

# Commercial Open Source

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**COSS C03**

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# Agenda

1. Definition (commercial open source)
2. Economic significance
3. The three core strategies
4. Single vendor open source firms
5. Open source distributor firms
6. Service and support firms
7. Benefits by business function

# 1. What is Commercial Open Source?

# Definition of Commercial Open Source

- **Commercial open source software** is open source software that
  - Is being managed and developed by one or more software vendors
    - For the purposes of generating revenues through derived products
- A **commercial open source software vendor** is a software vendor that
  - Manages and develops commercial open source software
- The product itself, sold by a vendor, is never open source software

# Examples of Commercial Open Source Firms



# Origin of the Term Commercial Open Source

## REGISTRY WHOIS FOR COMMERCIALOPENSOURCE.COM

Domain Name: **commercialopensource.com**

Registrar: NETWORK SOLUTIONS, LLC.

Whois Server: whois.networksolutions.com

Referral URL: <http://www.networksolutions.com>

Status: clientTransferProhibited

Expiration Date: 2011-04-26

Creation Date: 2005-04-26

Last Update Date: 2008-01-27

Name Servers:

[dns1.sugarcrm.com](https://dns1.sugarcrm.com)

[dns2.sugarcrm.com](https://dns2.sugarcrm.com)

[See commercialopensource.com DNS Records](#)

Information Updated: Fri, 19 Jun 2009 05:32:53 UTC

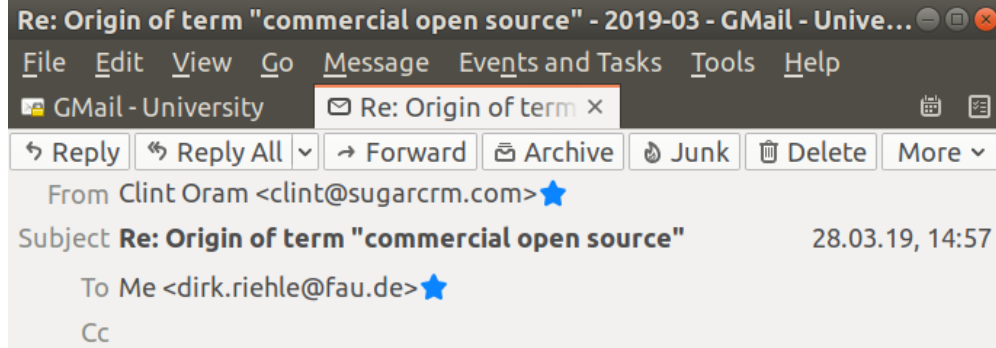
## COMMERCIALOPENSOURCE.COM SITE INFORMATION

IP: [70.42.242.70](#)

IP Location: Cupertino, United States

Website Status: [active](#)

Server Type: Apache



The person who came up with the term was John Roberts, my colleague that I started the business with and our first CEO. Our focus was to convey that there was a company behind the open source project and that we were a commercial endeavor.

Hope that helps.

Clint

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Clint Oram, Chief Strategy Officer & Co-founder  
SugarCRM Inc.

# Software and the Commercial Product

- **Core product =**

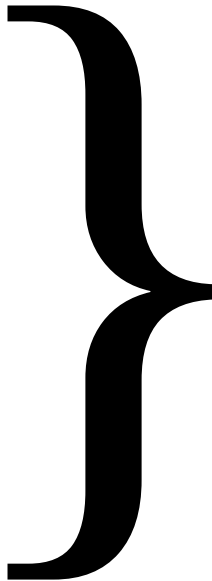
- Core software
- Additional functionality
- Complementary artifacts
- Self-help services



