



IBM Software Group

# Integrating Open Source into Your Business

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**ON** DEMAND BUSINESS™

# Agenda

- Understanding the Open Source Ecosystem
- 
- Customer benefits and challenges of Open Source
- 
- IBM and Open Source
- 
- How to integrate Open Source into your business



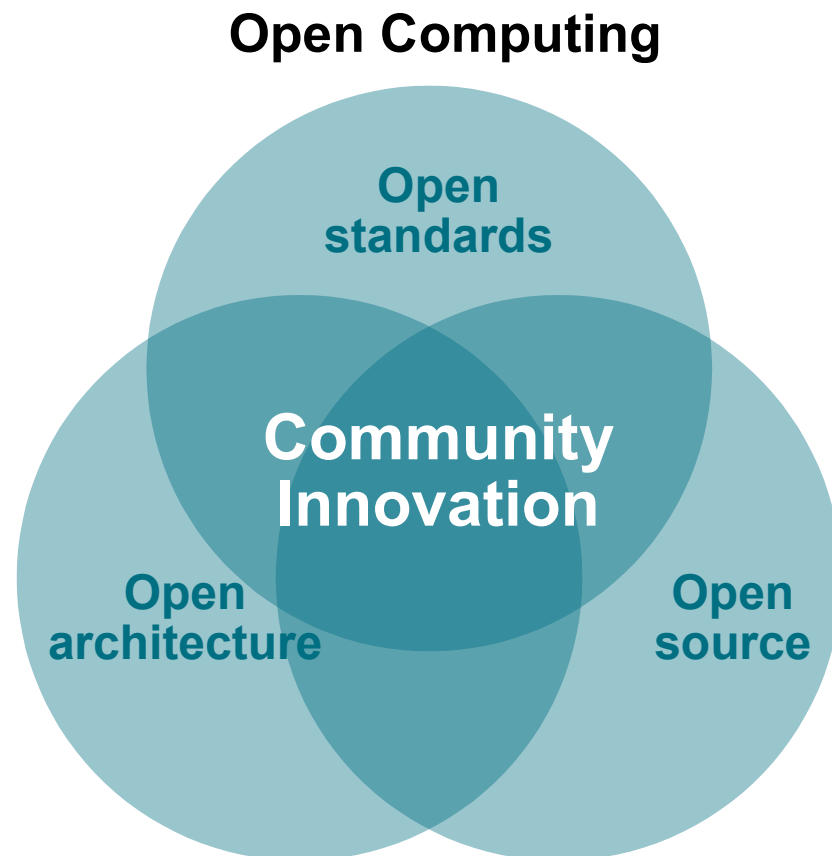
# Community Innovation is key to Open Source

- Community-driven approach to problem solving
- People working across geographical and organizational boundaries to confront today's most pressing challenges
- Enabled by:
  - Open standards
  - New intellectual property practices
  - The Internet and collaborative tools
- It unites perspectives from a host of disciplines to:
  - Rapidly solve business issues
  - Accelerate technological advancements
  - Stimulate economic growth
  - Enable new business models



# Open Source is part of Open Computing

- **Open standards**
  - Improving information sharing by simplifying integration of disparate technologies
  - Promoting interoperability by using open published specifications
- **Open architecture**
  - Increasing collaboration by easily extending business processes – eg SOA
  - Innovating on top of common hardware specifications
- **Open source**
  - Promoting innovation by leveraging community development
  - Accelerating open standards adoption



# Open Computing is critical for Businesses

**Rapid Business Change  
Virtual Enterprises  
Globalization**

**ACQUISITION**

**Flexibility**

**OPEN COMPUTING**

**Resilience**

**DEPLOYMENT**

**Networked Topologies  
Heterogeneous Systems  
Complex Infrastructures**



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# Customers see benefits and challenges in open source

