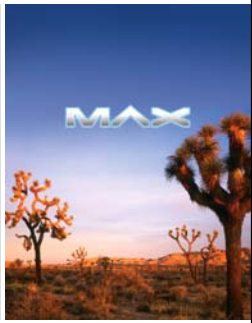



MAX 2006 Beyond Boundaries



Mack McNeely
Manager, Web Development
Developing business applications in Flex
T-Mobile USA

2006 Adobe Systems Incorporated. All Rights Reserved. 1


Application Audience



- Front-line sales managers
- Training managers
- Executive team
- Administration and support team

2006 Adobe Systems Incorporated. All Rights Reserved. 4


About T-Mobile USA



- Based in Bellevue, Washington, T-Mobile USA is a national provider of wireless voice, messaging, and data services capable of reaching over 268 million Americans where they live, work, and play.
- T-Mobile USA is a subsidiary of Deutsche Telekom—one of the largest telecommunications companies in the world with more than 80 million customers worldwide.

2006 Adobe Systems Incorporated. All Rights Reserved. 2


Audience: front-line sales managers



- Requires an easy to use system for scheduling new sales representatives
- Over 500 registrations per month

2006 Adobe Systems Incorporated. All Rights Reserved. 5

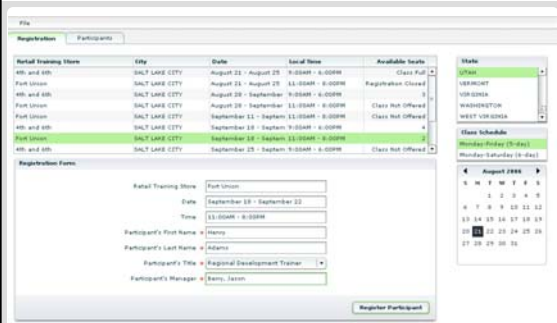
Application Overview: Training Registration



- Project goal: deliver an easy to use web application to manage all aspects of new-hire training registration

2006 Adobe Systems Incorporated. All Rights Reserved. 3

Demo: registration process




The screenshot shows a web application interface for training registration. It includes a table of training classes and a registration form.

Retail Training Store	City	Date	Local Time	Available Seats	Status
4th and 6th	SALT LAKE CITY	August 22 - August 25	9:00AM - 4:00PM	Class Full	Open
Fork Union	SALT LAKE CITY	August 26 - August 29	11:00AM - 4:00PM	Registration Closed	Unenroll
4th and 6th	SALT LAKE CITY	August 26 - September 1	9:00AM - 4:00PM	Class Full	Unenroll
Fork Union	SALT LAKE CITY	August 26 - September 1	11:00AM - 4:00PM	Class Not Offered	Washington
Fork Union	SALT LAKE CITY	September 11 - September 11	11:00AM - 4:00PM	Class Not Offered	West Virginia
4th and 6th	SALT LAKE CITY	September 18 - September 18	9:00AM - 4:00PM	Class Full	Class Schedule
Fork Union	SALT LAKE CITY	September 18 - September 18	11:00AM - 4:00PM	Class Full	Monday Friday (5-day)
4th and 6th	SALT LAKE CITY	September 25 - September 25	9:00AM - 4:00PM	Class Not Offered	Monday Saturday (6-day)

The registration form includes fields for: Retail Training Store (Fork Union), Date (September 18 - September 22), Time (11:00AM - 4:00PM), Participant's First Name (Denny), Participant's Last Name (Adams), Participant's Title (Regional Development Trainer), and Participant's Manager (Denny, Jason). A "Register Participant" button is at the bottom.

2006 Adobe Systems Incorporated. All Rights Reserved. 6

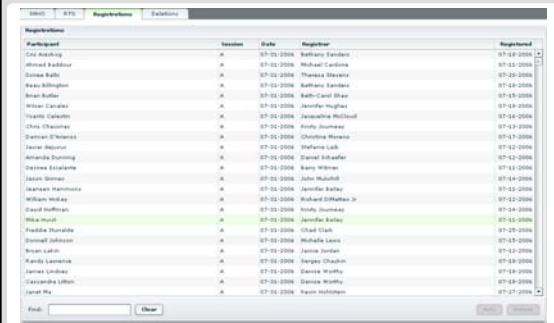
Audience: training managers



- Requires an easy to use system for management of their training location
- Over training 100 locations nationwide