**Sometimes commercial**

- **Basic product =**

- Core product +
- Fitness for use
- Certification
- Support services

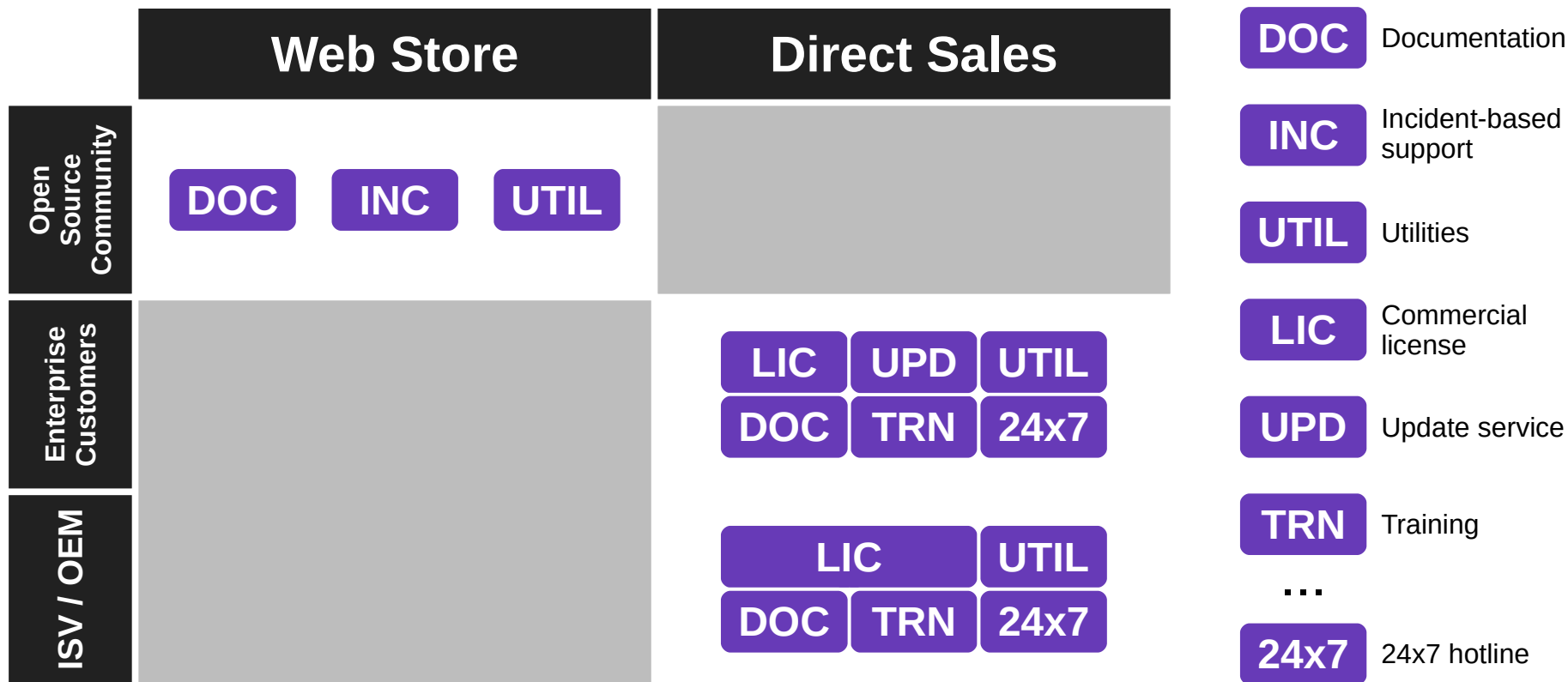


**Always commercial**

- **Whole product =**

- Basic product +
- Training
- Consulting
- Operations

# An Example Commercial Open Source Product [WR13]





## 2. Economic Significance

## Increasing Open Source Investment Pace

|   | <5 YEARS | 5-10 YRS | >10 YEARS | AGGREGATE |
|---|----------|----------|-----------|-----------|
| OSS COMPANIES FOUNDED (1ST INST. INV.)  | 31       | 19       | 8         | 58        |
| VC INVESTMENT BY FOUNDING VINTAGE (\$M) | \$1,802  | \$2,847  | \$255     | \$4,904   |
| VC INVESTMENT BY YEAR BUCKET (\$M)      | \$4,237  | \$506    | \$161     | \$4,904   |
| VALUATION BY FOUNDING VINTAGE (\$M)     | \$8,174  | \$12,719 | \$16,992  | \$37,886  |
| EXCL. RED HAT                           |          |          | \$1,938   | \$22,832  |

