

CONFIDENTIAL

Penetration of Open Source in US Enterprise software market – An Overview

Zinnov Study

June, 2006

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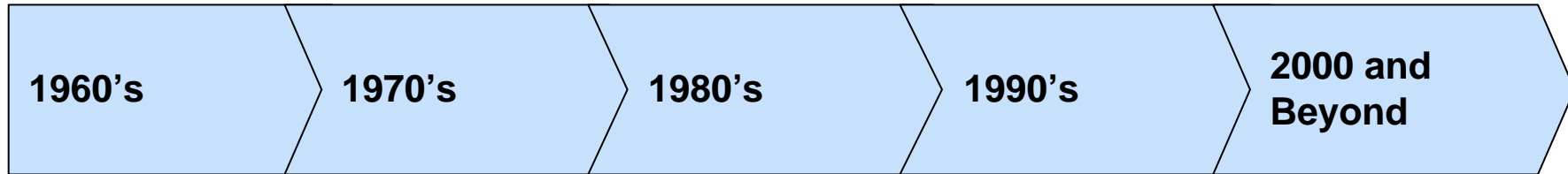
AGENDA



Focus of Discussion

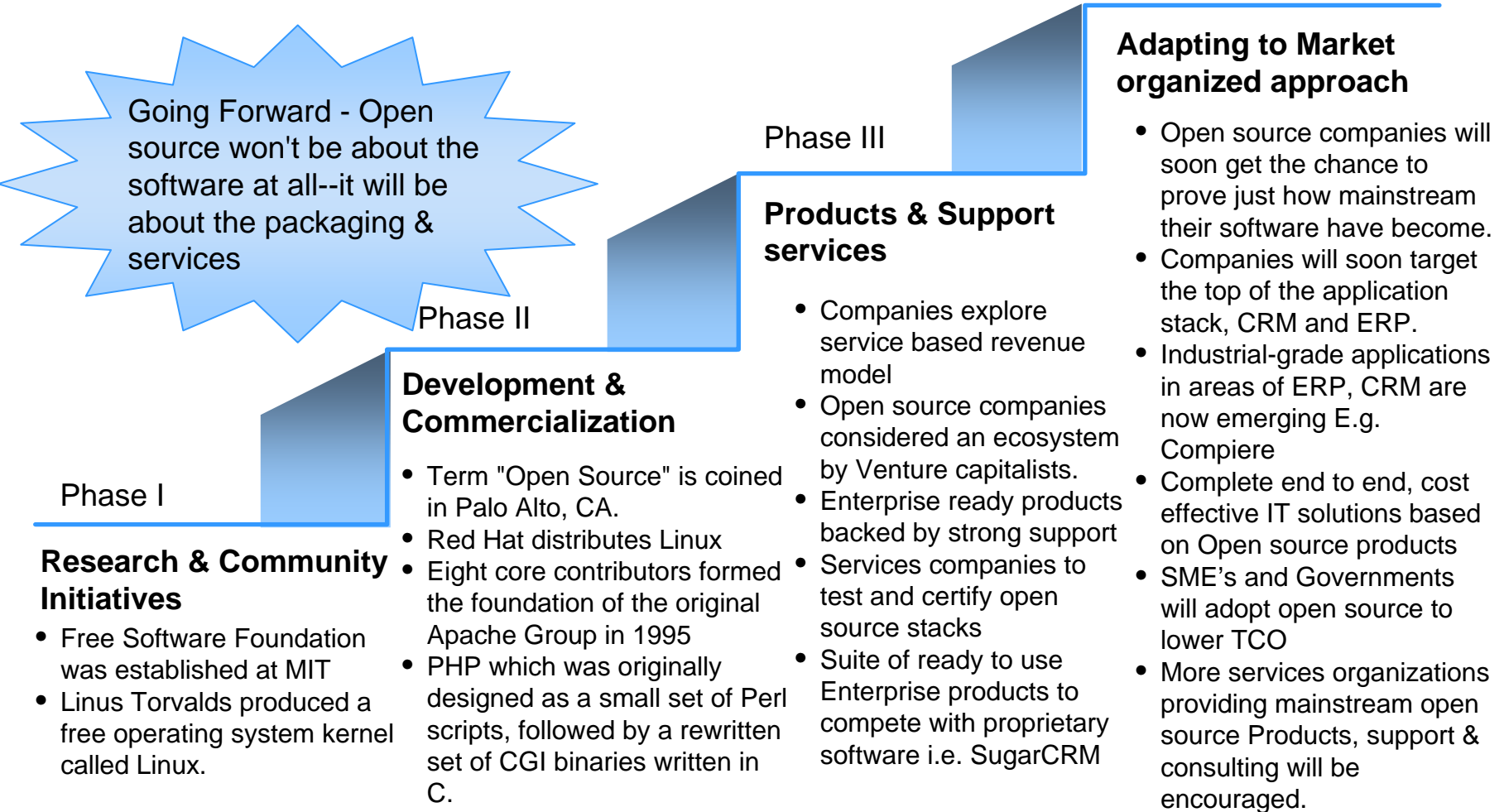
- Evolution of Open Source Software (OSS)
- OSS Market Analysis
- OSS Penetration in Enterprise Market (sample)
- Key Drivers for OSS
- Open Source Enterprise product catalogue
- Major players in enterprise OSS integration (sample)
- Going forward - Open source revolution
- Zinnov Research

Open Source revolution began in Early 90's with the landmark release of Linux



- MIT, AT&T Bell Labs, and GE worked on an experimental operating system called Multics
- ARPANET founded. The precursor to the Internet, it allows researchers to share code and information.
- Bell Labs, writes the first version of Unix
- AT&T announces plans to commercialize Unix
- Decision to re-write Unix in the C programming language.
- Free Software Foundation was established at MIT
- FST established the idea of "copyleft" and the General Public License (GPL)
- Minix, a version of Unix with Source code was released
- Industry group called X/Open was formed to standardize Unix systems.
- First company to provide custom engineering and support services for free software i.e. Cygnus
- Linus Torvalds produced a free operating system kernel called Linux.
- Netscape announces plans to make the source code for Communicator free on the Internet
- Term "Open Source" is coined in Palo Alto, CA.
- Eight core contributors formed the foundation of the original Apache Group
- PHP which was originally designed as a small set of Perl scripts, followed by a rewritten set of CGI binaries written in C.
- Linus Torvalds releases the highly anticipated 2.4 Linux kernel.
- Red Hat officially announces its entry into the enterprise with the "Enterprise-Ready Linux"
- Sun Microsystems also released an open source version of Solaris, called "OpenSolaris"

Open source is moving up the stack, and much more quickly than many could have predicted



AGENDA



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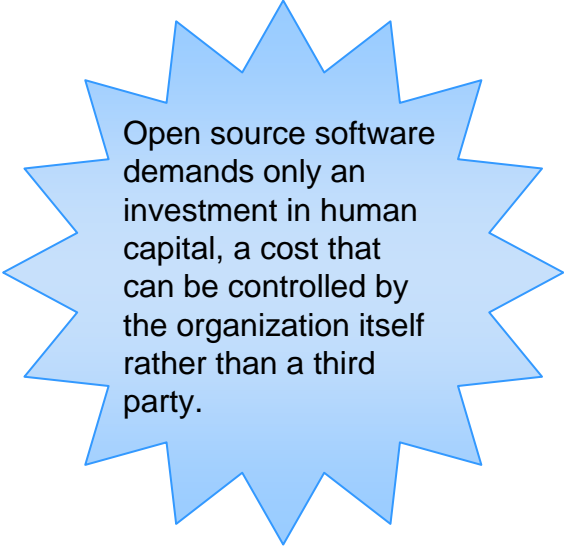
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Market Overview

Open Source software market is growing fast with leading market share in application servers. In operating server domain OSS have secured a good second position and is growing to exceed \$35 billion by 2008.

