



Computer Associates®

# Open Source and Open Platforms

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# “Open Source” Pharmaceutical Model

- Drugs that become generic are like open source
- Value add is formulation of generic and new product to create a higher value drug
- Example: Glucophage formulated with Avandia creates Avandamet. The product sells for 30% premium over Avandia.

# What Else is it? The Benefits.

- Lower cost!?
- Innovation
  - Large development/innovation pool
    - Iterative development model
  - Community approach (Bazaar)
- Open Standards support
- Flexibility
  - Choice based on technology vs. price
  - Competition
  - Reduces vendor lock-in

# The Open Innovation Model

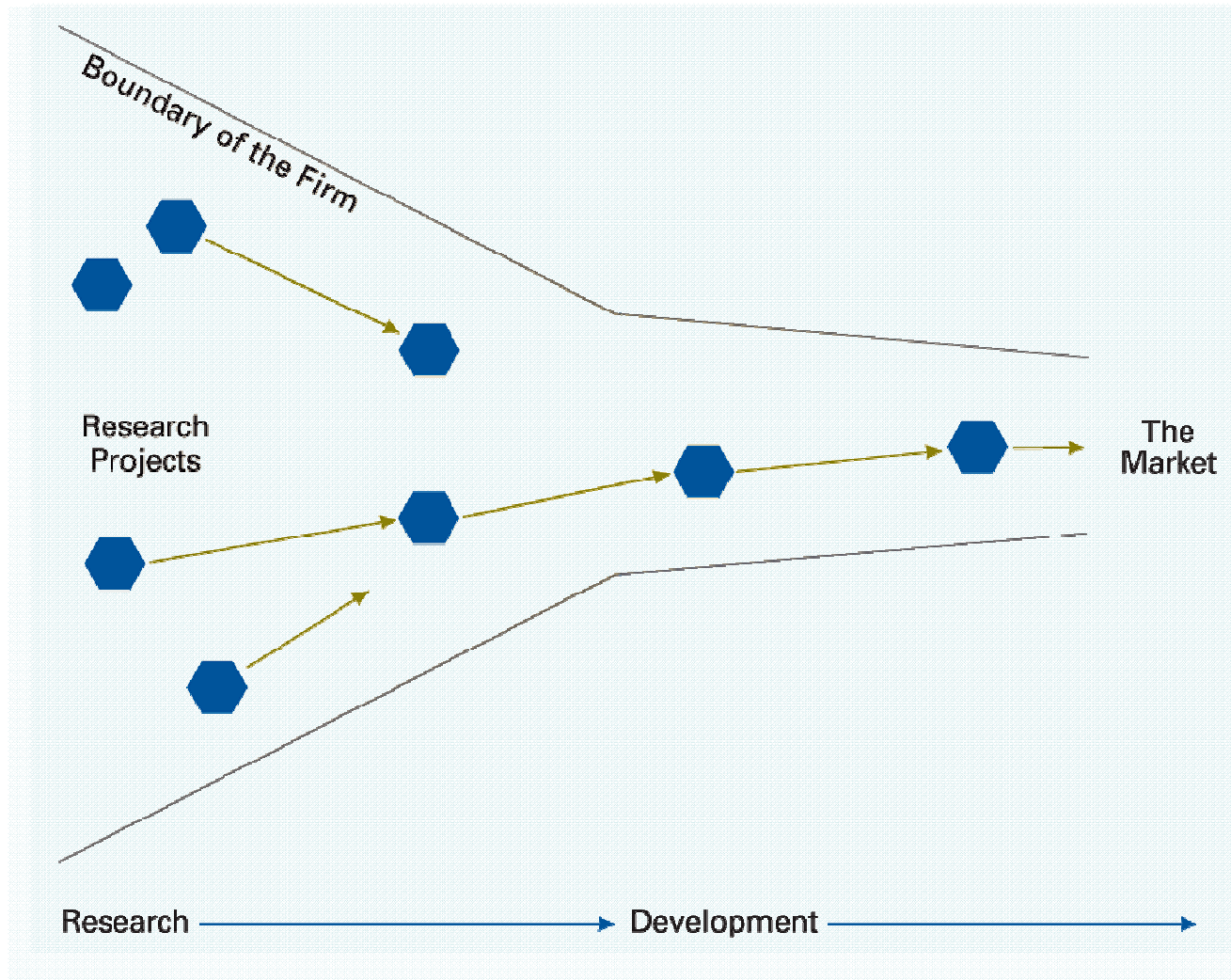
# Era of Open Innovation

“Companies are increasingly rethinking the fundamental ways in which they generate ideas and bring them to market – harnessing external ideas while leveraging their in-house R&D outside their current operations.”