# Wealth Creation Through Commercial Open Source [1]

| 5  | Company                  | Core Project(s)         | OSS License     | Company Creation | Project Creation | OSS Origin                    | VC Raised (M) | Employees | Est. Revenue (M) | Est. Valuation (B) | Exit Value (B) | Public/Private                        | Status      | Outcome   | Exit Date  | Technology Area                         | Business Model        |
|----|--------------------------|-------------------------|-----------------|------------------|------------------|-------------------------------|---------------|-----------|------------------|--------------------|----------------|---------------------------------------|-------------|-----------|------------|---|-----------------------|
| 6  | Acquia                   | Drupal                  | GPL v2          | 2007             | 2000             | Personal project              | \$200         | 930       | \$200            | \$1.5              | \$1.50         | Private                               | PE          | PE        | 9/24/19    | Web Content Mgmt System                 | Open Core             |
| 7  | Aras                     | Aras PLM                | MS-PL           | 2000             | 2007             | Company project               | \$56          | 500       | \$100            | \$1.0              |                | Private                               | Independent |           |            | PLM                                     | Open Core             |
| 8  | Alfresco                 | Alfresco                | LGPL v3         | 2005             | 2005             | Company project               | \$70          | 460       | \$100            | \$0.3              | \$0.30         | Private                               | PE          | PE        | 2/8/18     | ECM <=> BPM                             | Open Core             |
| 9  | Automattic               | Wordpress               | GPL v2          | 2005             | 2003             | Personal project              | \$317         | 1,200     | \$300            | \$3.0              |                | Private                               | Independent |           |            | Content Management System               | Open Core             |
| 10 | Canonical                | Ubuntu                  | GPL             | 2004             | 2004             | Company project               | -             | 630       | \$150            | \$1.5              |                | Private                               | Independent |           |            | Operating System (Linux)                | Open Core             |
| 11 | Chef                     | Chef                    | Apache 2.0      | 2008             | 2009             | Personal project              | \$105         | 350       | \$100            | \$1.0              |                | Private                               | Independent |           |            | Configuration Management                | Support Subscriptions |
| 12 | Cloudera                 | Hadoop                  | Apache 2.0      | 2008             | 2006             | Internet-Scale (Google)       | \$1,350       | 3,100     | \$850            | \$4.0              | \$1.90         | Public                                | IPO         | IPO       | 4/28/17    | Big Data / Hadoop Ecosystem             | Open Core             |
| 13 | Confluent                | Kafka                   | Apache 2.0      | 2014             | 2011             | Internet-Scale (LinkedIn)     | \$455         | 1,100     | \$300            | \$4.5              |                | Private                               | Independent |           |            | Big Data / Middleware / Streaming       | Open Core             |
| 14 | Couchbase                | Couchbase               | Apache 2.0      | 2005             | 2003             | Spin-out (LiveJournal)        | \$246         | 500       | \$100            | \$1.5              |                | Private                               | Independent |           |            | NoSQL Database                          | Open Core             |
| 15 | Docker                   | Docker                  | Apache 2.0      | 2008             | 2013             | Spin-out (dotCloud)           | \$308         | 500       | \$100            | \$1.0              |                | Private                               | Independent |           |            | Developer Tools                         | Open Core             |
| 16 | Databricks               | Spark                   | Apache 2.0      | 2013             | 2010             | Academia/Research (AMPL)      | \$900         | 1,300     | \$400            | \$6.5              |                | Private                               | Independent |           |            | Big Data / Hadoop Ecosystem             | Open Core             |
| 17 | Datastax                 | Cassandra               | Apache 2.0      | 2010             | 2008             | Internet-Scale (Facebook)     | \$190         | 580       | \$150            | \$2.5              |                | Private                               | Independent |           |            | NoSQL Database                          | Open Core             |
| 18 | Elastic                  | ElasticSearch           | Apache 2.0      | 2012             | 2010             | Personal project              | \$272         | 1,600     | \$400            | \$8.0              | \$2.5B         | Public                                | Independent | IPO       | 10/5/18    | Distributed Search Index + Tools        | Open Core             |
| 19 | Fastly                   | Varnish                 | BSD             | 2011             | 2006             | Internet-Scale (Verdens Gang) | \$220         | 550       | \$200            | \$8.0              | \$2B+          | Public                                | Independent | IPO       | 5/18/19    | CDN                                     | Open Core             |
