Rapid Development of Smart and Self-Adaptive Cloud, Mobile & IoT Applications
- Accelerating the Last Mile of Cloud Computing

Jesse Shiah
CEO and Co-founder
Jesse.shiah@agilepoint.com
The Paradigm Shift of Computing
- How to Support the Demand for Business Critical Cloud Applications

1970’s 1980’s 1990’s 2000’s 2010’s
Main Frame Personal Computing Network Computing The evolution of Cloud Computing

The ‘Treat Me as Me’ Generation

Consumer
Mobile & Social Apps

The Age of Customer

Smart Enterprise
Business Critical Cloud & Mobile Apps

Technology is Business Operations Support
Technology is Your Business
Most Consumer Centric Cloud and Mobile Apps Support Simple Backend Connectivity

Consumer

Enterprise

Key LOB Systems
(on-premises)

- Complex
- Adaptive

Financial
ScM
ERP
MES
CRM
Adaptive Cloud Computing Evolution
- Bridging the Last Mile of Cloud Computing

“One Size fits all”

Microsoft
Amazon
Web Service

Microsoft Office 365 &
Dynamics CRM
Google Apps

Salesforce

Salesforce

ServieNow

Adaptive IaaS

Microsoft Azure
IBM

Adaptive PaaS 2.0

Salesforce

Adaptive SaaS 2.0

Force.com

Configurable
“Individualized Experience”

SaaS

Netsuite

“IaaS

Salesforce

“Paas

Google Apps

“The INTERNET of THINGS”
Traditional Software Development Paradigm Creates Rigid Cloud and Mobile Applications

- Agile Development Methodology does not address the limitation either

Gather Requirements

Develop & Execute as Code

Hand-off

Applications created, not responsive & adaptive at run-time

• Rigid Point-to-Point Connectivity
• Inevitably becomes legacy
• Costly to maintain & connect

Change management incurs engineering development cycle
CIO’s dilemma – The ‘Application Modernization Y2K’

Problems:
Hundreds of small apps developed in different languages or tools to bridge or fill the gaps left by the key LOBs all turned into legacies and maintenance headache

Key Challenges:
- Systematic approach for ‘mobile’ enablement
- Worsen exiting legacy application maintenance challenges
Business Critical Enterprise and Cloud Apps
- Enabling Connected Enterprise and Collaboration

End-to-End Business Critical Apps

Cloud Services

Internet of Things

End-to-End Collaborations

- New Project Launch
- Supply Chain Planning & Execution
- Order to Cash
- Adaptive ‘End-to-End Process’

LOB 1 (e.g. SharePoint)
LOB 2 (e.g. DMS)
LOB N (e.g. SCM)

KPI
KPI
KPI
KPI
The Current Paradigm Creates Business Critical Enterprise and Cloud Apps into Point-to-Point, Monolithic ‘Instant Legacies’

- Costly for Change Management and Continual Improvement
- Lost of domain knowledge and knowhow – costly retraining
Current Development Paradigm Also Creates ‘Technical Debt’

BARRIERS TO SUCCESS
What are your company’s biggest application or process management-related impediments?

- **49%** Changing, upgrading, or optimizing applications
- **32%** Changing or adapting processes as business requirements change
- **30%** Implementing new applications
- **17%** Automating or integrating business processes

Data: InformationWeek 2012 Enterprise Application Survey of 338 business technology professionals

Impacted by ‘**HOW**’ You Implement the Needs (Not What you ‘**CAN**’ do but ‘**HOW**’ you do it)

Business Needs
Accelerate the Last Mile of Cloud Computing

Create New Generation of Adaptive SaaS 2.0 Apps with a PaaS 2.0 based on a Responsive Application Platform (RAP)
What is a Responsive Application Platform
- Key Architecture Characteristics

1. 100% SOA
2. Metadata Abstraction Framework
3. Model-Driven Process-Based Composition

Responsive Application Platform

Platform as a Service (PaaS)
Responsive Application Platform

#1: 100% SOA based Architecture

1. On-premise (NLB/Cluster)
2. Cloud – Private or Public

Open API Support:
- Web Service API
- WCF API
- REST API

Familiar Microsoft Tools & Technologies
- SharePoint
- Microsoft Dynamics CRM
- Microsoft Exchange
- Active Directory
- Microsoft Office 365
- Microsoft WCF
- Microsoft ASP.net
- Mobile/Cloud/Web

© 2014 AgilePoint, Inc. All Rights Reserved.
Responsive Application Platform #2: Metadata IT Assets Abstraction Framework

