Open Source:
A Key Ingredient for Successful Software Companies

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Agenda

- Background: Actuate Corporation and Open Source
- Open Source Product and Commercialization Strategies
- Actuate and Open Source: An Evolving Strategy
- An Open Source Product Strategy Checklist
- Challenges to Consider
- Conclusions (So Far)
# Actuate Corporation

<table>
<thead>
<tr>
<th>Headquarters</th>
<th>South San Francisco, California</th>
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</thead>
</table>
| Offices            | Regional HQs: London, Singapore, Tokyo, Toronto  
                    | R&D: South San Francisco, Kansas City, Shanghai, Toronto |
| Employees          | 600+ worldwide |
| Founded            | December 1993 |
| Financial Strength | $118 million in revenues (ttm)  
                    | Profitable, strong cash balance and no debt |
| Traded as          | ACTU on NASDAQ since July 1998 |
| Customers          | Over 3,500 customers globally – Primarily in Global 9000 organizations  
                    | Top-tier accounts in banking, insurance, securities, government, high tech, pharmaceuticals, health care and telecom |
| Services           | Design, consulting, development, integration, training, support |

## Partners

- Eclipse
- IBM
- SAP
- Oracle
Actuate Business Intelligence Products

**e.Report Technology**
- Pixel-perfect, brochure quality reports

**e.Spreadsheet Technology**
- Automated generation of Excel spreadsheets

**BIRT/BusinessReports Technology**
- Web reporting and ad hoc reporting for business users

**Analytics Technology**
- Interactive exploration and analysis of data

**Deployment**

**iServer**
- Highly scalable content generation, distribution and management
- Fully clustered and highly available
What Is Eclipse?

- Eclipse, **the organization**, is an open source community of 18 Strategic Members, 100+ Add-in Providers and 15+ Associate Members focused on developing a universal platform of frameworks and exemplary tools that make it easy and cost-effective to build and deploy software in today’s connected and unconnected world.

- Eclipse, **the technology**, is the market leading Integrated Development Environment (IDE) used by Java developers, and, increasingly, as the underlying platform for a diverse range of tools aimed at all classes of users.
Business Intelligence and Reporting Tools

BIRT Project Goals

- Next generation reporting technology
- Web centric design metaphor
- Open source and extensible
- XML report design format
- Foundation for commercial products
- Build community and ecosystem

BIRT Project Committers

- Actuate (http://www.actuate.com)
- Innovent Solutions (http://www.innoventolutions.com)
- IBM (http://www.ibm.com)
- InetSoft (http://www.inetsoft.com)
Possible Open Source Product Strategies

<table>
<thead>
<tr>
<th>Consulting</th>
<th>Support for Open Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Platform Support</td>
<td>Cost Reduction Using Open Source</td>
</tr>
<tr>
<td>Bundling</td>
<td>Open Source Development</td>
</tr>
<tr>
<td>Application Service Provider</td>
<td></td>
</tr>
<tr>
<td>Embedding</td>
<td></td>
</tr>
<tr>
<td>Contribution and Patronage</td>
<td></td>
</tr>
<tr>
<td>Open Source Products</td>
<td></td>
</tr>
<tr>
<td>Value Added Features/Products</td>
<td></td>
</tr>
</tbody>
</table>
Support for Open Source

- Consulting Services
  - Helping organizations leverage open source technology

- Open Source platform support
  - Ensuring your software works with open source platforms
  - Platforms chosen typically driven by market demands
  - Example platforms:
    - Linux
    - Apache
    - JBoss
    - Eclipse
  - You don’t actually produce any open source software
Cost Reduction Using Open Source

- **Bundling**
  - Reduce your customer’s licensing cost using open source
  - Make your overall solution cost lower to customers
  - Package open source versions of required technology

- **Application Service Providers**
  - Reduce your licensing cost using open source
  - Build ASP infrastructure using open source components

- **Embedding**
  - Leverage open source products in your product
  - Don’t reinvent the wheel if you don’t have to
  - Refactor using open source to reduce maintenance cost
Open Source Development

- **Contribution and Patronage**
  - Contribute to open source projects to support related commercial strategy. Examples:
    - Build momentum around a standard you support
    - Provide patches and features to technology you use

- **Open Source Products**
  - Develop and distribute technology via open source
  - Seeding strategy for complementary commercial products
  - Generate market for support, training and other services

- **Value Added Features/Products**
  - Develop commercial features/products that complement and/or extend open source products
  - Generate license revenue from commercial products
Direct Monetization in an Open Source World

- **Support and Services**
  - Generate revenue from support, training, certification and/or consulting
  - Leverage your expertise as sponsor/contributor to the project

- **Voluntary Donations**
  - “If you like this product, please support its development via PayPal…”
  - Typically only used in consumer-oriented projects

- **Dual license**
  - License open source code with some restrictions
  - Provide a commercial license without these restrictions
  - But… open source license cannot be too restrictive, or adoption will fail

