - Customers interested in how their scenarios map to the ones we are addressing in development (ie. Coverage)
Providing e-business on-demand

Business Portals

Business Process Integration

Application Connectivity

Host Environment

Employees

Customers

Partners

Suppliers

Developers

Open Source Community

Application Development

Access On Demand