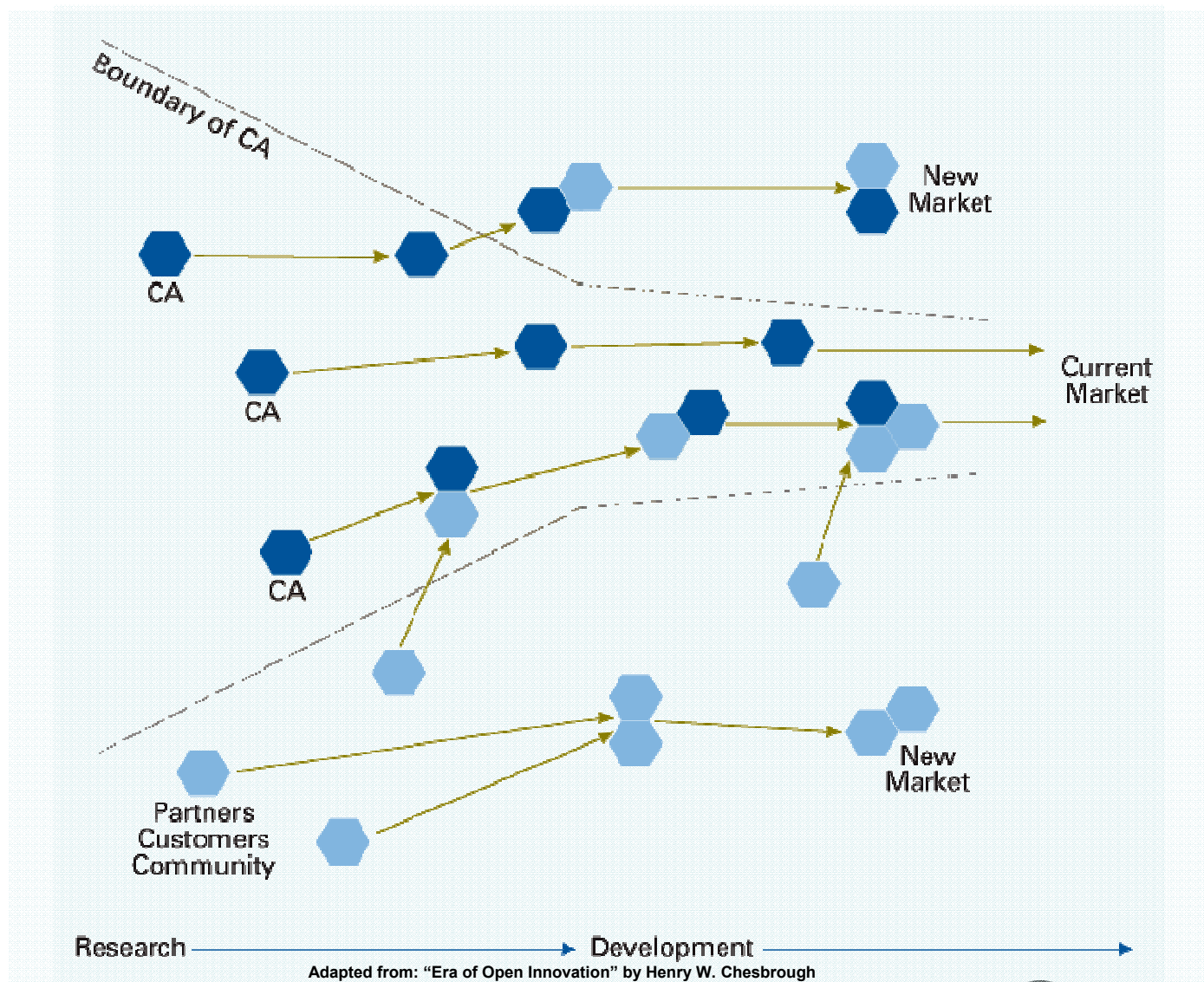
**Henry W. Chesbrough**  
**Harvard Business School**

