



ESSENTIALS OF Management Information Systems

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Chapter 11 Building Information Systems and Managing Projects

Case 2: The History of Bus Proc Reengineering (BPR)

Tags: Appcelerator; rapid application development; open source; service oriented architecture; SOA; rich Internet.

Summary


Appcelerator is a rapid application development environment. It is an application platform that lets you build rich Internet applications and integrates into your existing service oriented architecture (SOA) environment. The front and the back end development uses standard technology like HTML (front end) and Java, .NET, PHP and others (back end). The idea is to let you quickly build online Web applications by quickly building prototypes, getting user involvement and participation, and delivering completed products inexpensively, on time, and on budget. L= 3:59

URL: <http://www.youtube.com/watch?v=AOfwnFSWbwM>



Case

"Rapid Application Development (RAD) is a methodology that involves iterative development and the construction of prototypes. More recently, the term and its acronym have come to be used in a broader, generic sense that encompasses a variety of techniques aimed at speeding application development, such as the use of Web application frameworks, open source tools, Web services that can be quickly integrated



to your application, widgets (Web applications), and other types of software frameworks.

RAD developed over a twenty year period as a response to the traditional systems analysis and design life cycle approach (often called the "waterfall" approach) which could be agonizingly slow to develop applications, led to long backlogs at IT departments, and often resulted in systems that were old before they were implemented, or the solved problems that had already been by-passed or forgotten.

The idea behind RAD is to develop prototypes quickly, work with users iteratively to refine the prototypes, use common tools and environments to quickly implement the solution. Using structured techniques the developer first builds preliminary data models and business process models of the business requirements.

Prototyping then helps the analyst and users to verify those requirements, and to formally refine the data and process models. The cycle of models, then prototypes, then models, then prototypes and so forth ultimately results in a combined business requirements and technical design statement that is used for constructing new systems."

Today this approach is much more easily implemented with the emergence of the Internet, Web services and software available online including widgets and other functionalities, and the evolution of common Internet tools like Java, PHP, Linux, and SQL.


Appcelerator is an open source RAD platform for building rich web applications. There are many rapid application development tools provided by the major vendors like IBM, Oracle, and Microsoft. But the major vendors provide proprietary tools which may be incompatible with your firm's architecture and applications. Appcelerator is different because it is an open source RAD platform.

"Appcelerator, Inc. is a Silicon Valley venture funded company located in Mountain View, California. Appcelerator was started in 2006 by software veterans Jeff Haynie and Nolan Wright. Haynie and Wright set out to make building rich Web applications faster and cheaper by using a better set of technologies, a new architecture called Service Oriented UIs (or SOUI), and an agile methodology for rapid prototyping called Interactive Use Cases.

Appcelerator's flagship product is called the Appcelerator Platform. The Appcelerator Platform consists of a software development kit (SDK) for building rich web applications and is completely open source. The Appcelerator Developer Community has thousands of developers and numerous open source contributors from around the world.

The key attributes of Appcelerator according to the company are:

- Agile: Build prototypes without any throwaway code
- Adaptive: Easily extend Appcelerator to meet the specific needs of your applications
- Simple: Use declarative Ajax or event driven Javascript
- Integrated: Native support for 6 server-side programming languages and several popular frameworks

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- Modern: Message-oriented client/server architecture
 - Visual: UI themes, layouts and controls. Make your UI look beautiful."

Resources: Appcelerator.org; Wikipedia; CIO.com.

Case Study Questions

1. What are "rich Internet applications" and why are they important today?
2. How can Appcelerator speed up the application development process?
3. Why is it important that Appcelerator is an "open source" tool?
4. List several commercial applications mentioned in the video and describe why these would be useful applications of these application development tools.
5. How well would the applications developed by Appcelerator fit in with a firm's existing software architecture?

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