| 20 | ForgeRock                | OpenAM/IDM/DJ/G         | CDL             | 2010             | 2005             | Spin-out (Sun)                | \$235         | 670       | \$200            | \$2.0              |                | Private                               | Independent |           |            | Identity and Access Management          | Open Core             |
| 21 | GitHub                   | Git                     | GPL v2          | 2009             | 2005             | Personal project              | \$350         | 1,550     | \$400            | \$7.5              | \$7.50         | Public (via MSFT)                     | Acquired    | M&A       | 6/4/18     | Distributed Source Code Version Control | Open Core             |
| 22 | GitLab                   | Git                     | GPL v2          | 2014             | 2011             | Personal project              | \$436         | 1,300     | \$100            | \$5.0              |                | Private                               | Independent |           |            | Distributed Source Code Version Control | Open Core             |
| 23 | HashiCorp                | Many                    | MPLv2           | 2012             | 2010             | Personal project              | \$350         | 950       | \$150            | \$5.1              |                | Private                               | Independent |           |            | Developer / Ops / Infra Tools           | Open Core             |
| 24 | Instructure              | Canvas                  | AGPL v3         | 2008             | 2011             | Company project               | \$90          | 1,420     | \$220            | \$1.4              | \$0.65         | Public                                | Independent | IPO       | 11/13/2015 | Learning Management                     | Open Core             |
| 25 | JetBrains                | IntelliJ                | Apache 2.0      | 2000             | 2009             | Company project               | -             | 800       | \$350            | \$4.0              |                | Private                               | Independent |           |            | Developer Tools                         | Open Core             |
| 26 | JBoss                    | Artifactory             | AGPL v3         | 2008             | 2007             | Company project               | \$230         | 460       | \$150            | \$1.5              |                | Private                               | Independent |           |            | Software Artifact Repository            | Open Core             |
| 27 | Kaltura                  | Kaltura                 | AGPL v3         | 2006             | 2009             | Company project               | \$166.00      | 530       | \$200            | \$1.5              |                | Private                               | Independent |           |            | Video Editing Platform                  | Open Core             |
| 28 | Liferay                  | Liferay Portal          | LGPL v2.1+      | 2004             | 2000             | Company project               |               | 870       | \$250            | \$2.5              |                | Private                               | Independent |           |            | Enterprise Portal                       | Open Core             |
| 29 | Magento Commerce         | Magento                 | OSL v3, AFL v3  | 2007             | 2008             | Company project (Varien)      | \$272         | 700       | \$200            | \$1.7              | \$1.68         | Public (via Adobe)                    | Acquired    | M&A       | 5/20/18    | Web Content Mgmt System                 | Open Core             |
| 30 | Mapbox                   | Mapbox GL JS            | BSD-3           | 2010             | 2010             | Company project (Develo       | \$275         | 450       | \$100            | \$1.5              |                | Private                               | Independent |           |            | Mapping Software                        | Open Core             |
| 31 | Mirantis                 | OpenStack               | Apache 2.0      | 1999             | 2010             | Academia/Research (NASA)      | \$227         | 500       | \$100            | \$1.0              |                | Private                               | Independent |           |            | Infrastructure Software                 | Open Core             |
| 32 | MongoDB (fka 10gen)      | MongoDB                 | SSPL (not OSI)  | 2007             | 2009             | Spin-out (10gen)              | \$311         | 1,500     | \$400            | \$11.0             | \$1.60         | Public                                | Independent | IPO       | 10/19/17   | NoSQL Database                          | Open Core             |
| 33 | Mozilla Corporation      | Firefox                 | MPLv2           | 2003             | 2002             | Spin-out (Netscape)           | \$22          | 1,100     | \$550            | \$5.0              |                | Private                               | Independent |           |            | Web Browser                             | Ads/Royalties         |
| 34 | MuleSoft                 | Mule ESB                | CPAL            | 2006             | 2003             | Personal project              | \$311         | 1,750     | \$700            | \$8.0              | \$6.50         | Public (via SFDC)                     | Acquired    | IPO + M&A | 3/20/18    | Middleware                              | Open Core             |
| 35 | MySQL AB                 | MySQL                   | GPL v2          | 1995             | 1995             | Company project               | \$41          | 800       | \$1,000          | \$1.1              | \$1.10         | Public (via Oracle)                   | Acquired    | M&A       | 2/26/08    | Relational Database                     | Open Core             |