2004 Adobe Systems Incorporated. All Rights Reserved. 7

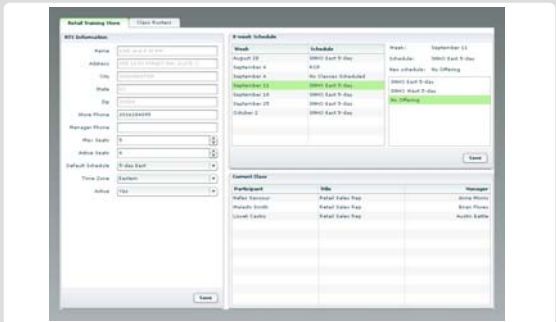
Demo: executive dashboard



Participant	Session	Date	Registration	Registration
Eric Anderson	A	07-20-2004	Richard Sanchez	07-20-2004
Michael Anderson	A	07-20-2004	Michael Cardona	07-20-2004
Donna Balle	A	07-20-2004	Theresa Alvarez	07-20-2004
Kevin Bringham	A	07-20-2004	Richard Sanchez	07-20-2004
Brian Butler	A	07-20-2004	Rafael Cardenas	07-20-2004
Michael Cardona	A	07-20-2004	Joseph Hughes	07-20-2004
Yvesha Cardona	A	07-20-2004	Joseph Hughes	07-20-2004
Victor Chantrel	A	07-20-2004	Victor Chantrel	07-20-2004
Victor Chantrel	A	07-20-2004	Victor Chantrel	07-20-2004
Stephen D'Amico	A	07-20-2004	Christina Moreno	07-20-2004
David Espinoza	A	07-20-2004	Victoria Lutz	07-20-2004
Amelia Dominguez	A	07-20-2004	David Sanchez	07-20-2004
Debra Escobar	A	07-20-2004	Samy Wilson	07-20-2004
Jason Gomez	A	07-20-2004	Jose Hernandez	07-20-2004
Isaac Hernandez	A	07-20-2004	Isaac Hernandez	07-20-2004
William Hines	A	07-20-2004	Richard Sanchez	07-20-2004
David Hernandez	A	07-20-2004	Victor Chantrel	07-20-2004
Willy Hines	A	07-20-2004	Joseph Hughes	07-20-2004
Paulina Hernandez	A	07-20-2004	Richard Sanchez	07-20-2004
Ernest Hernandez	A	07-20-2004	Michael Lopez	07-20-2004
Brian Lujan	A	07-20-2004	James Jordan	07-20-2004
Randy Lujan	A	07-20-2004	George Chavez	07-20-2004
James Lujan	A	07-20-2004	George Chavez	07-20-2004
Elizabeth Lujan	A	07-20-2004	George Chavez	07-20-2004
Joseph Mui	A	07-20-2004	Samy Wilson	07-20-2004


2004 Adobe Systems Incorporated. All Rights Reserved. 10

Demo: managing a training location



2004 Adobe Systems Incorporated. All Rights Reserved. 8


Audience: administration and support team



- Requires tools to access, modify and report on every aspect of the system

2004 Adobe Systems Incorporated. All Rights Reserved. 11

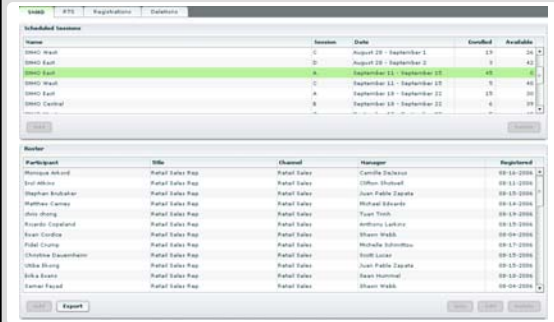
Audience: executive team



- Requires up to date reporting on all aspects of the new-hire training program

2004 Adobe Systems Incorporated. All Rights Reserved. 9

Demo: administration




Name	Session	Date	Enrolled	Available
00001 Juan	C	August 20 - September 1	13	20
00001 Juan	B	August 20 - September 2	3	40
00001 Juan	A	September 11 - September 15	40	4
00001 Juan	C	September 11 - September 15	5	40
00001 Juan	A	September 16 - September 22	13	20
00001 Central	B	September 16 - September 22	4	30