Highlights: Open Source Software Market

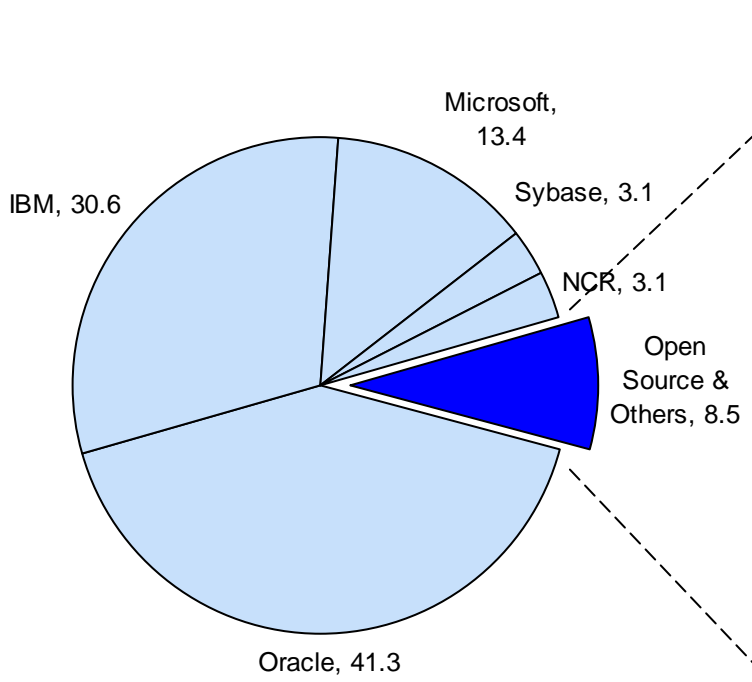
- Open Source accounts for close to 10% of market share in RDBMS. Together MySQL and Firebrand has a market share of 80%, with almost equal share. Moreover It is estimated that open source database market will grow from present USD 300 million to USD 1billion by the end of 2008.
- Linux based operating servers boast of 30% market share, second only to Windows. Within, Linux Red Hat is the clear leader with close to 50% market share. According to IDC forecasts Linux is supposed to be the fastest growing operating server.
- At 67% market share Apache is the numero-uno in web server domain with second being Microsoft at distant 20%
- Absence of license fees in open source makes it multiple times cheaper then proprietary counterparts. A good example is open source application servers, which are 2.5 times cheaper than their proprietary counterparts.



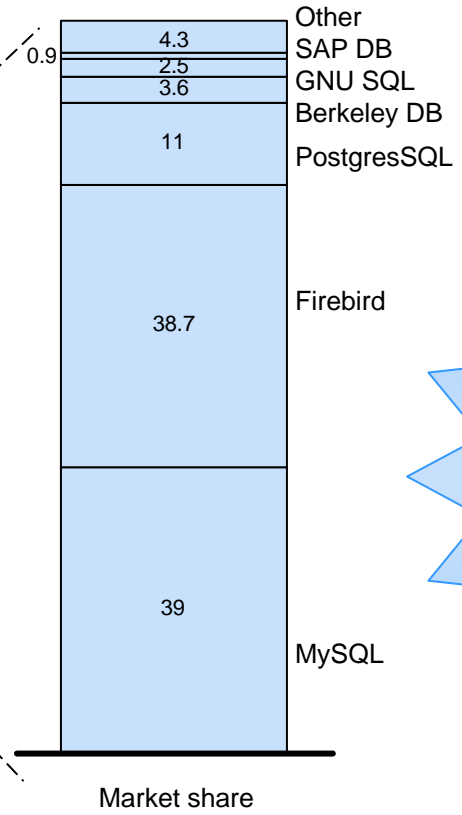
Open source software demands only an investment in human capital, a cost that can be controlled by the organization itself rather than a third party.

The biggest surprise in open source database market is that Firebird has nearly tied with MySQL in number of installations

Market Share of RDBMS in 2005
Percentage



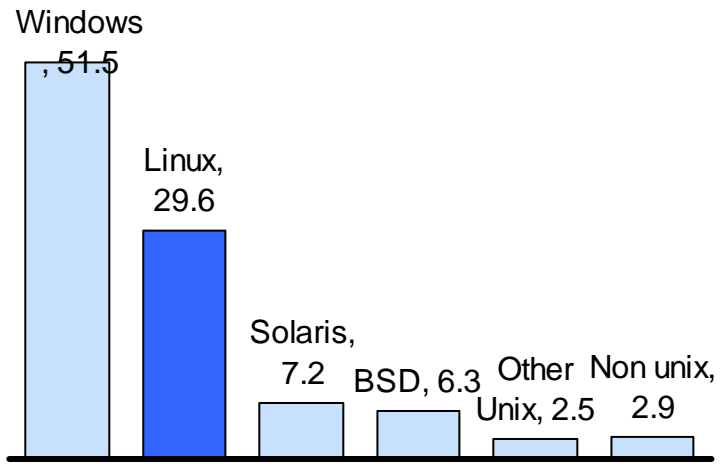
Open Source RDBMS Market Share
Percentage



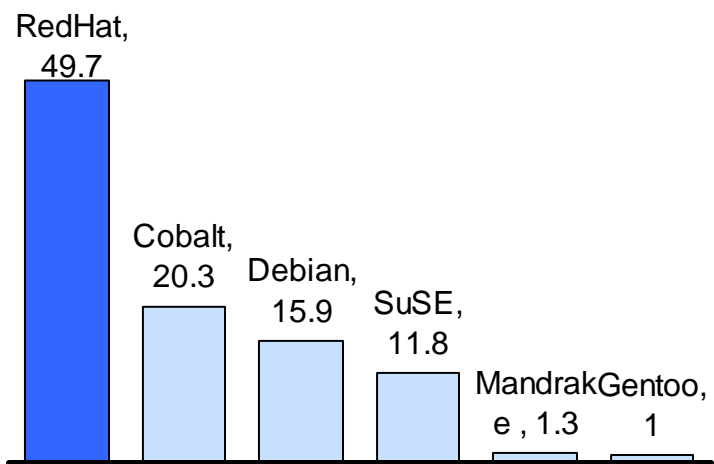
The open-source database market alone was \$300 million last year and is expected to reach \$1 billion by 2008
- Forrester

Linux is forecasted to be the fastest growing server operating system environment

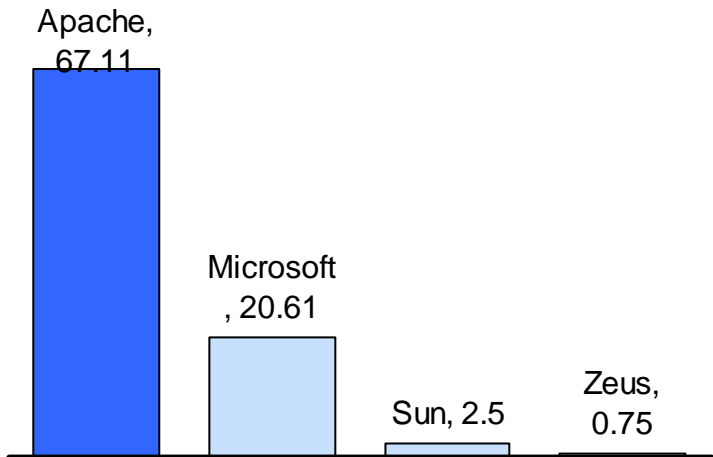
Percentage Market share of Operating Systems