| 36 | Neo4j                    | Neo4j                   | GPLv3           | 2007             | 2007             | Company Project               | \$160         | 300       | \$100            | \$1.0              |                | Private                               | Independent |           |            | Graph Database                          | Open Core             |
| 37 | Nicira                   | Open vSwitch            | Apache 2.0      | 2007             | 2009             | Academia/Research (Stanfor    | \$42          | 100       | \$2,000          | \$1.3              | \$1.26         | Public (via VMware)                   | Acquired    | M&A       | 7/23/12    | SDN / Network Virtualization            | Open Core             |
| 38 | Odoo                     | Odoo                    | LGPL v3         | 2005             | 2005             | Company project               | \$105         | 950       | \$250            | \$1.5              |                | Private                               | Independent |           |            | Business Applications                   | Open Core             |
| 39 | Pentaho                  | Pentaho                 | Apache 2.0      | 2004             | 2004             | Company project               | \$75          | 670       | \$100            | \$1.0              | \$0.50         | Public (via Hitachi)                  | Acquired    | M&A       | 6/4/15     | BI/ETL                                  | Open Core             |
| 40 | Pivotal (Now VMware Tanz | CloudFoundry            | Apache 2.0      | 2013             | 2009             | Company project (VMware)      | \$1,700       | 2,400     | \$800            | \$3.5              | \$4.00         | Public                                | Acquired    | IPO       | 4/20/18    | PaaS / Hadoop / Spring                  | Open Core             |
| 41 | Puppet Labs              | Puppet                  | Apache 2.0      | 2005             | 2005             | Company project               | \$142         | 560       | \$250            | \$2.5              |                | Private                               | Independent |           |            | Configuration Management                | Open Core             |
| 42 | Rapid7                   | Metasploit              | BSD-3           | 2000             | 2003             | Personal project              | \$89          | 1,800     | \$350            | \$2.5              | \$0.90         | IPO                                   | IPO         |           | 7/22/15    | Security                                | Open Core             |
| 43 | Red Hat                  | Linux                   | GPL v2          | 1993             | 1991             | Personal project              | \$5           | 13,100    | \$3,500          | \$34.5             | \$34.00        | Public                                | Acquired    | IPO + M&A | 8/11/99    | OS, Middleware, Infrastructure Software | Support Subscriptions |
| 44 | Linden Lab               | Second Life             | LGPL            | 1999             | 2003             | Company project               | \$19          | 250       | \$100            | \$0.5              |                | Private                               | Independent |           |            | Virtual Worlds                          | Open Core             |
| 45 | Sourcefire               | Sno                     | GPL v2          | 1998             | 1998             | Personal project              | \$40          | 600       | \$500            | \$3.0              | \$2.70         | Public (via Cisco)                    | Acquired    | M&A       | 10/7/13    | Network Intrusion Detection             | Open Core             |
| 46 | SugarCRM                 | SugarCRM                | Previously A2.0 | 2004             | 2004             | Company project               | \$146         | 440       | \$175            | \$1.0              |                | Private                               | PE          | PE        | 8/20/18    | CRM                                     | Previously Open Core  |
| 47 | SUSE                     | Linux Kernel            | GPL v2          | 1992             | 1991             | Personal project              | -             | 1,500     | \$400            | \$2.5              | \$2.50         | Public (via Novell) + Private (MicroF | M&A         |           | 11/4/03    | Operating System (Linux)                | Support Subscriptions |
| 48 | Talend                   | Talend Data Integration | Apache 2.0      | 2005             | 2006             | Company project               | \$102         | 1,300     | \$200            | \$1.1              | \$0.55         | Public                                | Independent | IPO       | 7/28/16    | SOA/ETL/AI/Middleware                   | Open Core             |
| 49 | VA Linux (Geeknet)       | Linux                   | GPL v2          | 1993             | 1991             | Personal project              | \$30          | 300       | \$120            | \$0.2              | \$0.15         | Private                               | Acquired    | IPO       | 12/9/99    | Computer Systems                        | Hardware Sales        |
| 50 | WP Engine                | Wordpress               | GPL v2          | 2010             | 2003             | Personal project              | \$291         | 900       | \$200            | \$1.0              |                | Private                               | Independent |           |            | Content Management System               | Open Core             |
| 51 |                          |                         |                 |                  |                  |                               | \$10,951      | 53,820    | \$17,565         | \$161.2            | \$69.29        |                                       |             |           |            |   |                       |