- **Products that extend or complement open source products**
  - Commercially licensed products
  - Strategy may assume a relatively small % of users will purchase these

- **“Exit Strategy”**
  - Technology fits into a wider market that may interest other vendors
  - Revenue comes from acquisition of technology (and user base)
Actuate & Open Source: An Evolving Strategy

- Support for Apache HTTP Server
- Support for Tomcat Server
- Support for Redhat and SUSE Linux Servers
- Embed Apache Tomcat Server in iServer
- Build *Information Object Designer* on Eclipse platform
- Propose and launch BIRT Project in Eclipse Foundation
- Support programs and commercial derivative of BIRT
- Release additional commercial products based on BIRT
An Open Source Product Strategy Checklist

- Clearly understand and articulate the business problem
- Develop open source product strategy proposal
- Get buy in from Executive Management
- Build alignment beyond the development organization
- Understand the processes and governance model in your community
- Start the development process within Engineering
- Develop plan and dedicate resources to work with the community
- Evangelize project to grow community and attract additional committers
- Marketing activities for complementary commercial products/services

For Actuate, this was an iterative and phased process
What Business Problem Needed Solving?

Circa 2004, existing products were strong...

- Industry leader in handling complex, pixel-perfect reports
- Rich environment with 10+ years of investment

But...

- Java developers needed reporting technology for easy integration into applications
- Improved ease-of-use needed for broader appeal to report developers
- Needed a baseline technology for new offerings in other product areas
Actuate Open Source Strategy

**Product Development Strategy:**
- High value technology that addresses Java reporting needs
- Ground up initiative targeting Java Developers
- Establish the open, standards based reporting technology of choice

**Go To Market Strategy:**
- Develop a new community of reporting users: Expand the market
- Leverage open source distribution
- Commercial friendly open source license

**Commercialization Strategy:**
- Offer indemnification and support offerings around open source
- Develop complementary products that will interest developers
- Use technology as basis for additional products
Why Open Source?

**Answer: Adoption, Adoption, Adoption**

- **Commercial**
- **Open Source**

Commercial Opportunity

New Community of Reporting Users
(Corporations, ISVs, other Open Source Projects, …)

The Wider the Community, the better
Open Source Projects

- Possible approaches:
  - Contribute to an existing project as part of the Community
  - Contribute to an existing project as a Committer
  - Propose, create and lead a new project

- Existing open source initiatives and distribution channels…
  - Sourceforge.net (approximately 82,000 projects)
  - Freshmeat.net (approximately 41,000 projects)
  - Eclipse.org
  - Apache.org
  - …

- Or create your own distribution channel/community

- Actuate open source initiative targets Java Developers
- Made sense to approach Eclipse Foundation with project proposal
Licensing and Intellectual Property

Open Source Licensing Choice is Critical

- To develop and grow a community, the right license is required
  - Is the license good for IT organizations?
  - Is the license good for ISVs?
  - Is the license good for extending the technology?
- If strategy is purely “Dual License”, then the question is harder
  - An open source license that is too restrictive limits adoption
  - An open source license that is too open limits revenue opportunity
- For Actuate, our strategy naturally led us to Eclipse Public License

What to Open Source, What Not to Open Source?

- Open Source, but not useful, will not get traction
- Open Source, but needs your deployment, will not get traction
Getting Buy-In: Convincing Executive Staff

- Successful open source strategies involve multiple business units
- Management need to buy-in to strategy and commit resources

- Actuate held a series of executive planning meetings in mid-2004
- Multi-year product/open source plan presented and discussed
- Included market growth opportunity and monetization estimates
Getting Buy-In: Existing Revenue

- Some revenue came from older Java based reporting technology
- Open source reporting initiative would eliminate this over time

- Internal proposal included this factor in overall strategy
- Executive staff determined net benefit would outweigh this downside
Alignment Beyond Development Organization

- Presentations to each organization on open source strategy

- Customer Support
  - Develop new support programs for open source initiative
  - Appropriate support programs for non-enterprise customers

- Marketing
  - Increase marketing reach into java development communities
  - More self-service marketing initiatives
  - New web site content, data sheets, etc.

- Sales
  - Organization beyond traditional direct sales representatives
  - Increased channel development
Open Source Processes and Governance

- Understanding the processes, governance and infrastructure
  - Varies depending on the open source initiative you participate in

- Significant time required…
  - To understand the processes
  - And to work with the processes

- Easier if the open source initiative provides a mentoring approach
Development

- Dedicated significant resources to work on the project
- Ground up initiative – we did not open source existing code
- Aggressive development plan to quickly build momentum
  - Feb 2005 – BIRT 1.0 Preview
  - Jun 2005 – BIRT 1.0
  - Jan 2006 – BIRT 2.0
  - Jun 2006 – BIRT 2.1
- Primary development resources were Actuate funded initially
- Contributors now include Innovent Solutions, IBM, and InetSoft
Product Development Strategy

