IBM BPM, ODM and Mobile - Overview and Demonstration

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http://IBMBPMDemos.com for more information and resources
Context Aware Apps – Mobile + Process, Rules & Events

The initial context is set as Mike books his flights and waits until 24 hours before his flight departs.

On The Fly Airlines

Control Centre

Pre-flight  Flight Delay  In-Flight  Cancelled Connection  Baggage Claim

Send event indicating Mike Mitchell has booked his flights
Event is detected and Mike's mobile app updates based on the context
Send event indicating it is 24 hours before the flight departure
24-hour pre-flight Event is detected and the passenger flight process is initiated
Mike's mobile app updates based on the process context

Operational Systems  Business Events  Business Rules  Mobile App

Enterprise Service Bus

Destination  Gate  Time  Status
Kansas City  A01  9:10 AM
Las Vegas  G44  4:20 PM
Jacksonville  90  6:20 AM

SEARCH FOR FLIGHT
PURCHASE FLIGHT
MESSAGE CENTER
What is a **Context Aware Application**?

An application is **context aware** when it is capable of **responding** to **changes in the environment**, based on **business policies**, in **real time**.
• We **establish context** by detecting what is (or isn’t!) happening in the business environment
• Information about what is happening is delivered via events
• Business Event Processing (BEP) technology is used to:
  – Correlate disparate events together
  – Identify patterns in events over time
• Patterns can be designed, implemented, and maintained by the business

Mobile technologies open up a new world of events, giving us a richer window into the application context.
• Identifying context alone is not enough... what now?
• The ability to **decide** involves:
  – Identifying the best response given contextual, operational, and historical information
  – Making business policies executable and understandable
  – The agility to change policies to respond to the environment
• Business rules can (and should) be designed, implemented, and maintained by the business

**Implication for mobile**

Decisions can now be made with greater accuracy, given the wealth of additional information available
• Business situation detected $\rightarrow$ decision made $\rightarrow$ now what?

• Acting on decisions can involve:
  – Initiating simple or complex workflows
  – Aligning and orchestrating resources within the organization
  – Communicating with customers at their point of contact

• **Business Process Management** (BPM) is a proven technology that allows organizations to model, execute, rapidly change, govern, and gain end-to-end visibility on their business processes

The *mobile revolution* allows us to have a *conversation* with our customers in real time and interact at the *point of engagement*. 
Bringing it all together - Events, Rules, Process & Mobile

*Loosely Coupled <> Tightly Integrated*

IBM Operational Decision Management
- **Detect** (Event Rules)
- **Decide** (Business rules)
- **Act** (Business Processes)

IBM Business Process Management

Connectivity (ESB)

Mobile allows us to have conversations with customers, leveraging real-time context and interacting at the point of contact
Events, Rules and Processes in Action: *Customer Acquisition*

**Detect**
- Multi-channel quote requests
  - **Event Pattern:** Customer requests a series of quotes with increasing deductibles
  - **Business Rules:** Customer good prospect, find best promotion
- **Event Correlations**
  - **Event Pattern:** 2 web quote requests and 1 direct contact in 3 days
  - **Business Rules:** Determine best product
- **Event Pattern:** Same vehicle ID with different addresses on phone & Web request:
  - **Business Rules:** Is customer gaming the system?

**Decide**

**Act**
- **Make a personalized offer**
- **Trigger process for agent to call/assist**
- **Seek clarification**

**Events**
- Internet
- Call Center
- Agency

**Rules**
- Business Rules

**Decisions**
What do you need from your processes in a customer-centric world?

Processes must be:

**Instant**
At Internet speed
47% of online bank account opening applicants don’t successfully complete the process and fund their accounts

**Seamless**
Interconnected & ubiquitous
In the US, mobile banking jumped to 32% of customers in 2012 up from 21% in 2011

**Insightful**
Targeted and relevant
47% say it frustrates them when companies don’t use the information they have to make interactions and offers more relevant
To become a mobile enterprise, your processes must be...

**Mobile Aware**

Context aware to engage with all process participants anywhere and anytime

Geo-location of team members and customers for assignments, up-sell marketing opportunities

**Mobile Specific**

Mobile data capture to enrich and optimize processes improvement

Barcode scanning, Signature captures

**Mobile Centric**

Efficient mobile experiences to change how employees interact with the enterprise

Field technicians, Inspectors, Customer Servicing
BPM 8.5 will bundle Worklight Enterprise Edition with entitlement to develop custom mobile apps with IBM BPM. Full license required for production use.

Leverage Worklight capability for multi platform development & deployment. Integrate with IBM BPM through REST APIs.