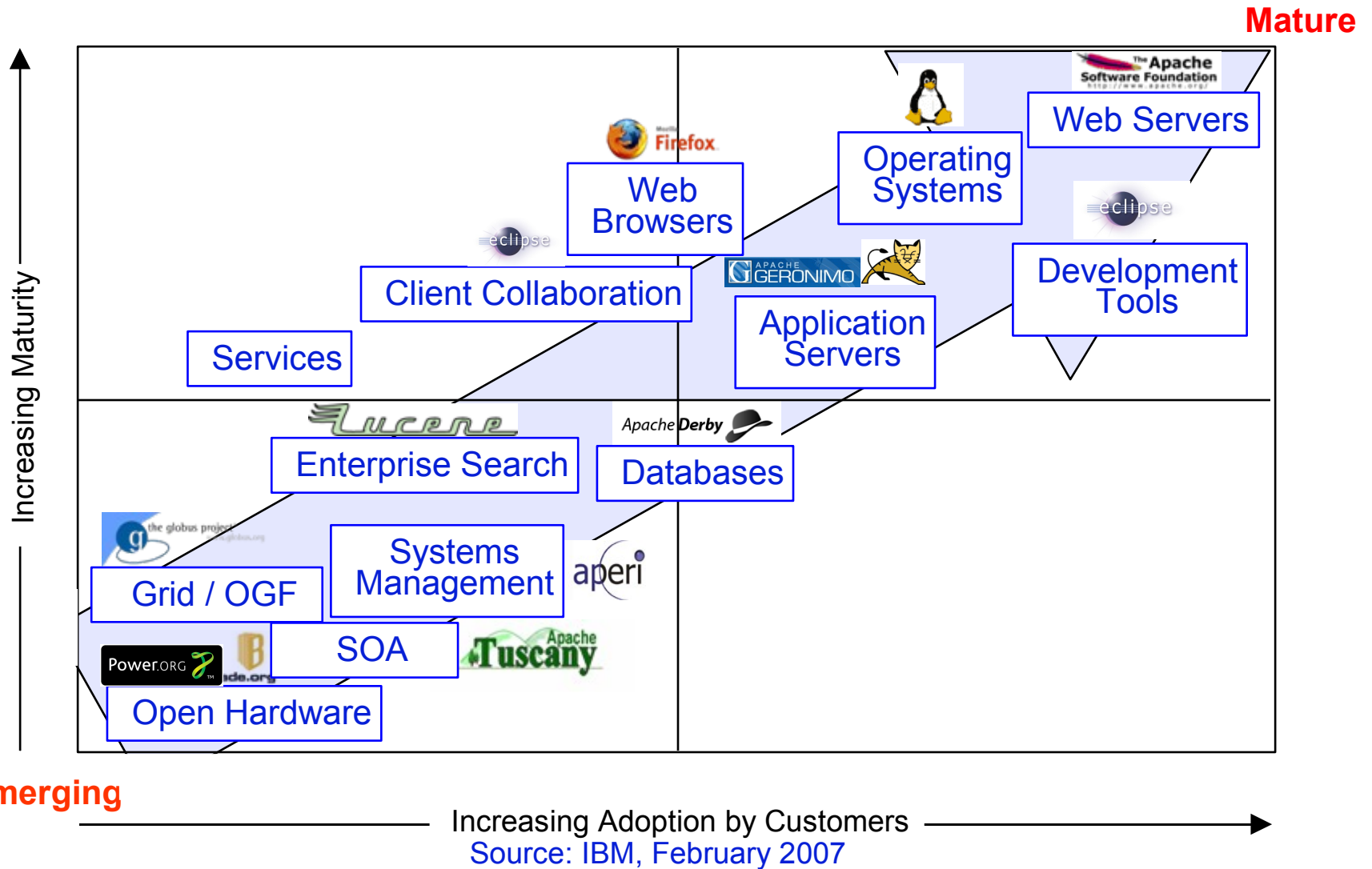
## Potential Customer Benefits

- **Choice and Flexibility**
  - Hardware portability and software flexibility
  - Modularity and extensibility
  - Range of support options
- **Low acquisition cost**
- **Frictionless access to software**
  - Light weight and easy to use
  - Rapid prototyping
- **Quality of software**
  - Peer review of source code
  - Broad community testing
  - Fast cycle time of releases and bug fixes
- **Community innovation**
  - Opportunity for interaction with developers
  - Open user community support and features
  - Harvest commoditized components and use freed-up resources for innovation