Current Paradigm

UI
Logic
Data/Integration

Custom Code

UI (People)
Logic (Process)
Data (Connectivity)

Metadata Abstraction Framework

Enabling Process-based (SOA) Composition with No Code

© 2014 AgilePoint, Inc. All Rights Reserved.
Responsive Application Platform
#3: Explicit Model-Driven Architecture

Execution Feedback & new data drives real-time self-adapting change management

Design as a Model

Execute as a Model

SaaS Apps
Self-Adaptive at run-time as a Model

Individualized user experience

Mobile Enablement inherently

© 2014 AgilePoint, Inc. All Rights Reserved.
Model-Driven Enables Visual Composition of Process-based Cloud Apps with No Code

Application output as XML and directly interpreted for execution

Mobile Enablement inherently
RAP enables Abstraction for Cross Channel, Cross Platform and Individualized Engaging Experience

**Service-Oriented Integration**

**Key LOB Systems & Cloud Services**
- SCM
- ERP
- MES
- CRM

**RAP**

- Customer Issue to Resolution
- Supply Chain Planning & Execution
- Engineering Change Order
- Order to Cash

**Customization and dynamic integration cross LOBs created as adaptable process-based composition**

**Keep as native as possible and minimize direct customization**
How is Responsive Application Platform Enabled

Application Composition as a Model

Existing Services

SOA Alignment

XML

Execution (Interpretation)

Model Driven BPM Engine

Web Service, WCF, REST Services

Monitoring & Administration

Management Dashboard

Web Application – ASP.NET, HTML5

SharePoint

.NET

Java

HTML 5

Custom

Collaboration Portal

Business

IT

Create Metadata-Driven (SOA) Service

Metadata Abstraction Framework

Create Custom Services

Visual Studio

javascript

Existing Services

Create Custom Services

Metadata Abstraction Framework

XML

Web Service, WCF, REST Services

Monitoring & Administration

Management Dashboard

Web Application – ASP.NET, HTML5

SharePoint

.NET

Java

HTML 5

Custom

Collaboration Portal

Business

IT

Application Composition as a Model

Existing Services

SOA Alignment

XML

Execution (Interpretation)

Model Driven BPM Engine

Web Service, WCF, REST Services

Monitoring & Administration

Management Dashboard

Web Application – ASP.NET, HTML5

SharePoint

.NET

Java

HTML 5

Custom

Collaboration Portal

Business

IT

Create Metadata-Driven (SOA) Service

Metadata Abstraction Framework

Create Custom Services

Visual Studio

javascript
Single Code Base Multi-Tenancy
- Each tenant has a dedicated & secured data space while sharing the same engine

Each ‘Tenant’ maintains fully secured and dedicated AgilePoint workspace and database
A Hybrid, Multi-Cloud Application Example - End-to-End Sales Lead Follow Up App

<table>
<thead>
<tr>
<th>Submit Request</th>
<th>Customer Contact</th>
</tr>
</thead>
<tbody>
<tr>
<td>Add Lead Review</td>
<td>Create Lead</td>
</tr>
<tr>
<td>Update/Delete Lead</td>
<td>Update Lead</td>
</tr>
<tr>
<td>Convert Lead?</td>
<td>No</td>
</tr>
<tr>
<td>Delete Lead</td>
<td></td>
</tr>
<tr>
<td>Task Management</td>
<td></td>
</tr>
</tbody>
</table>

A Lead Follow Up Orchestration Example Created with No Code – Involving SalesForce, Office 365/SharePoint, GoToMeeting, Database, etc.

1. **Sales Review**
   - Outside Sales Review
   - Create GTM?
     - Yes: Create Meeting
     - No: Send Sales Force Email

2. **Insert Record**
   - Connect to On-Premise database securely using AgilePoint Service Bus
   - Insert Lead record in DB

- **Office 365**
  - Connect to Office 365 using SharePoint connector
  - Insert Record into Office 365

- **GoToMeeting**
  - REST API call to create a new GotoMeeting

© 2014 AgilePoint, Inc. All Rights Reserved.
AgilePoint Mobile Dashboard

Support:
• iOS, Android, Windows 8
Agile, Cross Channel Responsive eForms Builder

Browser

Tablets

Smart Phone
About AgilePoint
Who is AgilePoint?
AgilePoint Quick Facts Sheet

1,100+ Installations Worldwide
28 Nations Global Footprint
15 Languages Localization Support
75+ Worldwide Partners
63.2 million Processes Run Per Month

AgilePoint is a global leading provider of advanced Responsive Application Platform (RAP) solution as a PaaS to accelerate development of self-adaptive Cloud applications.