Percentage Market share of Linux Operating Systems



Percentage Market share of Web Server in 2005



Comments

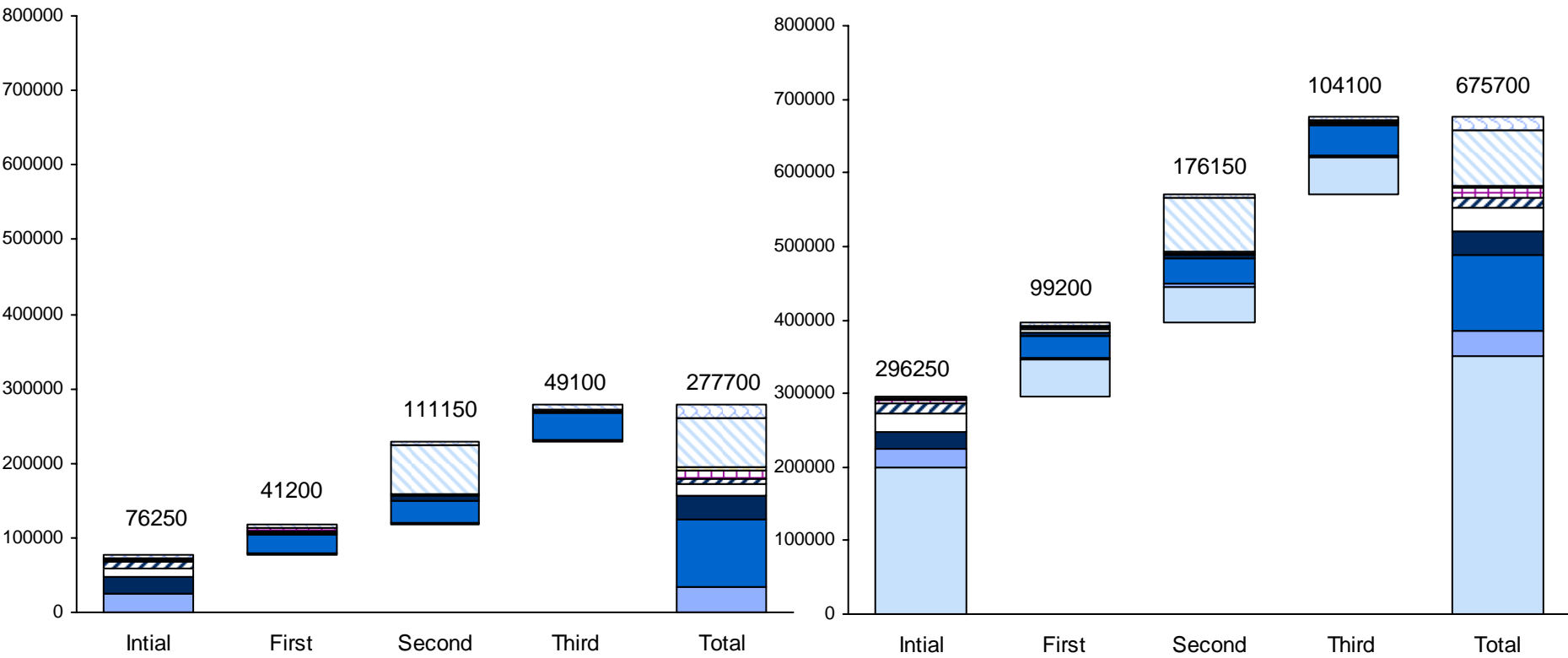
- IDC predicts the overall market revenue for desktops, servers, and packaged software running on Linux will exceed \$35 billion by 2008.
- Linux is forecasted to be the fastest growing server operating system environment, and the overall Linux solution stack is growing at a commensurate rate.
- Apache now powers more than 50 million sites and continues to maintain a large lead in both active sites and hostnames.

Total Cost of Ownership (TCO) is 2.5 times lesser than proprietary software for application servers

Illustrative

TCO for J'Boss Application Server

TCO for alternate Proprietary Software



- Software Licenses
- Hardware
- Support
- Development
- Professional Services
- Training
- Testing
- Operations
- Staffing
- Maintenance Contracts

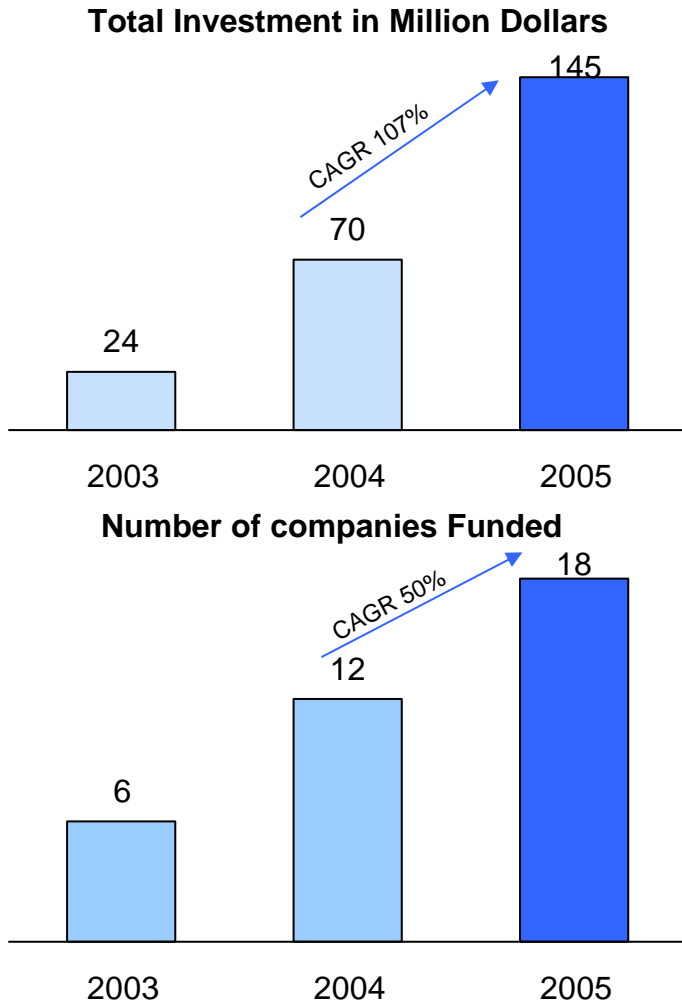
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Angel investors and VC firms have increasingly shown interest in open source companies



Open Source – Investors Ecosystem

- Venture capitalists have pumped nearly \$400 million into 50 open-source companies.
- Funding has been in all software offerings i.e. broad business applications like business intelligence programs to very specialized applications, like running a hospital's computer systems.
- Three open source start-up companies were selected as "Ones to Watch" by OSBC* i.e. Splunk, Project.Net, rPath.
- The leading venture capital companies showing interest in open source are North Bridge Venture Partners, Accel Partners, Matrix Partners, Mayfield, Kleiner Perkins Caufield & Byers.

"As young companies, they are already gaining tremendous market momentum – setting new precedents and capturing customer attention with their innovations. We look forward to watching them grow and mature over the coming year."

- Bryce Roberts, OSBC

* Open source Business conference

Banks are increasingly exploring opportunities to use Open Source software

Background and Business Description

- **Company**
- Head Quarters
- FTE's
- Revenues
- Other Information
- **Fidelity Investments**
- Boston, MA
- 36500
- \$10,470 MM
- Fidelity Investments Institutional Services Company (FIIS) distributes products and programs through banks, insurance companies, securities brokers, financial planners, and other financial services providers.
- Total Internet development spend is \$350 million

Open source Software used

- Operating System – Linux
- Web server – Apache
- Scripting tool – Perl
- Development Tool – Eclipse Foundation's development environment
- Application framework - Struts Web application framework
- Others
 - Deployed an open source tool, the tcl scripting language back in 1995
 - Apache and a host of Apache-related tools to run the Fidelity.com Websites, which generate about 30 million daily page views.

Future Plans

- Fidelity has more than a dozen open source packages in production and is willing to evaluate open source options in almost any application.
- Created a policy and governance structure that gives open source and proprietary products equal consideration in buying decisions
- Looking at open-source database management systems and assessing what applications might make sense

Comments

- "We're heavy users of proprietary software, and that won't change, but there are times you need a motor scooter, not a truck" - Charlie Brenner, SVP, Fidelity Center for Applied Technology

Government across the world are choosing open source route as it is to be used for public