## Potential Customer Challenges

- **Support**
- **Integration**
  - with other open source software
  - with commercial software
- **Skills**
- **Availability of applications**
- **Maturity**
  - Enterprise requirements gap (Functionality / Scalability)
  - Community / Industry support
  - Sustainability of business model
- **Too many choices**

# Open Source Maturity and Customer Adoption



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# IBM contributions to Open Source go back 8+ years



## 1999 - 2001

- IBM forms Linux Technology Center
- Leads Apache projects Xerces (XML4J), Xalan, SOAP
- Creates OSI-approved IBM Public License
- Strategic participation in Mozilla
- IBM becomes founding member of OSDL
- Founder of Eclipse.org and Eclipse Consortium
- Creates internal bazaar using OSS methodology

## 2002 - 2003

- Linux contributions to scalability (8-way+), reliability (stress testing, defect mgmt, doc)
- Leads Apache projects: Web Services (WSIF and WSIL), Pluto (Portlet API) and WSRP4J (Remote Portal)
- Leads Eclipse projects GEF (editing), EMF (modeling), XSD (XML Schema), Hyades (testing), Visual Editor, AspectJ, Equinox rich client
- Globus Toolkit contributions for OGSA, OGSi

## 2004-2005

- IBM and Novell/SUSE achieve security milestone (EAL4+ and COE compliance)
- Eclipse becomes independent as *Eclipse Foundation, Inc.* – IBM contributes UML2, Voice Tools, *Aperi*, *COSMOS*, *Ajax Tools Platform*
- Globus Toolkit 4 is WS-I compliant
- Pledged 500 patents to open source
- Partner with Zend PHP
- IBM enhances Apache partnership
  - Contributes Derby database
  - Helps Derby graduate from incubation
  - Contributes voice recognition
  - Supports Geronimo J2EE project
  - Acquires Gluecode for skills

## 2006-2007

- IBM contributes accessibility code to Firefox
- IBM becomes founding member of Eclipse Aperi project
- Leads Open AJAX initiative
- Leads Apache Tuscany project and Pecl PHP SOA for SOA
- IBM donates code for user-centric security management to Eclipse Higgins
- IBM donates code for medical record management to Eclipse Open Healthcare Framework (OHF)
- IBM announces support for Eclipse.org version of Eclipse
- IBM contributes to Apache Lucene project and announces OmniFind Yahoo! Edition

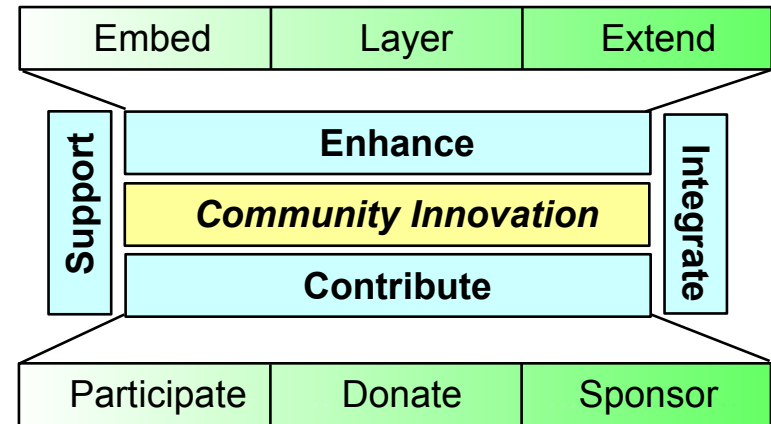
**More than 1000 IBM developers involved in OSS projects**

