The Sky's the Limit

Ernest Micklei, QNH PhilemonWorks

Tim Matthews, Cincom Systems

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Spanning five decades of global software leadership

- Founded in 1968 as a database management system company

- Strong international expansion in the 1970s

- Manufacturing specialization and application development diversification in the 1980s

- New technologies, acquisitions and increased distribution in the 1990s

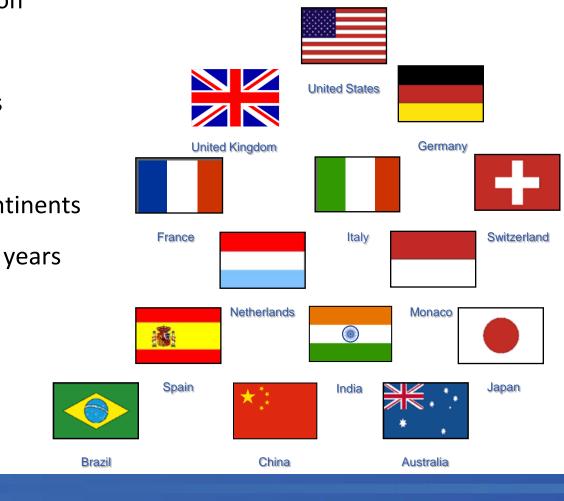- 2000s: Focus on delivering software and services to simplify complex business processes

Cincom today

- Annual revenues of $120 million

- Broad solution portfolio

- Approximately 750 employees

- 24 offices in 16 countries

- Thousands of clients on all continents

- Serving customers for over 40 years

United States

United Kingdom

Germany

France

Italy

Switzerland

Netherlands

Monaco

Spain

India

Japan

Canada

Belgium

Brazil

China

Australia

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Experience counts

- In Top 6 Vendors by revenue for software development tools

- 30+ years of experience in building software development tools

- Over 15 years of experience with object-oriented IDEs

- Market-leading Smalltalk suite Cincom Smalltalk™
  - VisualWorks® 7.7 (descendant of the original Smalltalk-80)
  - ObjectStudio® 8.2

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Enter Cincom WebVelocity™

- Cincom packed all this experience into WebVelocity

- Combining the best-of-breed concepts and frameworks to create an innovative tool to answer Web 2.0 and cloud computing development needs

- Based on Cincom Smalltalk, a highly refined and time-proven object-oriented dynamic execution environment

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What is WebVelocity?

Browser-based development environment for dynamic web applications that:

- Deploys to the Web in or out of the cloud

- Allows rapid application development for database-driven applications

- Has very high productivity, guiding the developer without confining him in a black-box framework

- Produces high-performance, scalable applications
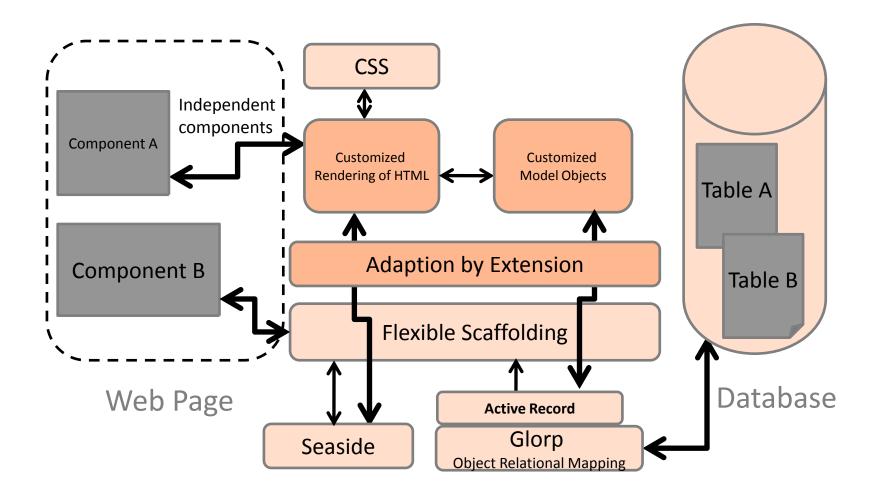
How does WebVelocity work?