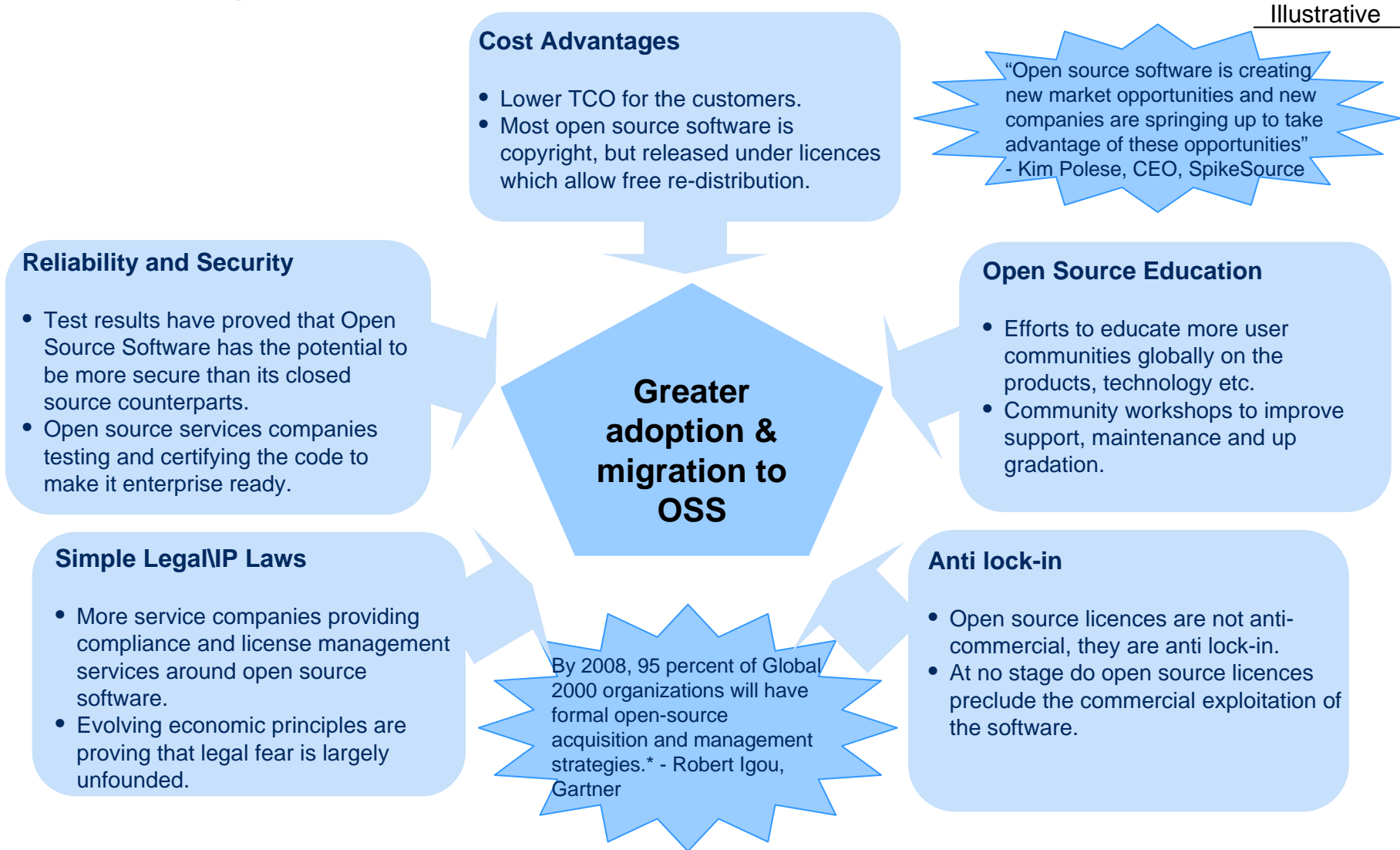
Risk Factor	Summary
United States	The Federal government plans to establish an open source depot of software to be used across agencies to develop, deploy and maintain applications across the life cycle. The agency intends to provide an OSERA (Open Source eGov Reference Architecture) that will be based on foundational technologies such as MDA (Model Driven Architecture), an ESB (enterprise service bus), an SOA or the Semantic Web.
Brazilian	In 2005, Government of Brazil said it will switch 300,000 government computers from Microsoft's Windows operating system to open source software like Linux. The government is dropping all proprietary software.
China	Chinese government is trying to reduce software piracy by purchasing open source software. According to China's Ministry of Information Industry (MII), almost 70 percent of all software purchases last year were of open source based products. Linux was adopted on about 45 000 systems in provincial government institutions.
Thailand	There are around 700,000 desktops and 300,000 laptops running a Thai language edition of Linux and the open source productivity suite StarOffice
Switzerland	The Federal Administration plans to adopt the open source software based operating system Suse Linux Enterprise Server on more than 3000 servers
Peru	In 2002 Peruvian government passed a bill that defended the mandatory use of open source software by the state as essential in fulfilling its obligations to its citizens.
South Africa	Currently Smart Cape Access project has about 540 open source software based desktop workplaces. The intends to adopt open source software on the 500-600 library management computers. The city expects to run open source software applications on about 1.500 desktop workplaces in the following months.
Philippines	Philippine Department of Budget and Management has procured a total of 10,000 computers with open source operating system and open source based office applications

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OSS due to its inherent advantages fosters competition amongst vendors and propels growth



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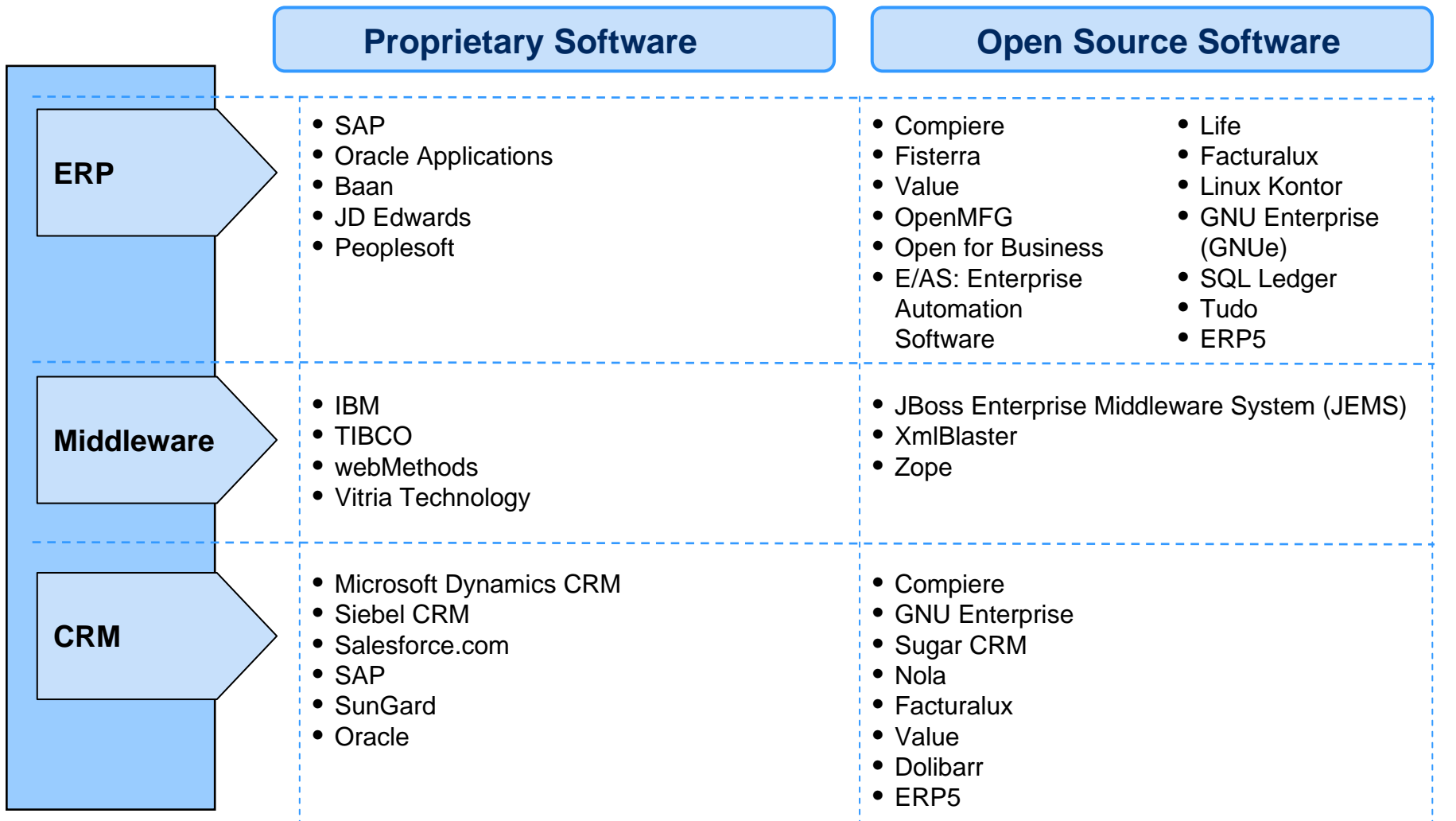