- Provides real value for Java application developers
- Technology should be appealing to application developers
  - Meets requirements for reporting in an application
  - Integrates well with Java applications
  - Ease of use for Java application developers
  - Familiar Eclipse IDE for developers
- Extremely easy to download, install and get started
- Popularize report development technology
  - Ensure skilled report developers are easy to find
  - Make BIRT a safe decision for developer/project leads
- Strategy includes complementary Enterprise products
## BIRT: Feature Rich Open Source Technology

**Open Source BIRT Report 2.0 New Features**
- Enhanced chart interactivity and scripting
- New chart marker, scale and legend control
- Additional Y-axis support in charts
- Percentage Pie chart type
- Central location for resource files
- Hyperlinks to Table of Contents entries
- Automatic parameter discovery for hyperlink
- Connection pooling for JDBC data sources
- Multiple Master page support
- Improved usability in parameter management
- Cascading parameters with multiple sources
- Ability to JOIN datasets in BIRT
- Advanced control on data bindings
- More page break and heading control
- Connection profile support

**Open Source BIRT Report 2.1 New Features**
- Table of Contents Support in Viewer UI
- Chart Interactivity at View Time in Reports
- Ability to Export Report Data as CSV
- Data Extraction from a Report
- Table of Contents API Support in Engine
- Top N / Bottom N Report Layout
- Multi-pass Aggregate, Sorting and Filtering Support
- Hyperlinks to Other Reports
- Multi-page Reports
- Persistent Storage of Report Output
- Basic XML as a Data Source
- Improvements to Chart components
- Provide Methods for Controlling Chart Behavior
- Provide support for Displaying CLOB (Text) Data from Database
- Provide support for Displaying BLOB (Image) Data from Database
- Bookmarks (Hyperlinks into a Report Body)
- Expanded JavaScript Support
- New and improved chart types
- Controlled/bounded use of System Memory
- Disk-Based Sorting and Data Manipulation
- Page-on-Demand Report Viewing APIs
- Cache Query Results while Developing
- Page-on-Demand Navigation UI/UI Framework
- Concurrent User Scalability for large numbers of Active Users
- Improve PDF Output Generation
- Dynamic Parameter List Support
- Cascading Dynamic Parameter Lists
- Chart Builder/Wizard
- Ability to use Property Editor for Chart Elements
- New Expression Builder for Improved Usability
- Syntax color coding in Expression Builder
- Auto-complete in Expression Builder
- Custom Template Support for New Reports
- Enhance Report Object Model API for Ease of Use
- Improvements to Chart Engine API
- Improve and Publish Chart Model
- Library Support for Reusable Report Items and Objects
- External Style Sheets for Use Across Multiple Report Designs
- Enhanced chart interactivity and scripting
- Support data set output parameters
- Move ODA Runtime Extension Point and Java Interfaces to DTP
- Provide plug-in Adapter for BIRT ODA Drivers to DTP ODA

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The Open Source Community

- Successful communities do not happen automatically
  - All strong communities have enthusiastic and active supporters

- Community needs infrastructure to communicate and interact
  - Web site for downloading project and accessing information
  - Forums or Newsgroups for discussions
  - Wikis for easy content creation and management

- BIRT project leverages Eclipse.org infrastructure
- Dedicated resources working with and supporting the community
  - The “Evangelism” role
  - Actively monitor and respond to forums
  - Create “How To” and tutorial content for web site
  - Work with and write articles for 3rd party publications and web sites
Marketing for Commercial Products/Services

- Generate awareness for complementary Actuate products
- Combination of traditional and evangelism marketing techniques

Commercial Marketing

Management, Project Leads

Opportunities

Open Source Evangelism

Open Source BIRT Community (Developers)
Ongoing: Detailed Plan and Rollout

- Additional effort required since it is not “business as usual”
  - Managing and driving change generated by open source initiative

- Continued collaboration with other organizations within Actuate
  - Refining Support Plans and offerings
  - Refining Pricing models
  - Working on marketing messaging and positioning
  - …

- A successful strategy needs participation at all levels
- Do not underestimate the ongoing effort required
Challenges To Consider

- Organization needs to be prepared to commit the right resources
  - Development resource for the code
  - Evangelism resources for the project
  - Supporting resources from marketing/support/services/sales
- Ensure key players know why you are doing open source
- Have a clear strategy for what features you will/will not open source
- Don’t underestimate time to understand processes and governance
- Promoting and getting visibility for your open source initiative
- Growing the community with additional Committers
  - May need to build momentum before others will join project
- Measuring traction: How do you know it is working?
  - Downloads; Blog postings; Newsgroup postings; Bugs submitted; …?
- Marketing to open source users: Who is using the product?
Conclusions (So Far)

- Enterprise Software companies can embrace an Open Source product strategy
- Eclipse BIRT project is gaining momentum
  - Excellent technology
  - Active and growing community
- Actuate 9 (Sept ’06) adds complementary products
- Strong Actuate 9 adoption expected in 2007

"From my research, BIRT is a really big deal, it has legitimate traction in the market."

Stephen O’Grady, RedMonk