# Closed Innovation Model



Source: "Era of Open Innovation" by Henry W. Chesbrough

# Open Innovation Model



# Contrasting Principles

<b><u>Closed Innovation</u></b>	<b><u>Open Innovation</u></b>
All Good Ideas Come From Within	Utilization of External Ideas To Enrich Our Products
To create a profit we must own all intellectual property	External and Internal R&D can create a higher profit
Getting To Market First	Getting To Market With The Right Solutions - Combined
We need to control all IP so that competitors do not profit from it.	We should profit from others use of our IP and we should use others IP whenever it advances our business model



# Example: Plone Foundation

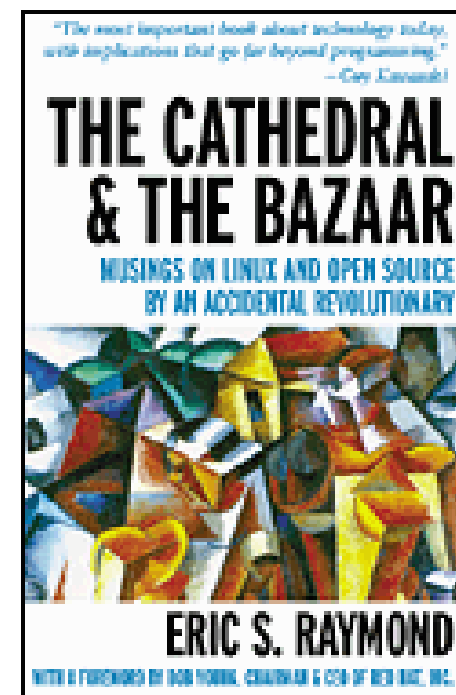
- Plone is a key component of CA's BrightStor Document Manager
  - simple document management for the enterprise
  - one piece of our ILM strategy
  - CA provides integration and support
- CA helped found the Plone Foundation
  - Membership based – non-profit
  - Independent Board of Directors
  - Organizational and financial support
  - Limiting legal exposure
  - Fosters open source participation
  - Protect the brand name

# Example: KGEM

- Better instrumentation for Linux OS
- Kernel Generalized Event Management (KGEM):
  - Donated by CA to community
  - Available on SourceForge.net today
  - Under review by Andrew Morton for the 2.6/2.8 kernel
  - Key contribution reviewed by IBM, HP, Novell and Red Hat
  - CA management and security tools are being modified to exploit KGEM

# Reasons for Growth of Open Source

- Bazaar development model
- Frequent releases
- Large beta test network
- Software commoditization and maturity
- Self esteem, “Meritocracy”



# Example: Ingres r3

- Mature, enterprise relation database
- Ingres is now available under open source
  - CA Trusted Open Source License (CATOSL)
  - CA made contributions to both OCFS and OpenDLM
  - Leveraged by JBoss and Zope
- Switch from “license” to “support and service” business model
- 16,000 downloads in first 100 days.

# Linux and Open Source CNET Survey

- CNET surveyed 400+ IT directors/architects
- North American organizations with over 500 employees
- Measure significant Linux and Open Source trends
- Available at [ca.com/linux](http://ca.com/linux):  
*“The State of Linux and Open Source in the Enterprise”*

# Linux Commitment

- 50% committed to Linux as primary or strategic platform
- 25% using in specific areas only
- 25% still experimenting