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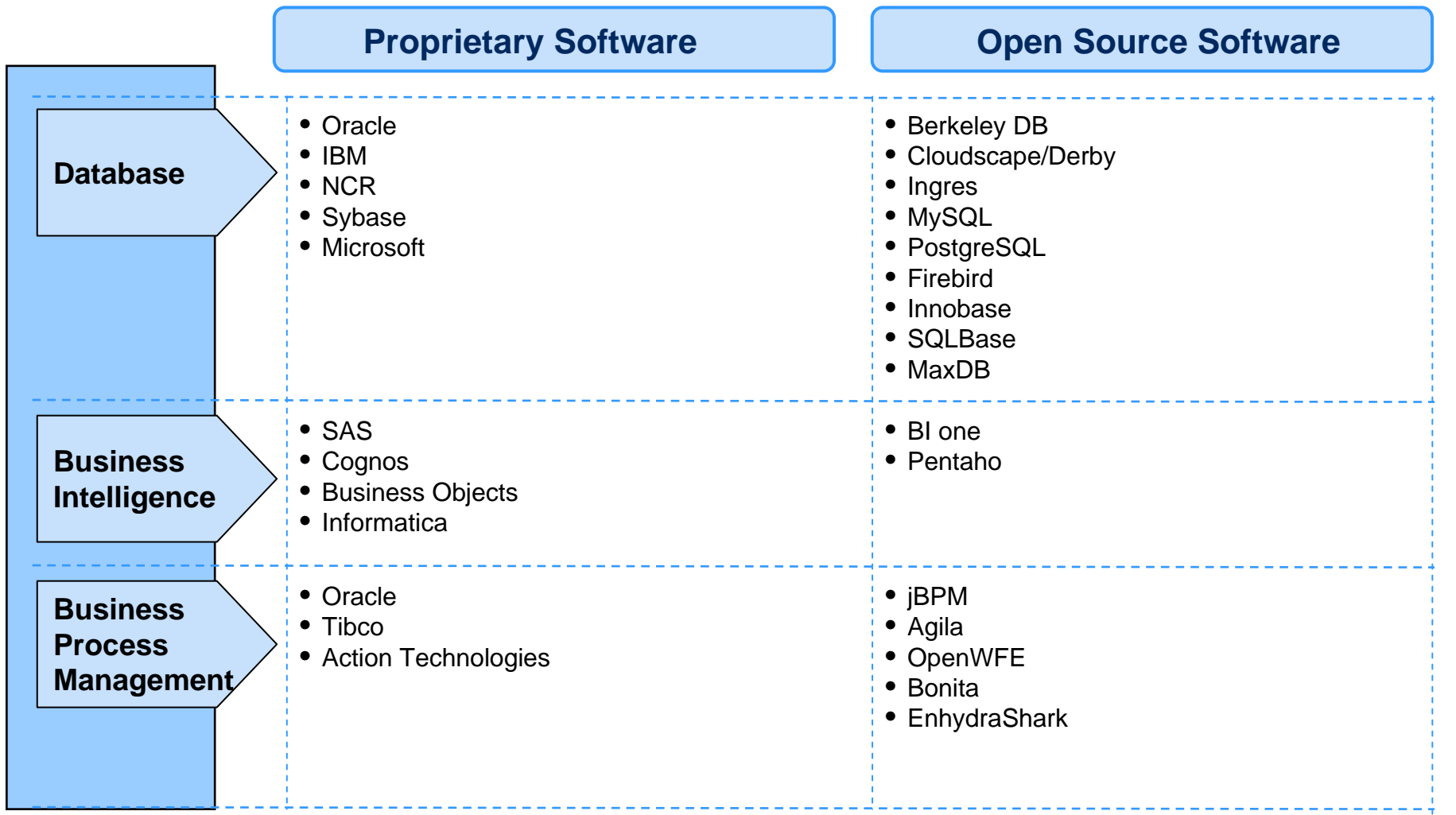
OSS has wide range of products to alternate to almost all commercial software products.

Illustrative



OSS has wide range of Products & has become a major interest both for the software industry and for economic theory

Illustrative



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SpikeSource is one-stop destination for business ready open source infrastructure

Background and Business Description

- Establishment
- Facilities
- Other Information
- 2004
- Redwood City, CA
- SpikeSource offers three pre-built stacks i.e. LAMP Stack, Servlet Stack & J2EE stack
- Spike Stacks include more than fifty open source components in six programming languages
- Offers wide range of services and clearly geared towards giving assistance to the community

Service Features

- Enterprise Starter Kit
- Spike Stacks
- Spike Net
- Spike Support
- SAM (SpikeSource Asset Manager), an open-source, cross-platform framework for identifying and reporting locally installed open-source components.

Stack	Testing	Support	Maintenance	Upgrade
✓	✓	✓	✓	✓

Clientele

- Dresdner Kleinwort Wasserstein

Partners

- Service Partner - Cognizant Technology Solutions
- Technology partner – Intel, JBoss, SugarCRM
- Community Partner - O'Reilly Media

Comments

- SpikeSource leads its closest competitor in market awareness and partner relationships.
- The annual fee starts at under \$1,000 and increases to some \$25,000 for Gold support.
- Three underlying principles
 - Supporting open source development and use;
 - Vendor neutrality; and
 - Profitability.

Red Hat to launch certification and support services for leading open-source LAMP and Java stacks

Background and Business Description

- Establishment
- Facilities
- FTEs
- Other Information
- 1993
- Raleigh, NC
- 1150
- RedHat pure-play open source company pioneered the support model
- Stack's will be certified and supported on Red Hat Enterprise Linux and delivered in a subscription model. Pricing will start at \$599 per server.

Partners

- IBM
- Dell
- HP
- Oracle
- Sun
- Fujitsu
- Intel
- NEC
- Hitachi
- BEA

Service Features

- **Web Application Stack** - for simple web sites and applications, and includes the key LAMP components Apache HTTP Server, MySQL database and the PHP scripting language on top of Red Hat Enterprise Linux
- **Java Web Application Stack** - for more dynamic web applications and supports all the components of the Web Application Stack - in other words LAMP plus PostgreSQL - as well as the Apache Tomcat servlet and JSP Container.
- **Red Hat Enterprise Java Stack** - will have all the components of the Java Web Application Stack plus support for a full Java application server

Comments

- To launch certification and support services for leading open-source LAMP and Java stacks beginning in the first quarter of 2006.

Stack	Testing	Support	Maintenance	Upgrade
✓	✓	✓	✓	✓

Marketplace for Open Source Software support is heating up in the last 2 years

Category	Specialization	Opensource Product			Implementation			Support		
		Product	Stack	Test Tool	Product Selection	Configuration	Integration	Maintainance	Technical support	Upgradation services
SpikeSource	Open source IT infrastructure(LAMP)		X	X		X	X	X	X	X
SourceLabs	SASH Stack		X	X		X	X	X	X	X
Optaros	Advisory Services, Sourcing strategies, Integration and support				X	X	X	X	X	
ActiveGrid	LAMP Stack		X			X	X	X	X	
Covalent	Apache, Tomcat, Jeronimo and Axis support	X	X		X	X	X	x	X	X
Gluecode(IBM)	Portal, Database and an application server	X			X	X	X	X	X	
ObjectWeb	Corporate Web portal and a content management application	X			X	X	X	X	X	

"Most companies don't have supermen in house. They don't have the ability to do this on their own"
 - Anne Thomas Manes, VP Burton Group

"In the LAMP stack, the evolutionary powers make sure that only best-of components survive."
 -Marten Mickos, CEO, MySQL

Covalent currently supports more than 50% of Fortune 500 and 70% of Fortune 100 companies.

Established professional services firms are raising the stakes and are expanding their services offerings for open-source components.

Illustrative

Professional Services companies

HP

- HP plans to certify, support and jointly sell two of the best-known open-source projects on its hardware, the MySQL database and JBoss application server
- HP issued Linux Reference Architecture software stack, which is based on open-source technologies

IBM

- IBM has committed to evolve the Gluecode Standard Edition platform* & particularly contribute to Apache Geronimo, the open-source Java application server.
- IBM WebSphere Application Server Community Edition is a free lightweight J2EE application server built on Apache Geronimo

IBM is asserting its support for open-source initiatives by releasing some low-level patents and underscored its position as a major IT influence.