**IBM leads 80+ OSS projects**

**IBM contributes to 150+ OSS projects**

# IBM's Open Source Goals

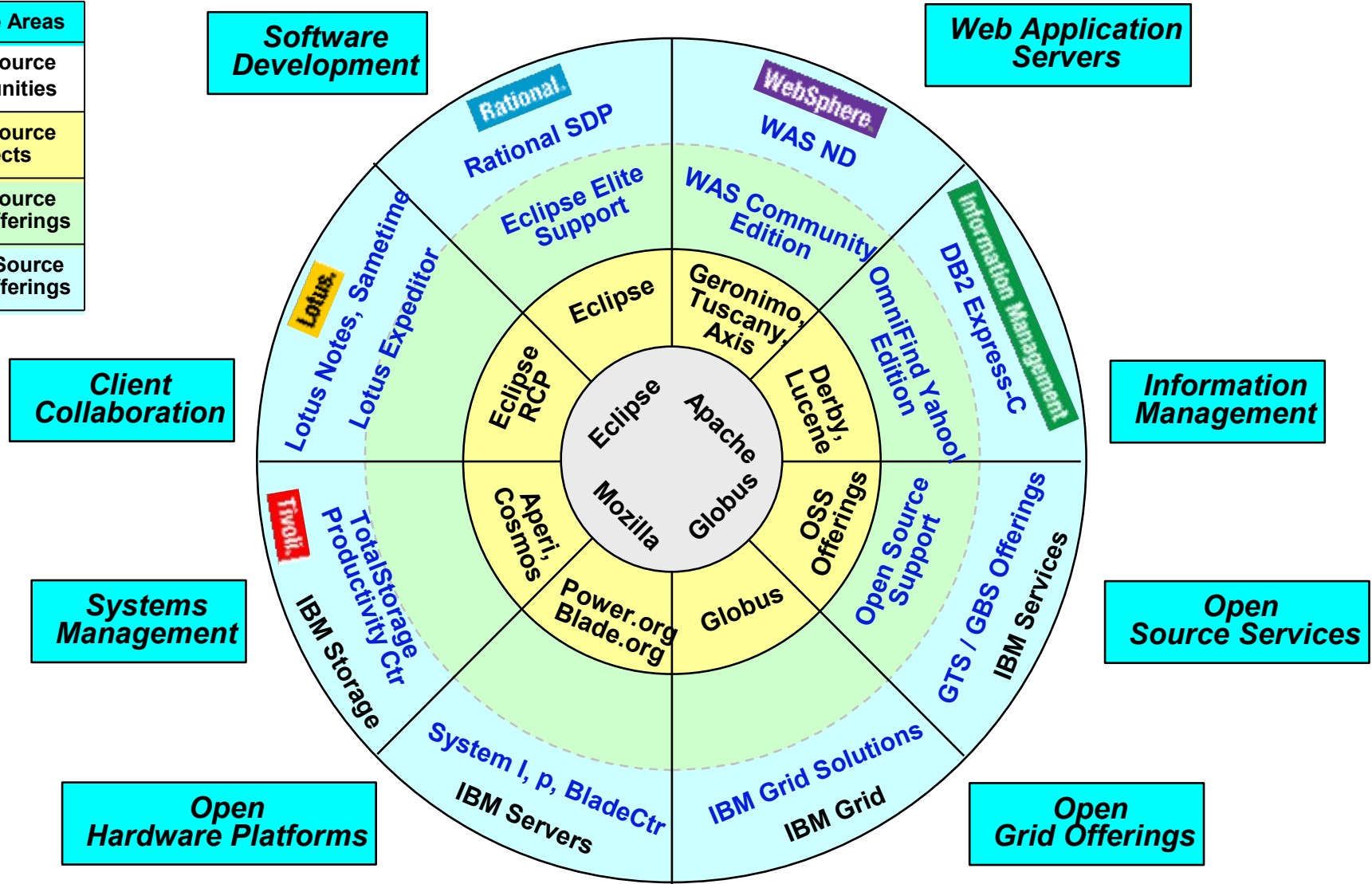
1. **Innovation:** Harness and fuel the energy and innovation of open source communities
2. **Contribution:** Become a strategic player in open source communities, both as a contributor and consumer of technology
3. **Enhancement:** Capture, focus and translate open source innovation into value for our customers
4. **Growth:** Leverage open source to gain new users, enter new markets, and expand business opportunities





# Open Source Beyond Linux

<b>Initiative Areas</b>
Open Source Communities
Open Source Projects
Open Source based Offerings
Private Source based Offerings



# Building repeatable open “stacks”: Novell’s Integrated Stack for Suse Linux Enterprise on IBM Systems

IBM and Novell offer a low cost solution for SMB and departmental customers. Novell's Integrated Stack for Suse Linux Enterprise (ISSLE) on System x targets file/print and web application and database workloads and is simple to plug into a Windows customer environment.