New Sample Mobile Coaches Toolkit includes over 15 coach views for creating coaches optimized for devices.
What’s new in V8.5
IBM mobile solutions for business process management

Non-production entitlement to Worklight Enterprise Edition with IBM BPM V8.5
- Develop and test custom IBM BPM mobile applications using Worklight
- Leverage the IBM BPM APIs and Coaches
- Accelerate development of customer ready mobile experiences
- Leverage business decisions from mobile devices

Accelerate delivery of mobile applications with new sample coach views delivered via an IBM BPM mobile ready toolkit
- Leverage mobile device specific features
- Updated Worklight sample for use as starting point implementation including Adapter to call BPM REST APIs
- New sample BPM controls targeted to deliver common mobile experiences – Location, Camera, Mobile UI Layout
Worklight Project with app and adapter illustrates multi platform development & deployment. Integrates with IBM BPM through REST APIs.


http://Tinyurl.com/IBMBPMSamplesExchange
http://bpmwiki.blueworkslive.com/display/samples/SAMPLE+EXCHANGE+HOME
Community Samples for iOS, Android, Web, Worklight

BPM Community

BROWSE BY LABEL
- bpm
- bpm75
- bpm751
- bpm8
- coach
- coachview
- dojo
- process-
- app
- sample
- toolkit

COMMUNITY WIKI
SAMPLE EXCHANGE HOME
- Guidelines for sample contributors
- Browse by product and version
- Sample File Repository

Mobile apps
- Mobile BPM (Android Sample)
- Mobile BPM (Web Sample)
- Mobile BPM (Worklight sample)
- Mobile BPM (iOS) sample

Working with Coach Views
- Process apps
- Toolkits
- Patterns
- More free BPM samples and other assets
- Wish list
- Commerce Corner

Mobile BPM (Worklight sample)

Download Sample
This sample requires Worklight 5.0.0.2 or greater and BPM Standard 8.0.
Instructions for installing and using the sample are included in the zip file as BPM Mobile-Worklight-Sample.pdf

Screenshots

URL: http://Tinyurl.com/IBMBPMSamplesExchange

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Worklight Sample - Project

Worklight Adapter for BPM REST APIs

Common HTML5 code base

Create hybrid apps for multiple devices and then optimize for device specific “environments” as needed.

Simulate on various mobile devices and resolutions from within the Worklight Studio environment.
New **Sample Mobile Coaches Toolkit** coach views illustrate how to create coach views for developing coaches optimized for devices for common patterns.
Sample with Device Aware Behavior

"Mobile coach" uses new mobile toolkit controls.

At runtime, the appropriate theme is dynamically applied for appearance and size.

Coach running on Android

Coach running on iOS
Developing with mobile coach views

The Mobile coach views include icons, localization bundles, event handlers, CSS, configuration options and data bindings for proper fit within the BPM coach framework.

In the simplest case, just drag and drop the coach view onto your coach, bind your data and playback.
V8 REST APIs and Tester Support Mobile Apps

IBM BPM V8 Process Portal and iOS Mobile App use this API
BPM with Worklight

Combining Worklight and BPM with Coaches

Worklight App Center, Console
(App Governance, integration with Mobile Foundation)

Worklight Studio
(App / Adapter Development)

BPM Process Center (Process / Data / UI)

Installation and update of app on device

JSON over HTTP/S, push notifications

Deploy app under lifecycle governance

Send Worklight push notifications

Worklight Server (WAS)

BPM Process Server (WAS)

1. LTPA authentication realm
2. Customized Worklight Adapter for BPM REST APIs

REST APIs
Operational Decision Management - Worklight Sample

Leveraging decisions in the Mobile workplace

1. Develop Rule Project
2. Develop Mobile App
3. Deploy to Decision Server
4. Execute on Decision Server

On server execution using XML REST API

Decision Center
- Rule Project
- Decision Server
- REST - Web Services – API - GUI

Decision Server
- Worklight Server Adapter
- Client Device JavaScript
- Worklight Server

Rule Designer
- Rule Project
- Access Mobile device information in rules through sample Cordova BOM
- Interface to rules through ODM Worklight Adapter

IBM Worklight Studio
- Mobile App
- Develop Mobile App

Repository
ODM Worklight Sample: Scenario and Decision Overview

- Car insurance mobile application parameters

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</tr>
</tbody>
</table>

- Geolocation rules

```
if the code name of the policy of 'the customer' is "bronze" and the distance between 'the customer' home and 'current location' is less than 20 km, then add "WARNING: You are at " + the distance between 'the customer' home and 'current location' + " km from your home which is less than 20kms, towing is not covered in your policy" to
```

Response from decision

Provided by settings

Provided by device
Demonstrations – Claim Mgmt

"Task is routed to Steve the mobile field agent"

"Julie the Manager uses iPad app or browser"

"Steve uses the BPM app to locate the scene and complete the task"
Demonstrations – Incident Management
Context Aware Apps – Mobile + Process, Rules & Events

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Operational Systems  Business Events  Business Rules  Mobile App
BPM Process Discovery & Modeling in the Cloud
– Blueprint Process Modeling for inventory & mapping
– Knowledge sharing & collaboration
– Process analysis & prioritization

BPM Process Modeling & Implementation
• Rapid process application development
• Continuous process improvement
• BPM program management

Education, Enablement and on-demand Services
• Quick Win Pilots
• Role-based education & mentoring
• Expert Services when and where they’re needed

Links to Your Next Steps…
IBM BPM Delivery Capabilities
Including Education and Enablement Services

http://BlueworksLive.com

http://IBMBPMDemos.com

http://www.ibm.com/developerworks/websphere/services/
Thank You