- RAD framework stack in the Ruby-on-Rails style with ActiveRecord, scaffolding and multiple database interfaces

- Fully integrated in an innovative Web IDE

- Based on

  Cincom Smalltalk, a mature dynamic development language for web page scripting and full-scale application development

  Seaside, a component model web framework

Web Velocity architecture

Why use WebVelocity? --- Tools

- All-in-one environment with a complete, capable web stack
  - Replaces a complex mix of technologies and tools used elsewhere
  - A single language for all tasks

- Developing and debugging in the target web environment
  - No surprises when deploying locally developed applications

- Start easy and quick, scale up to use the full power of Smalltalk when needed

Why use WebVelocity? --- Innovation

- WebVelocity is written in WebVelocity
  - All sources included and adaptable
  - No black box forcing you to stay on rails
  - A truly open environment

- Seaside translates the web to objects
  - Components instead of web pages
  - True application logic control flow instead of transaction handlers
  - Web development feels like GUI development
  - Full Ajax support, HTML DSL for page description

Why use WebVelocity? --- Productivity

- Get started in minutes
  - Online examples from a growing repository
  - Learn only as much as needed to progress

- Reduce the skill-set and team size required

- Workflow-oriented IDE

- Easy adaptable scaffolding of views without external code generation

- Designed to be adapted and extended

Who can use WebVelocity?

- WebVelocity is multi-platform
  - Windows
  - Mac OSX
  - Linux x86

- Firefox 3 best browser for development

- Mix these platforms for development and deployment

- Your choice!

Where to get more info about WebVelocity?

- www.web-velocity.com
    - Many introductory videos and background information
    - Source of the Lite version!

- Try it out for yourself!

- Install WebVelocity and browse through the extensive online manuals and sample applications that are available on the product and public repository

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WebVelocity @ work

- Ernest Micklei

- OO Software Artist
  - PhilemonWorks.com
  - QNH.nl

Aviation Training School

- Student Administration
  - Distance Learning
  - Day-school

- Question and Exam Administration
  - online tests

- JAR-FCL Exam Training
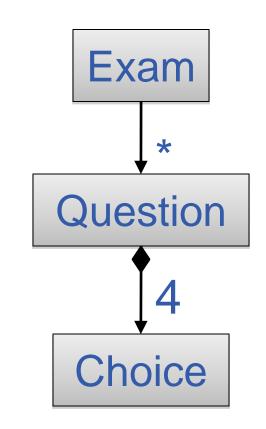 - = Joint Aviation Requirements for Flight Crew Licensing

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Domain classes

- Exam, Question, Choice

- Course, Objective, Subject

- Student, Class, Absence

- Schedule, ExamResults, Report

Exam

*

Question

4

Choice

Technology mix was growing...

- Distance Learning applications
  - file-based XML database
  - Java Web Start SWT-based front-end
  - Java XML-RPC backend
  - Html front-end
  - home-grown presentation framework
    - dynamic SWT widget building
    - generates HTML
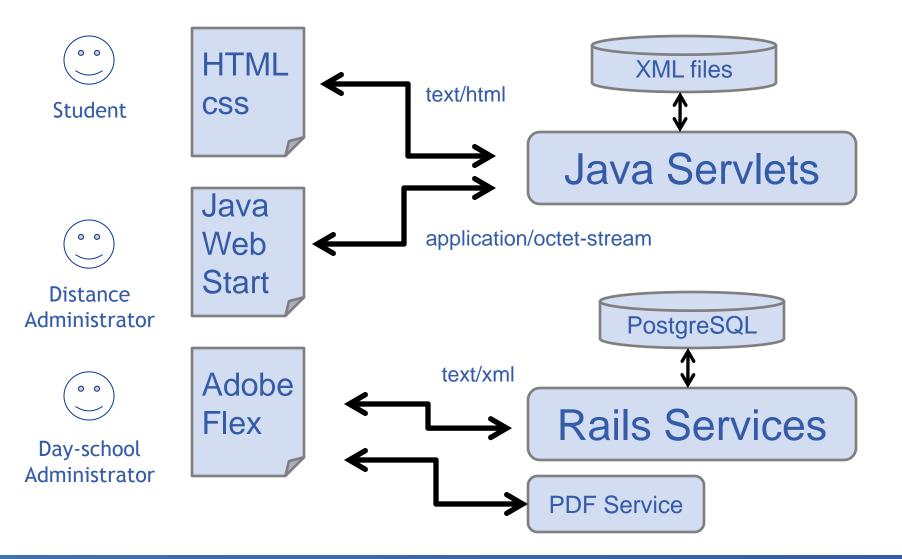
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More technologies