* Gluecode Standard Edition Platform - represents a fully integrated open-source solution stack, from app server to middleware to management to database

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Going Forward

Illustrative

Open source will play a major role in

Developing Countries

- Developing countries has the opportunity to escape from technological dependence on developed countries, but also a challenge to build up local expertise.
- The biggest markets in developing countries are particularly China, East Asia, India and South America.

Banks

- Micro financing companies can leverage the advantages of IT by implementing cost effective open source software

Web Services

- As ASP model for web services become more popular, companies would require numerous servers and economical software to support their applications. Open source servers and software would be an ideal answer to address these issues

Going Forward

Illustrative

Open source comprising 11% of the software market in 2010, up from 3% today. With the overall market continuing to grow, that translates to 700% growth in open source revenues during that time.

Survey of 140 of the largest U.S. companies by Forrester Research found that 56 percent of them use Linux or open-source software in some part of their operations. Another 19 percent plan to use it soon.

By 2008, 95 percent of Global 2000 organizations will have formal open-source acquisition and management strategies.

Global 2000 IT organizations will use open-source products in 80% of their infrastructure-focused software investments and 25% of business software investments by 2010

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Zinnov – About us

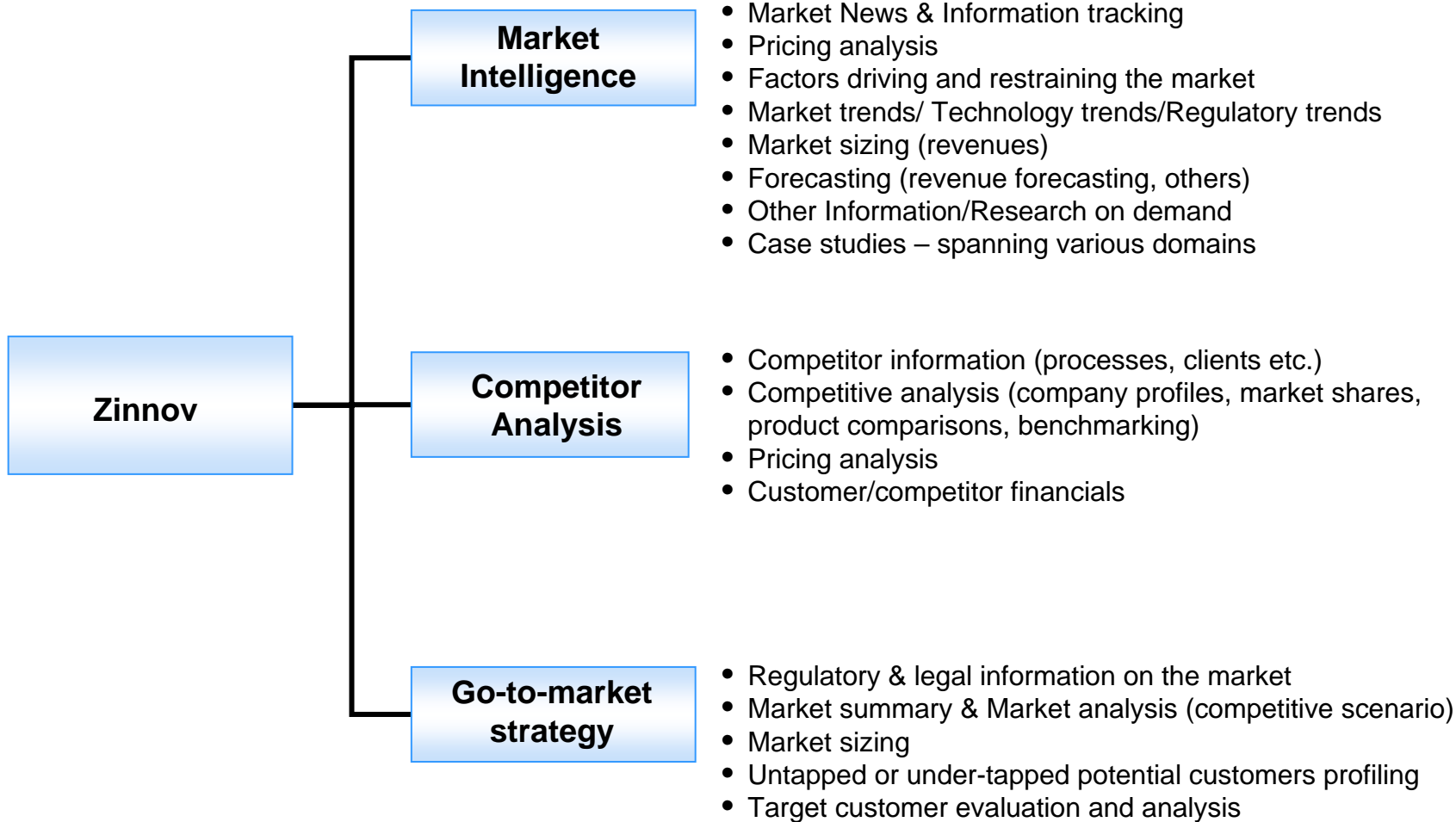
Company Overview	Market Research	Knowledge Services
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- We are a knowledge services and consulting company with offices both in US and in India.
- We help our clients reduce the time, money and risks involved in organizational initiatives using combination of consulting and knowledge solutions delivered by global teams.

- **Research services**
 - Customized market studies
 - Competitive Benchmarking
 - Data Analytics
 - Market Intelligence
- **Go-To-Market Services:**
 - Help companies enter the India market by helping them scope and segment the market, provide on-ground sales and marketing support to tap into the local market.

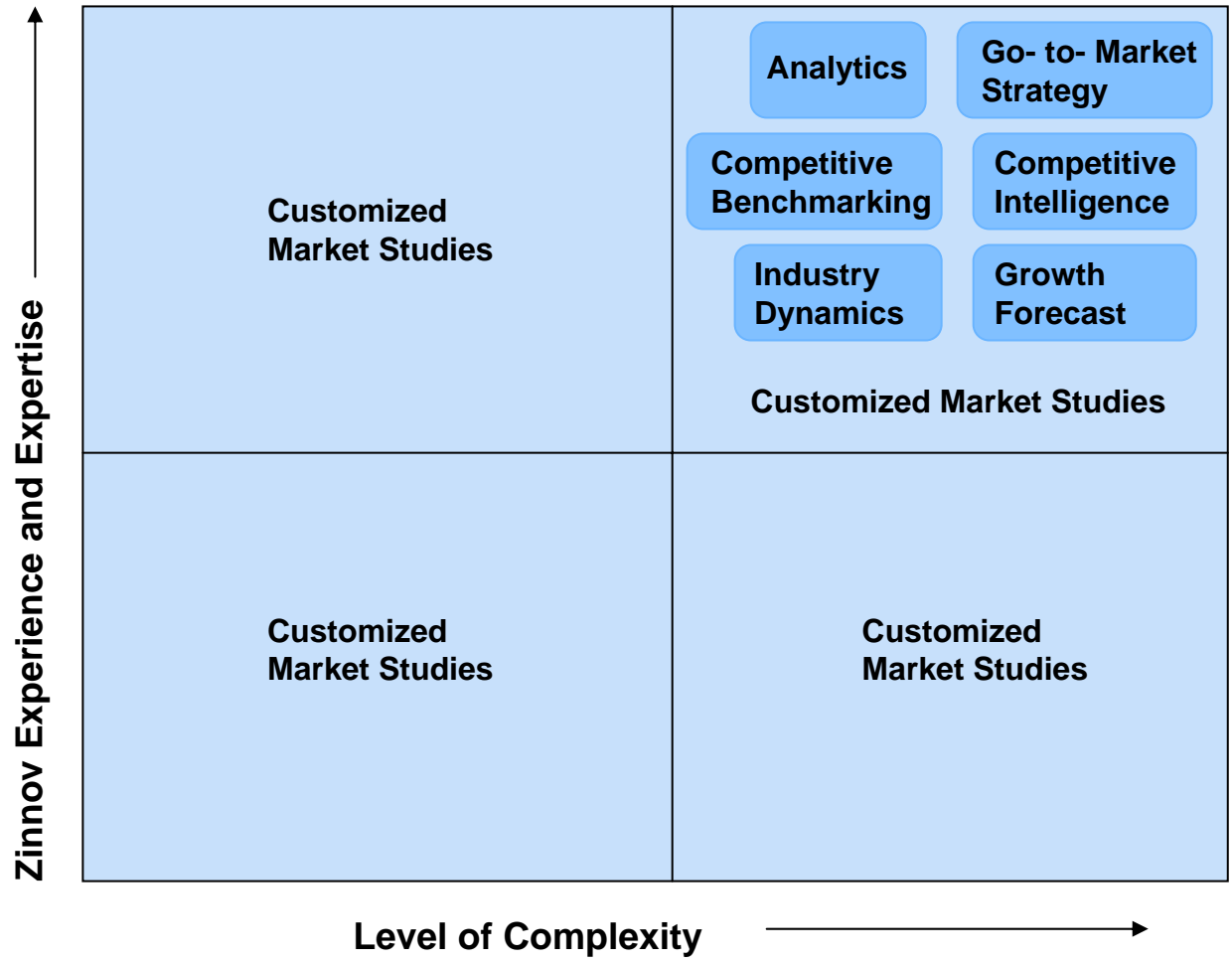
- **Dedicated Knowledge Centers (DKCs):**
 - We provide dedicated teams that help our customers in the areas of market research, competitor analysis, business research, data analytics and pre-sales support. DKCs act as an augmentation to our customer teams and provide cost effective and high value services.
 - We have provided our research and consulting solutions to more than two dozen customers. Today, our client roster included reputed NASDAQ listed companies, small to medium sized independent software vendors, strategy consulting firms and other large enterprises in domains such as BFSI, IT services and Infrastructure management.