“AgilePoint’s metadata-driven IT asset-abstraction framework ... and model-driven development framework provides the necessary instrumentation to fully experience the value proposition of SOA”

Installations by Region

- **EMEA**: 34%
- **North America**: 42%
- **Japan**: 7%
- **ASIA**: 4%
- **Other**: 13%

© 2014 AgilePoint, Inc. All Rights Reserved.
Broad Applicability Across Industries

Customers by Industry

- Manufacturing: 17%
- Government: 16%
- Financial Services: 15%
- Energy: 14%
- Non-Profit: 11%
- Legal: 9%
- Professional Services: 7%
- Telecommunications: 4%
- Other*: 17%

*Chemicals, Construction & Building Materials, Consulting, Electronics, Food & Beverage, Healthcare, Pharmaceuticals, Real Estate Services, and Transportation

12/5/2014 © 2014 AgilePoint, Inc. All Rights Reserved.
Create Business Critical Cloud and Mobile Apps with No Code

AgilePoint PaaS

Cloud Services

On-Premise

Directly Executable Model-Driven Compositions

© 2014 AgilePoint, Inc. All Rights Reserved.
Call to Actions

Visit AgilePoint Booth
Rapid Development of Smart and Self-Adaptive Cloud and Mobile Apps

Bridging the Last Mile of Cloud Computing

Jesse Shiah
CEO and Co-founder
Jesse.shiah@agilepoint.com
Questions & Answers

Jesse Shiah
CEO and Co-founder
Jesse.shiah@agilepoint.com
Supplement Information
Compose Multi-Cloud Applications in Familiar Visio Environment

Create process-based multi-cloud composite application with No code in Microsoft Visio

Intelligent metadata-driven Services for accessing and mapping SalesForce entities
More Than Could Integration – Support for Human-Centric Activities and a Powerful Form Builder

Create powerful dynamic forms for human activity with no code.
Example: Access SalesForce Entities Visually (Can Enable other Cloud Services with the same)

Ability to retrieve and expose SalesForce entities to facilitate visual composition and integration between SalesForce and other Cloud Services as well as on-premise LOB apps exposed as metadata-driven services through abstraction of AgilePoint.
Accomplish Integration Visually
-Human-Human, Human-System, System-System, Cloud-Cloud, Cloud-On-Premise

Visual mapping and integration (facilitates visual composition and integration between SalesForce and other Cloud Services as well as on-premise LOB apps abstracted by AgilePoint and exposed as metadata-driven services).
About AgilePoint
What is AgilePoint?

Rapid Application Development Framework for Everyone

Application Scenarios:

• Enterprise BPMS Platform for On-Premise and Cloud
  • Achieve Business Process Automation, Management, and Excellence
• BPM Platform-as-a-Service
  • Enable Business Process as a Service (BPaaS) Offerings
  • Extend existing Cloud and SaaS Applications
• Rapidly Create and Optimize Cloud Applications
  • Create Configurable and Personalizable SaaS Applications
  • Quickly and Easily Modernize Legacy Applications
• Enable Transparent Hybrid Integration – Public Cloud, Private Cloud, On-Premise, etc.
• AgilePoint is actually a **composition environment**, not simply BPM...enabling process-based SOA composition

• AgilePoint’s **metadata-driven IT asset-abstraction framework** ... and **model-driven development framework** provides the necessary instrumentation to **fully experience** the value proposition of SOA
Global Presence and Support

- **North America**: 2 countries
- **Africa & Middle East**: 6 countries
- **Europe**: 6 countries
- **Asia Pacific**: 6 countries

Global Partner Support Network
Broad Applicability Across Industries

Customers by Industry

*Chemicals, Construction & Building Materials, Consulting, Electronics, Food & Beverage, Healthcare, Pharmaceuticals, Real Estate Services, and Transportation

* Other*
Conclusion
Get Ahead with AgilePoint

Leverage Today’s Technology Trends Effectively to Game a Competitive Advantage

- Automate and Optimize Business Process Efficiencies Quickly and Easily
- Enable Personalized and Engaging Customer Experience
- Accelerate Cost Effective Innovation and Gain First Mover Advantage
- Shift Focus from Maintaining Legacies to Creation Innovations and High Value Activities
Demo Center on AgilePoint Web site