## 3. The Three Core Strategies

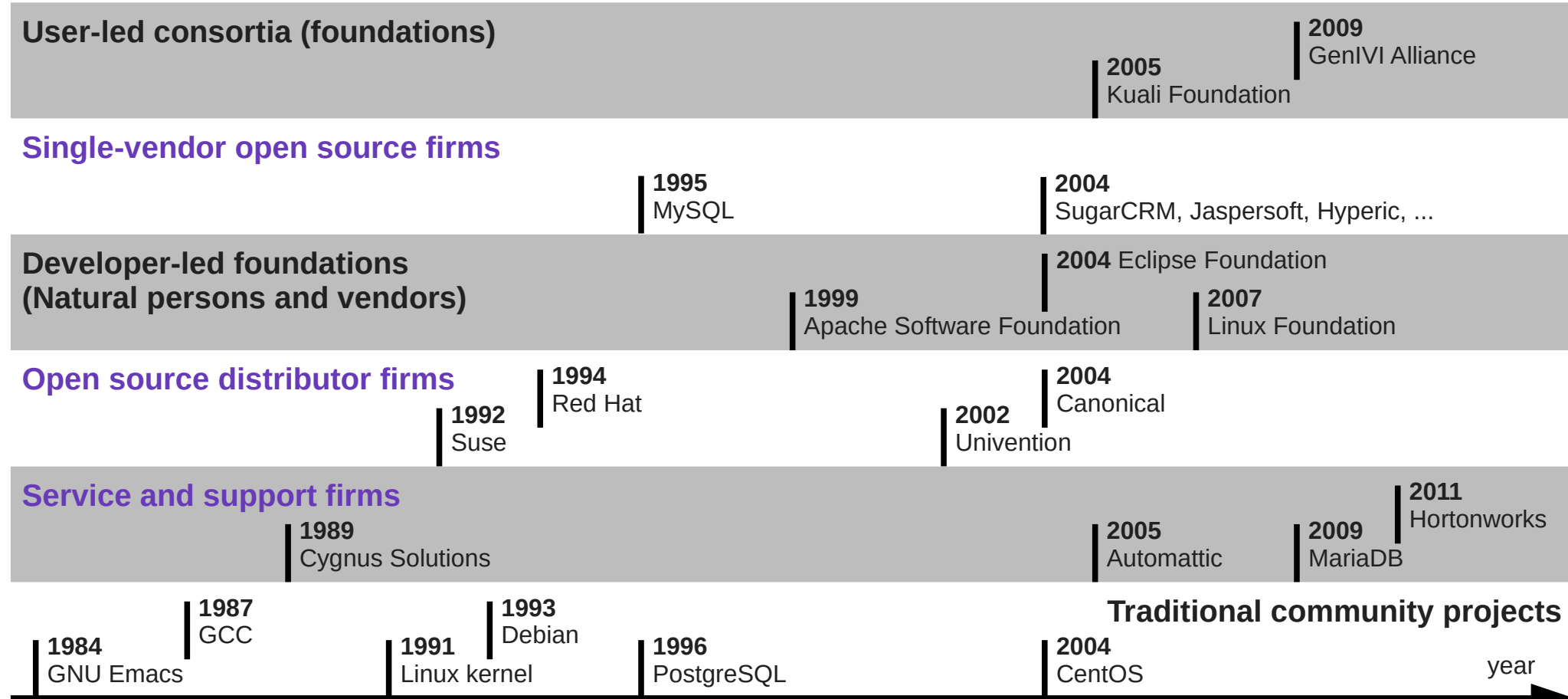
# Sustainable Open Source (Recap)