Zinnov research team can help clients with market intelligence, competitor analysis and go-to-market strategy



A. Market Research: Zinnov has a very strong Market Research Capability with expertise across the value chain, specifically in the high end space

Illustrative



- | Zinnov's Differentiators |
|--|
| <ul style="list-style-type: none"> • Rich experience with High end market research enabling strategic decisions such as go-to-market strategy • Excellent primary and secondary research capability • Excellent pool of resources with strong capability to create customized reports for clients in any sector |

B. Financial Analysis: Zinnov has a strong Financial Analysis Capability which complements both market and business research

Illustrative

Financial Statements

- Balance Sheet
- Income Statement
- Cash Flow Statement

Ratio Analysis

Profitability ratios

- Returns - Return on equity; Return on Assets, etc.
- Margins - Gross Margin; Net Margin

Turnover ratios

- Total Asset turnover
- Fixed asset turnover
- Working capital turnover
- Inventory turnover

Liquidity ratios

- Current ratio
- Quick ratio
- Cash ratio

Solvency ratios

- Debt to equity
- Debt to total capital
- Interest Coverage
- Total Coverage

Business Research – Company Performance Evaluation

Market Valuation

- Share Price
- Market Value of Equity
- Enterprise Value

Multiple Analysis

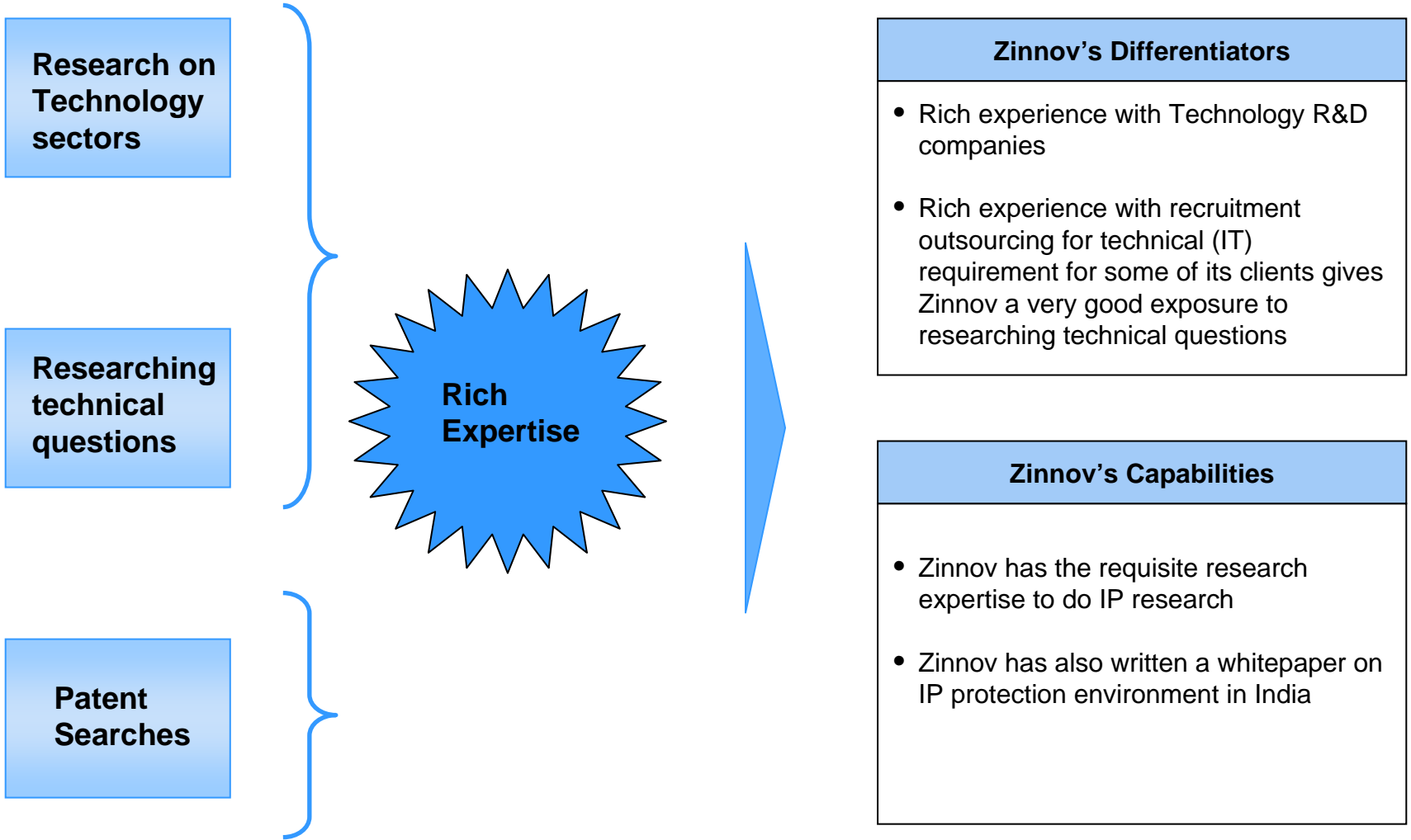
Trading Multiples

Transaction Multiples

Market Research – Competitive Benchmarking and Intelligence

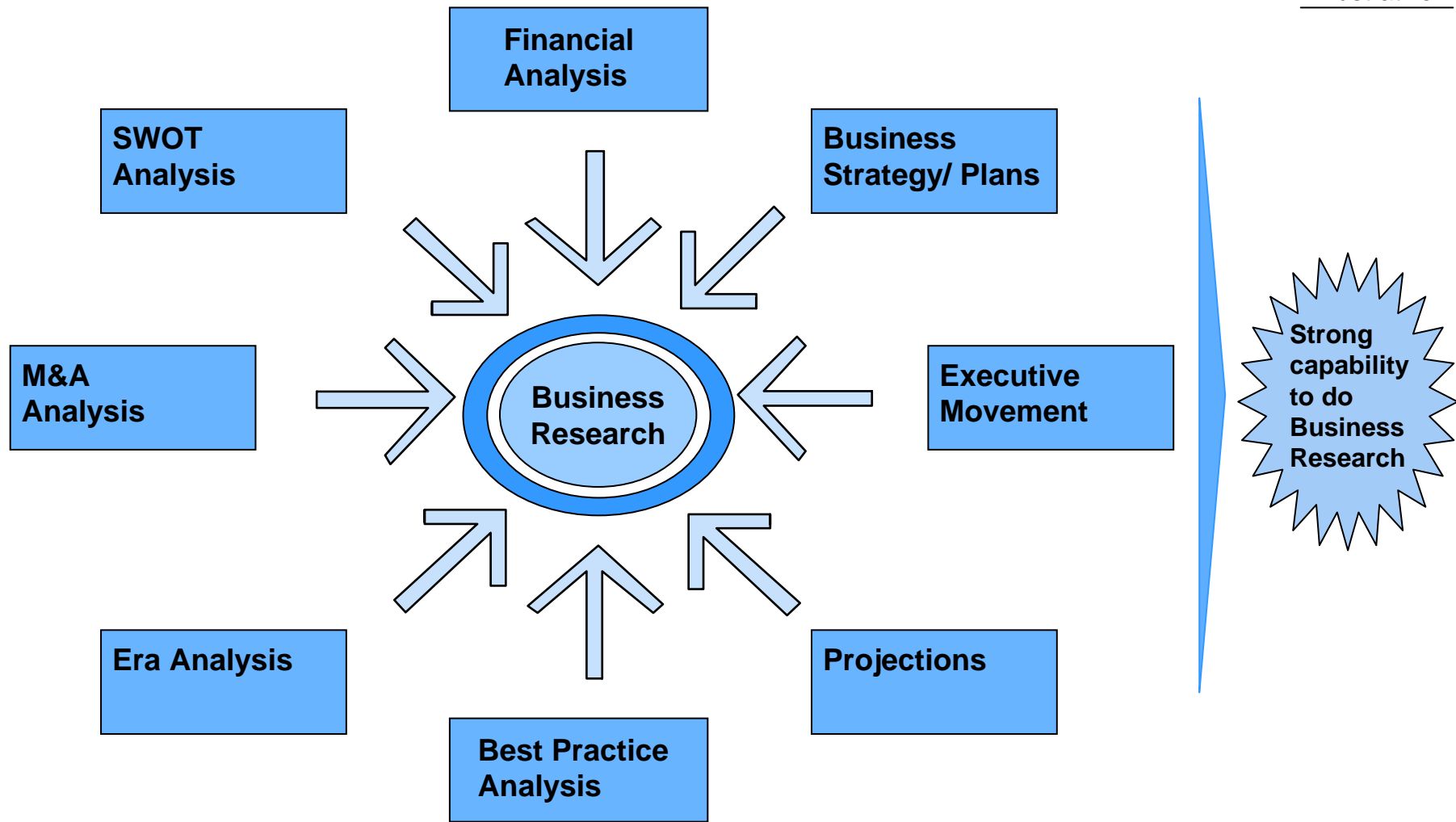
C. Technical Research: Owing to its rich and diverse experience with multiple IT R&D companies, Zinnov also has a strong Technical Research capability

Illustrative



D. Business Research: Zinnov has a strong Business Research Capability as well, covering various facets of business

Illustrative