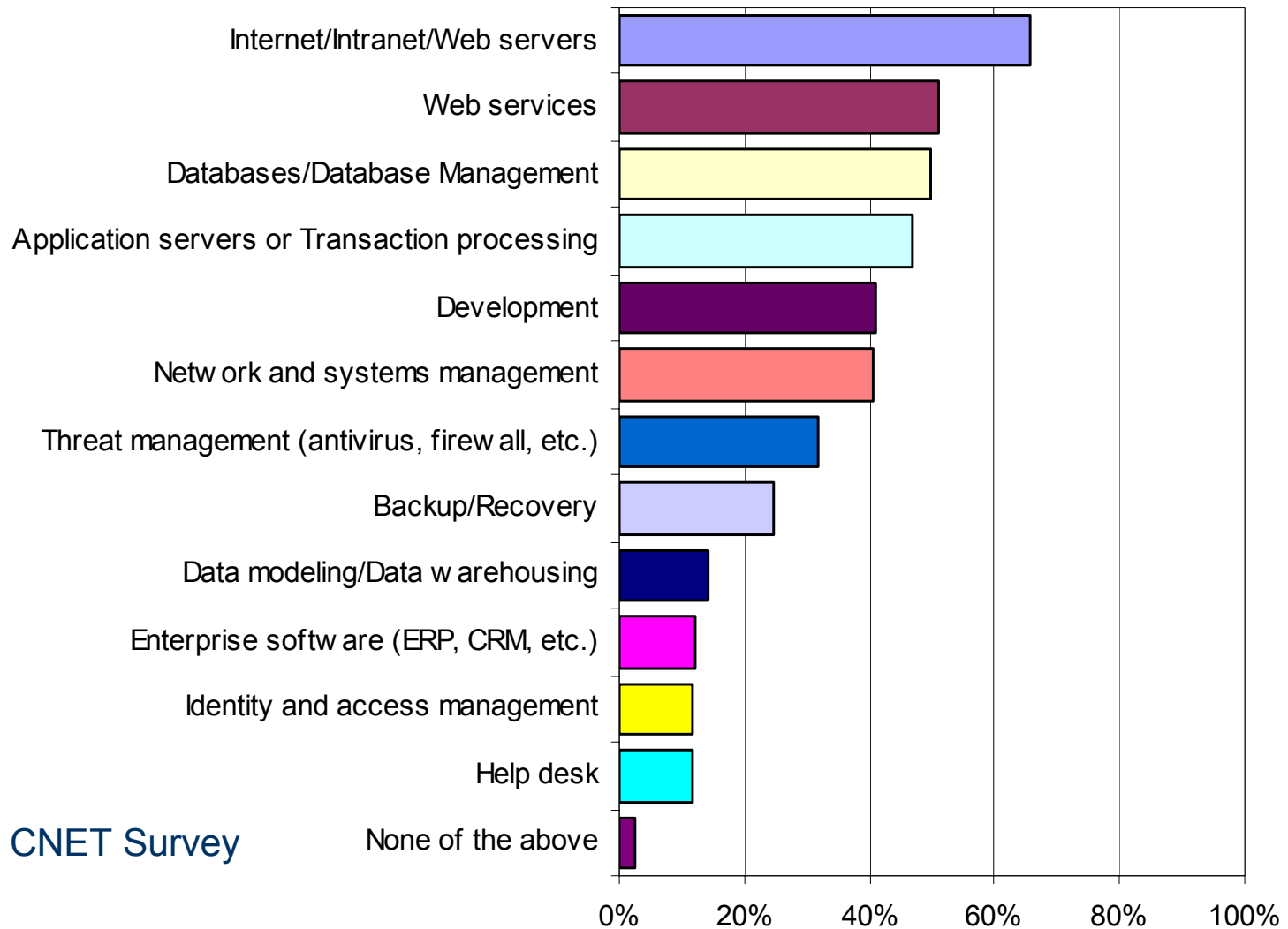
***Linux Has Crossed The Chasm!***

Source: CNET Survey

# Deployment Platform

- Distributed (70% of the respondents)
  - Intel/AMD
  - Blade servers
  - Key reasons
    - Conversions from Windows and UNIX
    - Low-cost platform
- Mainframe (15% of the respondents)
  - Key reasons
    - Proximity/integration to mainframe systems
    - High input/output requirements
    - Server consolidation