- Web Application / Database: Built on SLES10 with pre-integrated WAS CE, DB2 Express-C, and PHP on a single install DVD. Comes w/ 1 year of Centeris Likewise for integrating and managing Linux in Windows environments.



Web App Database OS+SW	Community Support		Commercial Support*	
	ISSLE	Microsoft	ISSLE	Microsoft
1 Server	349	16,791	13,867	20,990
5 Server Cluster			69,335	104,950

- File / Print stack with Centeris Likewise for Active Directory & Mgmt integration

File / Print OS + SW	Community Support		Commercial Support*	
	ISSLE	Microsoft	ISSLE	Microsoft
1 Server	349	4,793	869	5,992
5 Servers	1,745	23,965	4,345	29,960

\* License and support pricing based on 100 users, 2 CPU, and 4GB of RAM.

System x server costs are not included. For additional product information, commercial support options, and how to buy go to [www.novell.com/ibmstack](http://www.novell.com/ibmstack)



# Services and Consulting

## IBM Global Services

**Open  
Source Services**

### The Open Source Market is Evolving Rapidly

- Most mature open source packages are available in the infrastructure and tooling space
- Business Solutions are moving toward a mix of open source and traditional components
- Choice is now expanded beyond "build or buy" into the potential for acquiring Open Source components as well as "build/buy/share"
- As a Services business, IBM will continue to serve meet the needs of its clients during this evolution

### IBM Services will continue to augment its portfolio of offerings and consulting services

- Strong base of Linux capabilities on which to build
- Recognition of need for "buy/build/share" decision driven by business value
- Design and implement hybrid environments that deliver the most effective solutions
- Design and implementation services support the hybrid environment
- Support services include open source and proprietary traditional software

### Leverage the Open Source Community Model to help drive future innovation

- Encourage like-minded companies within an industry to collaborate on development of common business functionality
- Share a common development method and open standards
- Utilize a common value-based approach supported by IBM and partner

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# Key Customer IT Questions and Open Source

## How can IT help our business succeed ?

- Solve our problems today
- Grow in the future
- Integrate across and outside the company
- Respond quickly to opportunities and threats



## How can we improve our IT infrastructure ?

- Better – more reliable, more secure
- Faster – better price/performance
- Lower cost – more efficient, lower TCO
- More flexible – easier to integrate