- Day-school administration
  - Adobe Flex front-end
  - Ruby on Rails XML RPC back-end
  - PostgreSQL DB
  - PDF reporting service (servepdf.com)

Past architecture

Student

Distance
Administrator

Day-school
Administrator

HTML
CSS

Java
Web
Start

Adobe
Flex

text/html

application/octet-stream

text/xml

XML files

Java Servlets

PostgreSQL

Rails Services

PDF Service

Challenges

- Maintenance

- No shared domain model

- No shared database

- Home-grown framework legacy
    - limits innovation

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Simplify

- Two front-end technologies
  - HTML for online exam training
  - Flex for administration

- One back-end technology
  - WebVelocity
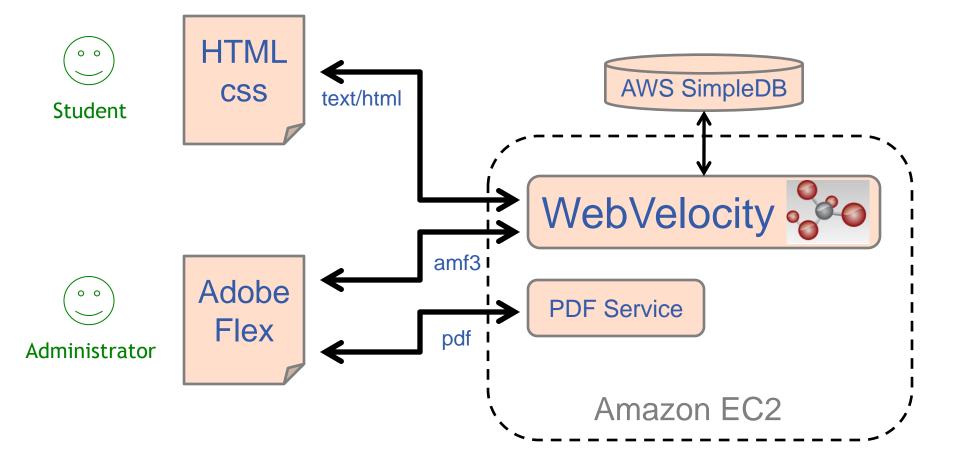
- One shared database
  - Amazon SimpleDB or Postgres

New architecture

Student

HTML CSS

text/html

Administrator

Adobe Flex

amf3

WebVelocity

AWS SimpleDB

PDF Service

pdf

Amazon EC2

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WebVelocity provides…

- … powerful Smalltalk language implementation

- … integrated development environment

- Glorp : object-relational mapping framework
  - ▪ open-source

- Seaside : component-based Web framework
  - ▪ open-source

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Extending WebVelocity

- Glare DS
  - Adobe Flex Data Services for Smalltalk
  - open-source

- Cloudfork
  - Amazon Web Services clients
  - open-source

- Cincom Public Repository access

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Working with WebVelocity

Show, don't tell !!!

Experience

- All-in-one IDE

- Easy deployment => frequent updates

- Browser-based code editing => iterative development

- No templating system, just Smalltalk

- Easy to develop & debug services for Flex client

- Shared model allow administration in single app

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Q & A

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