# What is Deployed on Linux?

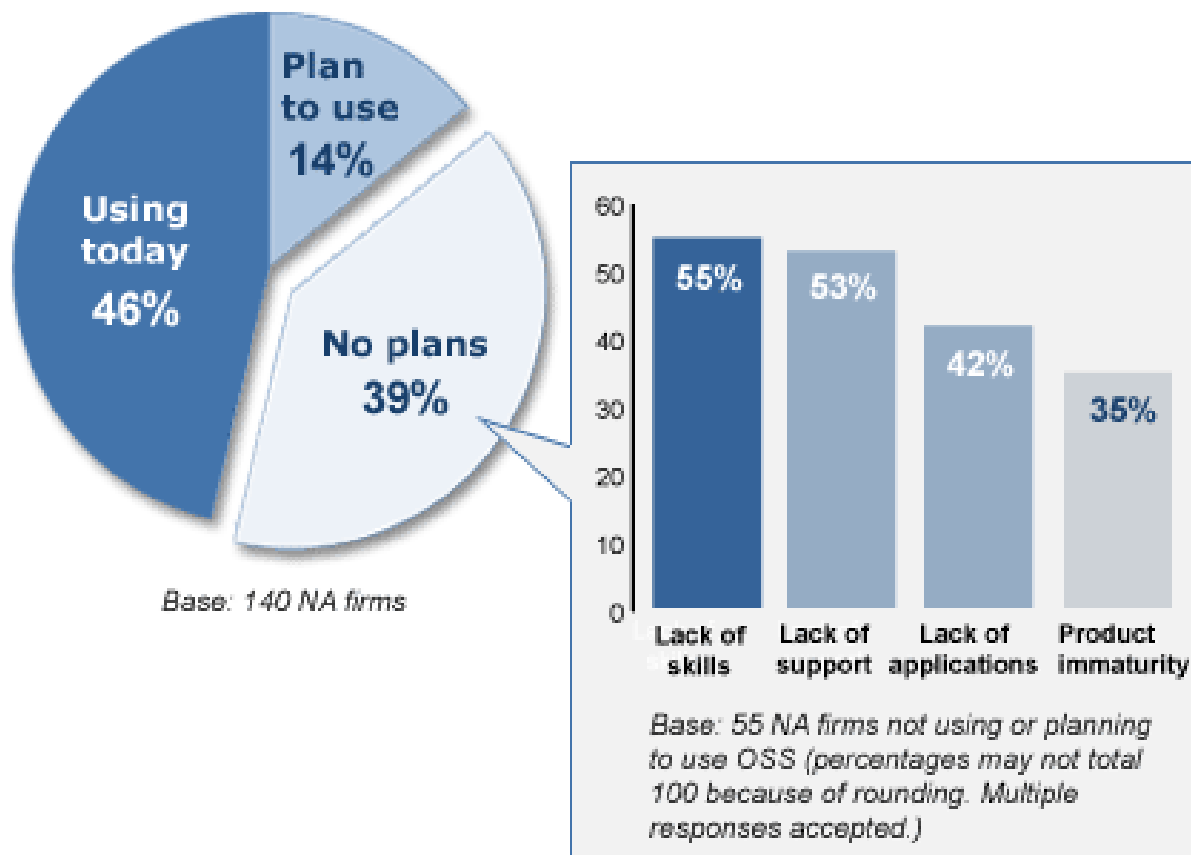


Source: CNET Survey



# How Pervasive is Open Source Software?

## “What are Your Plans for Open Source Software?”



Source: Open Source Moves Into The