- Non-profit open source organizations
    - Confederated community projects
    - Open source **vendor-led foundations**
    - Open source **user-led foundations**
  - **For-profit open source firms**
    - Single-vendor open source firms
    - Open source distributor firms
    - Service and support firms
- } **Commercial open source**

# Commercial Open Source by Intellectual Property

- Single-vendor open source firms
  - Provide a traditional software product to enterprises
  - Exclusively own (key parts of) the software their business is based on
  - Can attract venture capital; can have outside returns
- Open source distributor firms
  - Provide a well working assembly of open source components
  - Exclusively own non-core-software IP (configuration data, regression test suites, ...)
  - Can attract venture capital; can have outside returns
- Service and support firms
  - Service existing community open source software
  - Share in the IP, don't dominate it
  - Don't attract venture capital

# Open Source History (Recap)



Not a complete history: Events have been chosen for illustration purposes

## 4. Single-Vendor Open Source Firms



# Definition of Single-Vendor Open Source

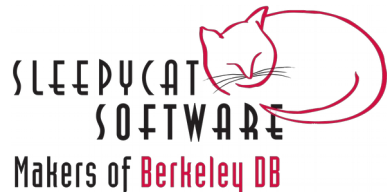
- **Single-vendor open source software** is commercial open source software that
  - Is being managed and developed by **a single vendor**
    - For the purposes of generating revenues through derived products
- A **single-vendor open source software firm** is a software vendor that
  - Manages and develops single-vendor open source software
- The product itself is never open source software

# Characteristics of Single-Vendor Open Source

- Single-vendor open source firms
  - Control most or all of the key control mechanisms for open source
    - In particular, they are (by definition) the sole copyright owner
  - Can attract venture capital funding and can have outside returns
- Perhaps better be called neo-proprietary software vendors

# Three Generations of Single-Vendor Open Source Firms

- The pioneers (199x-2002)



...

- The second wave (2002-2008)



...

- The current breed (since 2008)



...

# First and Second Generation Single-Vendor Open Source Firms



# Third Generation Single-Vendor Open Source Firms [1]



[1] More at <http://bit.ly/2Nxhf1F>; additions welcome

# Community vs. Commercial Edition (Single-Vendor Firms)

- **Community edition**

- **Core product**

- **Core software**
      - **Provided under an open source license**
    - Some complementary artifacts
    - Self-help services

- **Commercial edition**

- **Core product**

- Core software
      - **Provided under a commercial license**
    - Additional functionality
    - Complementary artifacts
    - Self-help services

- **Basic product = core product +**

- Fitness for use / certification
    - Indemnification
    - Support services

- **Whole product = basic product +**

- Training
    - Consulting
    - Operations

# User to Customer Conversion

- Community edition

- Home user
  - Will never pay money
  - But pays with time, feedback
- Line-of-business user
  - Likes \$0 line-items
  - May be ignorant of risks