E. Market Mapping – Competitive Mapping and Benchmarking

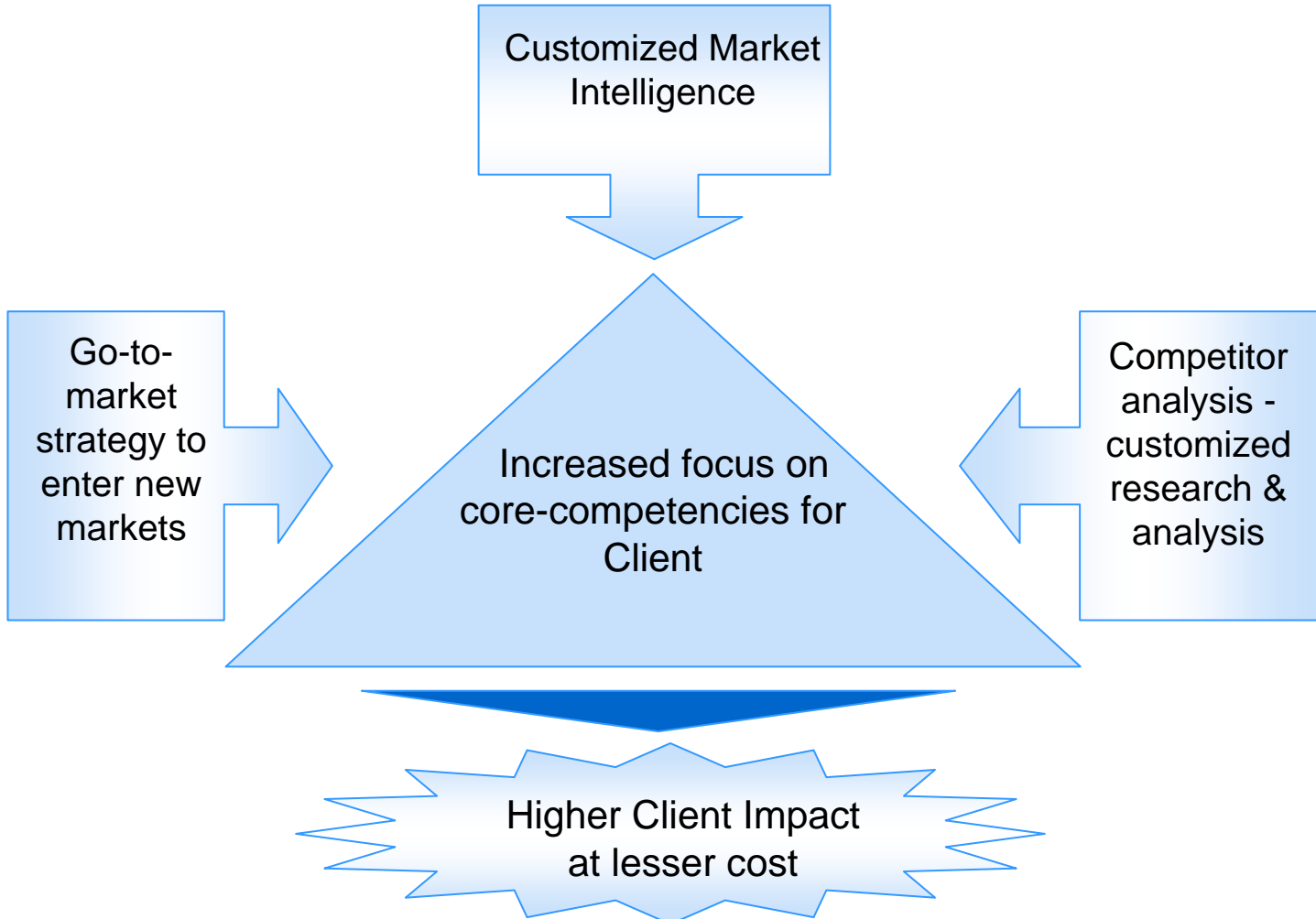
Illustrative

Financial Strength and Soundness
Margins - Gross
Margins - Operating
Margins - Net
Returns on Equity
Returns on Assets
Returns on Capital Employed
Solvency ratios - Debt to equity
Solvency ratios - Debt to total capital
Solvency ratios- Interest Coverage
Liquidity ratios - Current Ratio
Liquidity ratios – Quick Ratio
Liquidity ratios - Cash Ratio
Top line - Compounded annual growth rate (CAGR)
Trading Multiples

Capability Analysis
Management Team Expertise
Technological Capability
Products/ Services
Quality Processes
Market Share
R&D Investment/ Initiatives
Marketing Strategies
Geographical Presence
Years of existence
Personnel
Past successes and failures
Future strategies/ plans
Clientele
Alliances/ Partnerships/ M&A
Enterprise Business Solutions



Our clients are benefited by cost and time effective research that Zinnov offers



Zinnov is proud to maintain 100% client references. Our clients include reputed consulting firms and industry organizations

Your comprehensive report on our competitors enabled us to make informed and objective decisions on penetrating global markets

**-SVP, Marketing
Incentive Management Software**

Thanks for the quick turnaround of the survey analysis. We look forward to your help in producing similar reports for all our industry surveys

**- Executive Director
Industry Organization**

You help us compete with McKinsey in India

- Principal, Management Consulting Firm

The level of details you capture and analyze is great.

**- VP, Operations
Employment Screening Company**

The quantitative analyzer is one of the most flexible model I have ever seen. We used it for analyzing 'what if' scenarios in our meeting with the client and they loved it!

**- Principal
Management Consulting Firm**

Thank You !

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