Mainstream, Forrester Research, March 2004

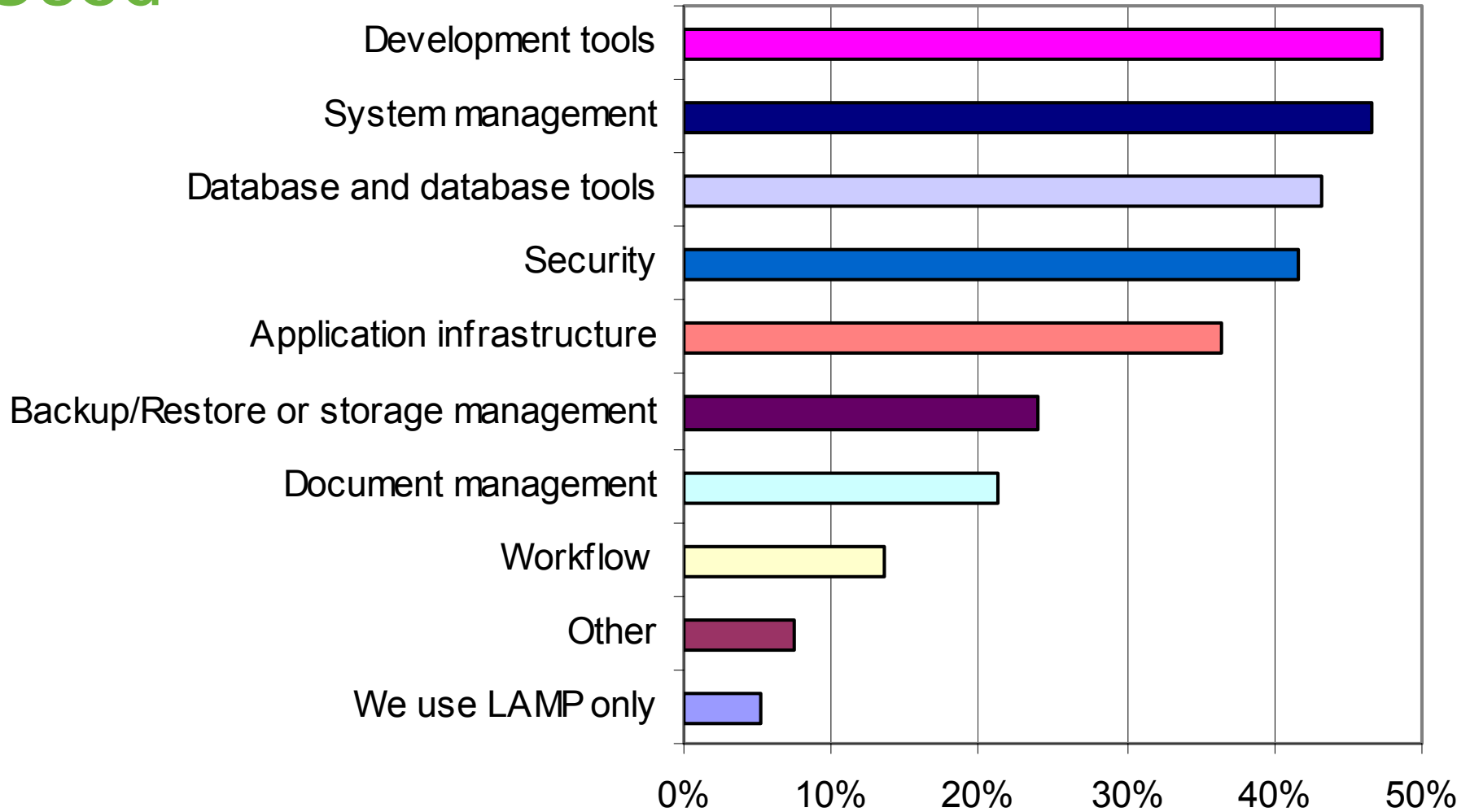
# Open Source – Beyond Linux

## Open Source use beyond “LAMP”

- 89% use or plan to use Open Source tools
- 30% say Open Source is key to IT strategy