Participant	Title	Channel	Manager	Registration
Michael Anderson	Patrol Sales Rep	Patrol Sales	Camille Delacruz	08-20-2004
Eric Anderson	Patrol Sales Rep	Patrol Sales	William Hernandez	08-11-2004
Michael Anderson	Patrol Sales Rep	Patrol Sales	Jose Pablo Zavala	08-05-2004
Michael Anderson	Patrol Sales Rep	Patrol Sales	Michael Hernandez	08-04-2004
Jose Chong	Patrol Sales Rep	Patrol Sales	Victor Chantrel	08-04-2004
Michael Anderson	Patrol Sales Rep	Patrol Sales	William Hernandez	08-04-2004
Brian Cardenas	Patrol Sales Rep	Patrol Sales	Samy Wilson	08-04-2004
Patrol Group	Patrol Sales Rep	Patrol Sales	Michael Hernandez	08-04-2004
Christina Moreno	Patrol Sales Rep	Patrol Sales	Jose Pablo Zavala	08-04-2004
Victor Chantrel	Patrol Sales Rep	Patrol Sales	Samy Wilson	08-04-2004
Samy Wilson	Patrol Sales Rep	Patrol Sales	Samy Wilson	08-04-2004
Samy Wilson	Patrol Sales Rep	Patrol Sales	Samy Wilson	08-04-2004
Samy Wilson	Patrol Sales Rep	Patrol Sales	Samy Wilson	08-04-2004

2004 Adobe Systems Incorporated. All Rights Reserved. 12

Summary



- Successfully delivered easy to use web application for new-hire training registration

2006 Adobe Systems Incorporated. All Rights Reserved. 13

ColdFusion: leveraging existing technology

- Allowed T-Mobile to leverage existing components and technology in the business tier
 - <<cfldap>
 - <<cfmail>
 - <<cfquery>
 - SAP
 - SQL Server
- Complete solution was developed and delivered in less than 1 man-month

```

1 <cfcomponent>
2 <cfFunction name="getEmployeeInfo" access="public">
3 <cfargument name="p_username" type="string" required="true">
4 <cfargument name="p_password" type="string" required="true">
5 <cfset qEmployeeInfo="">
6 <cfldap
7   server="gml900.org"
8   action="query"
9   username="#p_username#" password="#p_password#"
10  name="qEmployeeInfo"
11  start="dc=gml900,dc=org"
12  scope="subtree"
13  attributes="givenName,sn,mail
14  filter="(cn=#p_username,p_user
15
16 </cfldap>
17 <cfset aEmployeeInfo = StructNew({})>
18 <cfset aEmployeeInfo["firstName"] =
19 <cfset aEmployeeInfo["lastName"] =
20 <cfset aEmployeeInfo["userName"] =

```

2006 Adobe Systems Incorporated. All Rights Reserved. 14

Technology: how we put it together

Flex	ColdFusion MX	SQL Server	Enterprise
<ul style="list-style-type: none"> Version 1.5 	<ul style="list-style-type: none"> Version 7 	<ul style="list-style-type: none"> Version 2000 	<ul style="list-style-type: none"> SAP LDAP SMTTP

2006 Adobe Systems Incorporated. All Rights Reserved. 14

Better by Adobe.™

2006 Adobe Systems Incorporated. All Rights Reserved. 17

Flex: more than a pretty face

- Clean RIA framework
- Intuitive and familiar development paradigm
 - MXML
 - ActionScript
 - Design patterns
- Consistent user interface
- Fast user response times within the application

```

1 <?xml version="1.0" encoding="utf-8"?>
2 <mx:DataGrid
3   xmlns:mx="http://www.adobe.com/2003/mxml"
4   change="dispatchEvent({type:'locationSelected'})"
5   height="100%"
6   width="100%"
7
8   <mx:Metadata>
9     [Event("locationSelected")]
10  </mx:Metadata>
11
12  <mx:columns>
13    <mx:Accessor>
14      <mx:DataGridColumn columnName="location"
15      <mx:DataGridColumn columnName="location"
16      <mx:DataGridColumn columnName="city" h
17      <mx:DataGridColumn columnName="state" /
18  </mx:Accessor>
19  </mx:columns>
20 </mx:DataGrid>

```

2006 Adobe Systems Incorporated. All Rights Reserved. 15