# Competitiveness - com Building Competitive Business Clusters

# Building ArsDigita Portals #3

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#### Content

- Recap: ACS Architecture
  - Reliable Web Services
  - AOLServer
  - AOLServer against Apache
  - ACS Application Architecture
- How To Build Your Portal
  - Define the Project
  - Setup an ACS Server
  - Build a First ACS Portal
  - What Went Wrong?
  - Form Your Community
  - Build Custom Modules
  - Make Money

6. Structuring Techniques

Questions:

- How are large applications structured?
- How to avoid duplicated code?

#### Answer:

- Methods & Procedures
- Objects, Classes & Modules
- Class Models & Data Models
- Patterns

#### **Structuring Techniques**

#### Java

- Object/Classes/Methods
- Patterns: help to arrange larger functionalities
- Java Beans
- Modules consist of 1 or more classes
- The data model is hidden from the implementation by the persistence layer

#### **ArsDigita**

- Pages serve as "methods"
- Objects reside in the database
- Common functionality is "factored out" to TCL procedures
- The data model is in the center of the application

- 7. Development Methodology
- How to organize large projects?
- How to avoid that very "clever" guys make the same mistakes over and over again?



Java Against ArsDigita Development

#### Java

- Write Use Cases using UML
- Identify Components to be implemented using Java Beans
- Make your system design using Patterns
- Create a Class Model using Class Diagrams
- Create a Data Model from the Class Model
- Define important Methods for each Class using Collaboration Diagrams

#### **ArsDigita**

- Write Use Cases with or without UML
- Identify Components to be implemented using Procedures

Create a Data Model

**Application Design** 

- GUI and User Interaction
- Data Model / Object Model
- Business Logic
- Architecture



#### **GUI** Development

#### ACS

- Focus on page flow
- Implemented as a "Wemo" using static HTML

#### Java

- Focus on Forms and interactive elements in those forms
- Implemented using RAD (Visual Basic, Visual Age for Java, ...)

**Object/Data Model** 

#### ACS

- Object reside in the database
- The Data Model corresponds to the Object Model

#### Java

- Object model using UML Class
  Diagrams
- Data model using ERP modeler
- Integration using a persistence module/manager



Business Logic

#### ACS

 Business Logic integrated into TCL Pages

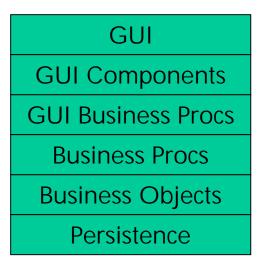
#### Java

 Separation of Business logic into a separate layer



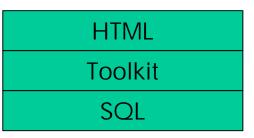
Java Against ACS Layer Cake

# OO (Java)



Data Model

# ACS



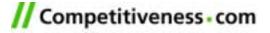
#### Data Model

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#### 8. How To Build Your Portal?

# How to Build Your Portal?

- Define the Project
- Setup an ACS Server
- Build a First ACS Portal
- What Went Wrong?
- Form Your Community
- Build Custom Modules
- Make Money



Define the Project

# Driving School Portal Case Study

- Idea
- Target Group
- Why Join the Portal?
- Additional Contents
- Which ACS Modules?
- Marketing
- Make Money



Setup an ACS Server

# What to do?

- 1. Learn some Linux
- 2. Learn TCL
- 3. Learn SQL
- 4. Get a Linux server
- 5. Install ArsDigita
- 6. Install Oracle

# How to do?

- Install Linux at home
- ACS problem set 1
- ACS problem sets 1 & 2
- PC with 128MByte RAM
- Read online doku
- Read online doku

Get together with some friends who have done it already

**Build a First ACS Portal** 

- 1. Get an idea of what you want to build
- 2. Define a web design
- 3. Configure some existing modules
- 4. Make some small changes to the modules
- 5. See why nobody is using your portal
- 6. GOTO 1

or continue with next slide

What Went Wrong?

- "Empty bar effect": Nobody likes to enter an empty bar":
  - Create artificial "noise"
  - Ask your friends to participate
  - Actively form your community
- "This is not my bar effect": Nobody likes to enter a bar which is not his/her background
  - Check that application modules 100% fit your needs
  - Analyze in detail user behavior (ask your girlfriend/boyfriend)
  - Build custom modules

Form Your Community

# What to do?

# 1. Setup an initial community

2. Make people stay in your portal

# How to do?

Tell your friends to participate

- Get killer content
- Design apps for people to stay
- Make "Strategic Partnerships"
- Import contents from other sites
- 3. Attract/maintain users
- Assure high quality/usability
- Remove old/bad contents

**Build Custom Modules** 

- 1. Get an idea of what you want to build
- 2. Define a web design
- 3. Make a "Wemo" (=Workflow Demo) for new modules
  - Present the Wemo to friends & family.
  - The Wemo will save a lot of time during development.
- 4. Configure some exiting modules
- 5. Make an interaction model
- 6. Make a data model.
- 7. Write the TCL pages
- 8. Test the system together with some friends
- See why nobody is using your portal 10.GOTO 1

Make Money

- Making money with a portal today is nearly impossible.
- You can try to sell your portals to people who still believe they can make money...

#### 9. Related Literature

- Ars Digita: <u>http://www.arsdigita.com/</u>
- TCCG: <u>http://www.competitiveness.com/</u>
- ACS Documentation:

http://www.arsdigita.com/doc/

• The Online Bible:

http://www.arsdigita.com/books/panda/