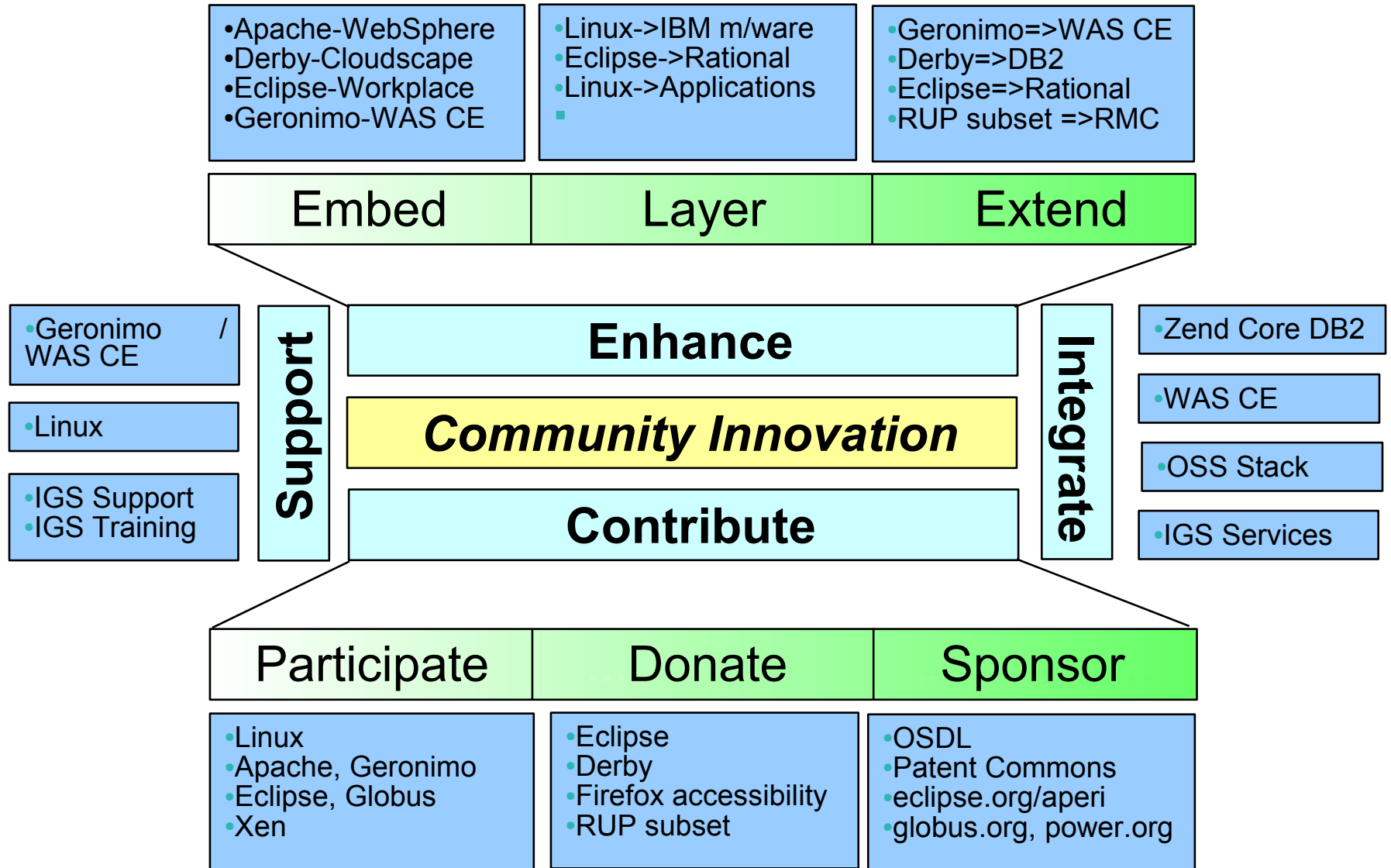
## Should we use Open Source software ?

- When / Where / How ?
- Open Source / Commercial / Mixture ?
- Who from / Who supports / Who integrates ?
- How much will it cost / TCO / ROI ?

# Integrating Open Source into your IT strategy

- **Insist on Open Standards**
  - Increases flexibility and responsiveness
- **Evaluate Open Source and Commercial software options**
  - Most customers are using a mixture of open source and private source
  - Don't build a separate strategy – interoperability / migration considerations are important
  - Balance up-front costs against recurring costs
- **Evaluate Community and Maturity of Open Source before committing**
  - Open, robust communities and broad industry support are important
  - Sustainable business models are critical
  - Healthy ecosystem of ISVs and Business Partners is required
- **Establish policies for working with Open Source software**
  - Educate company teams about OSS before they work with it
  - Implement a management system to review, approve, and track the use of OSS inside the company, and contributions of company software assets to external OSS projects
  - Review Open Source Licensing - establish a process within your company to help developers understand the terms of the OSS licenses and the procedures required to comply with them
- **Be pragmatic**
  - Run a proof of concept or pilot to test out viability
  - Make decisions based on both business and technical factors

# IBM's Open Source approach: Summary



# How to get started with Open Source and IBM

- IBM Open Source Portal
  - [ibm.com/opensource](http://ibm.com/opensource)
  -
- developerWorks Website
  - [ibm.com/developerworks/opensource](http://ibm.com/developerworks/opensource)
  -
- IBM's Open Computing Development Environment
  - WAS CE, DB2 Express-C, Eclipse
  - [ibm.com/developerworks/kickstart](http://ibm.com/developerworks/kickstart)
  -
- IBM Systems Journal
  - “Open Source” edition - Vol 44, No 2, 2005
  - [www.research.ibm.com/journal/sj44-2.html](http://www.research.ibm.com/journal/sj44-2.html)
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