Source: CNET Survey

# Top Areas Where Open Source Will Be Used



Source: CNET Survey

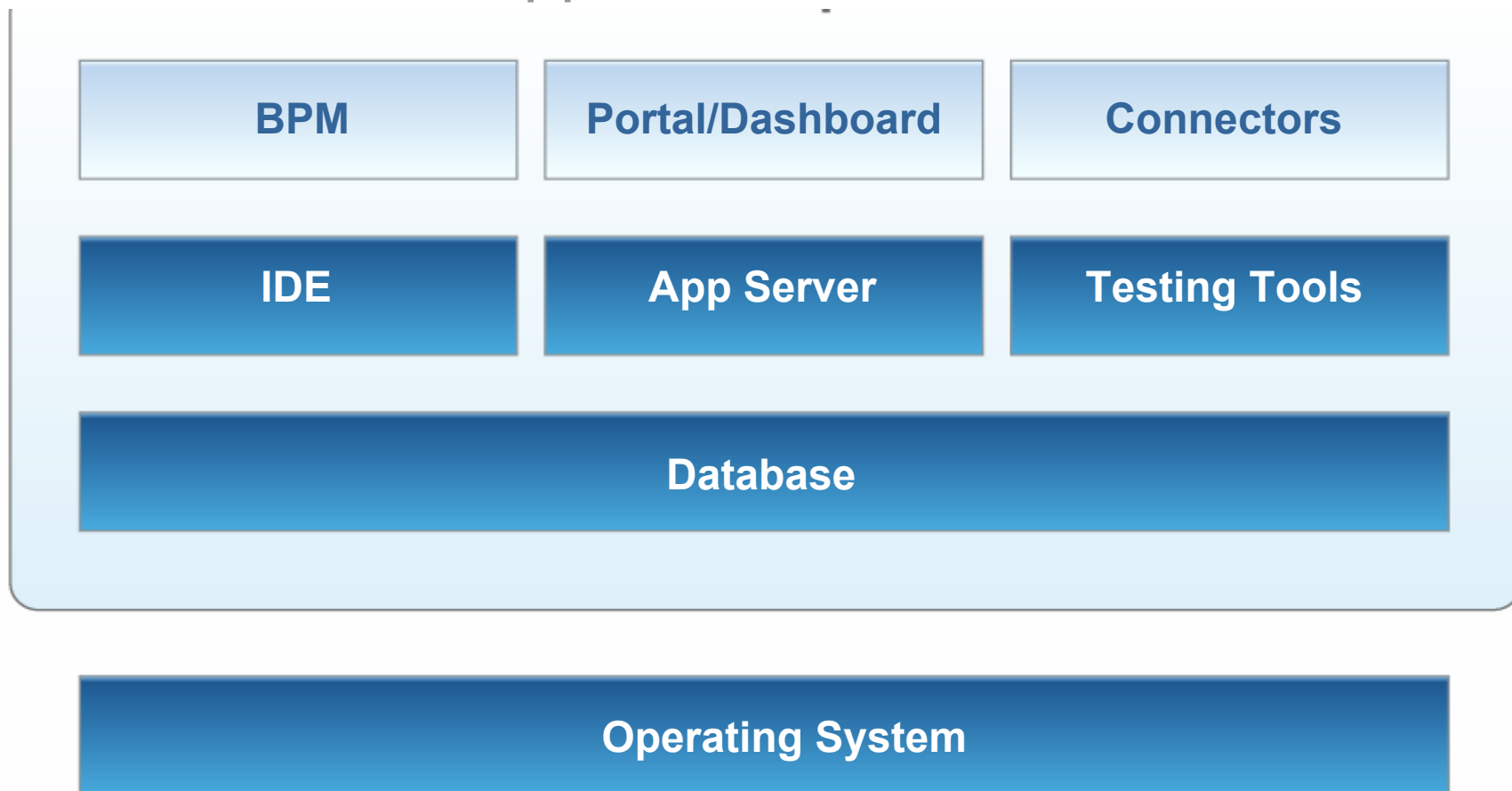
# Open Source Use and You

# Open Source Usage at CA

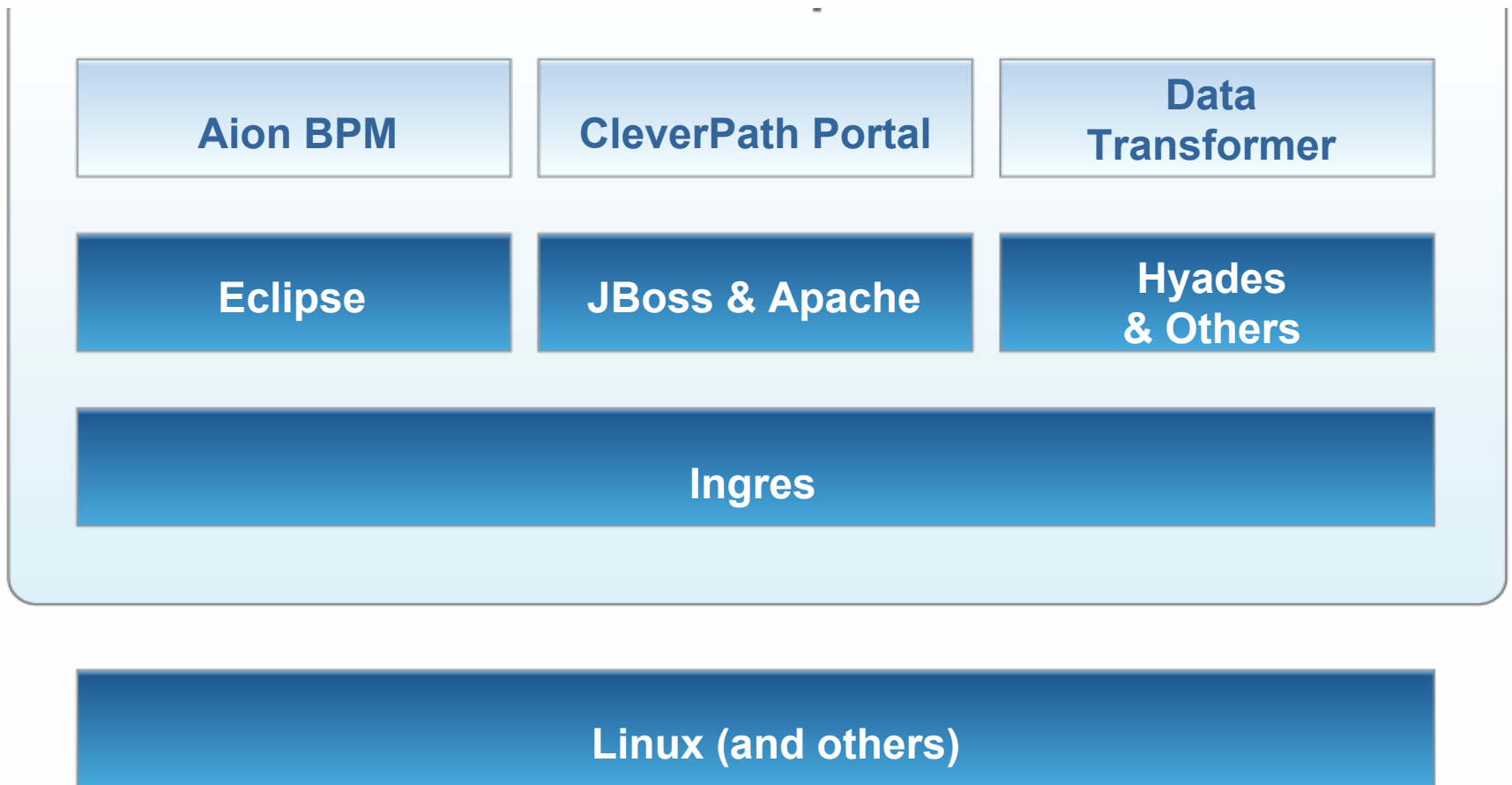
- Linux on zSeries and x86
- Apache Tomcat, Xerces
- Mozilla browser
- JBoss
- Eclipse
- Various Testing tools
- Plone and Zope
- OpenLDAP
- Perl, Python

# CA Product Tech Stack

- A common technology platform to build, integrate and customize applications



# CA and Open Source Tech Stack



# “Best Practices” for Open Source Use

- Planning is important!
- Create and open source advisory group
- Develop an “Open Source Stack”
  - or a combined open source/proprietary tools stack
- Consider open source development model for internal projects
  - Team communication, transparency, peer code reviews, user involvement, staffing models



# Procurement of Open Source Tools

- Parallel criteria to commercial software
- Common considerations in evaluating open source:
  - Functional requirements
  - Architecture fit
  - Product “popularity” vs Market Share
  - Project longevity, future direction vs Corporate stability
  - Community activity vs Resource availability
  - Support - single throat to choke!!!

# Closing Comments

- Open Source enables innovation and increases your choices
- Linux and Apache are here to stay
- Other Open Source solutions should be considered
- Best practices around procurement and management of Open Source technology are in works
- Vendors are getting behind open source

# Questions & Answers