- Commercial edition

- Enterprise customer
  - Is willing to pay
  - Requires enterprise features
- Internal IT department
  - Has appropriate budget
  - Wants professional support

## **Structure product and services so that you**

- 1. Maximize conversion to paying customer**
- 2. While benefiting from user community**
- 3. And keeping the competition at bay**



# Intellectual Property Management (Single-Vendor Firms)

- **Intellectual property rights imperative** (of single-vendor open source)
  - “Always act in such a way that you, and only you, possess the right to provide the open source project under a license of your choice.” [1]
- Use contributor agreement to maintain ownership
  - Almost all single-vendor open source firms require copyright transfer for any contributions to maintain full IP ownership [2]

[1] Riehle, D. (2009). [The intellectual property rights imperative](#). Web-published.

[2] All you really need is a relicensing right though

# Multi-Vendor Commercial Open Source Firms

- Multi-vendor = no single dominant owner, rather shared control
  - If so, best under a foundation to ensure reasonable governance
  - Creates the problem of starving the project for new features

Apache Hadoop

Apache Kafka

Apache Lucene/Solr

cloudera

confluent

Lucidworks

MAPR®

aiven

elastic

HORTONWORKS®

instaclustr

swifttype

## **5. Open Source Distributor Firms**

# Definition of Open Source Distribution

- An **open source distribution**
  - Is a well integrated collection of open source components and applications
- An **open source distributor firm**
  - Is firm that provides an open source distribution as a product or service

# Characteristics of an Open Source Distribution

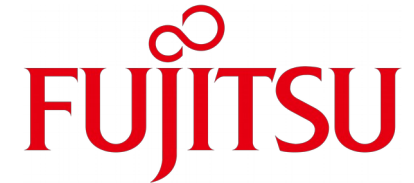
- An open source distribution is a complex software where complexity stems from
  - The number of components
  - The individual complexity of a component
  - Keeping the components working with each other
  - Keeping the components up-to-date
- A commercial open source distributor hides this complexity from the user (for pay)

# Examples of Open Source Distributor Firms

- Linux



- OpenStack



- Miscellaneous



# Intellectual Property Management (Distributor Firms)

- Distributor firms do not exclusively own the copyright to the code
- Distributor firms can (and do) exclusively own
  - Build processes for building the product from its components
  - Compatibility matrices and configuration data
  - Knowledge databases for support
  - Tests and test suites
- Distributors own “what’s in between” the open source code
  - Sometimes manifests itself exclusively in people

# Community vs. Commercial Edition (Distributor Firms)

- Community edition

- Example Linux-based distributions

- Canonical
      - Ubuntu
    - Univention
      - Univention Corporate Server
    - Red Hat
      - Fedora, CentOS
    - Suse
      - OpenSuse

- Product

- **Core product**

- Core software
        - **Provided under its open source license**
      - Complementary artifacts
      - Self-help services

- Commercial edition

- Example Linux-based distributions

- Canonical
      - Ubuntu
    - Univention
      - Univention Corporate Server
    - Red Hat
      - Red Hat Enterprise Linux
    - Suse
      - Suse Linux Enterprise Server

- Product and services

- **Core product**

- Core software
        - **Provided under its open source license**
      - Additional functionality
        - **Provided under a commercial license**
      - Complementary artifacts
      - Self-help services

- **Basic product**

- **Whole product**



## 6. Service and Support Firms

# Definition of Service and Support Firm

- An open source service and support firm is a consulting firm that
  - Services and supports community open source software

# Characteristics of Service and Support Firms

- A service and support firm is a consulting firm
  - Revenues mostly scale with labor
- These firms contribute to the open source project they support
  - Such positioning is important for marketing and sales

## **7. Benefits by Business Function**

# Why the Open Source Strategy?

- **To drive adoption** (of product in market)
  - To build a **large (not necessarily paying) user base** from which benefits accrue
- What is not new
  - Revenue sources
- What **is** new
  - Everything else (changes)

# Benefits By Business Function

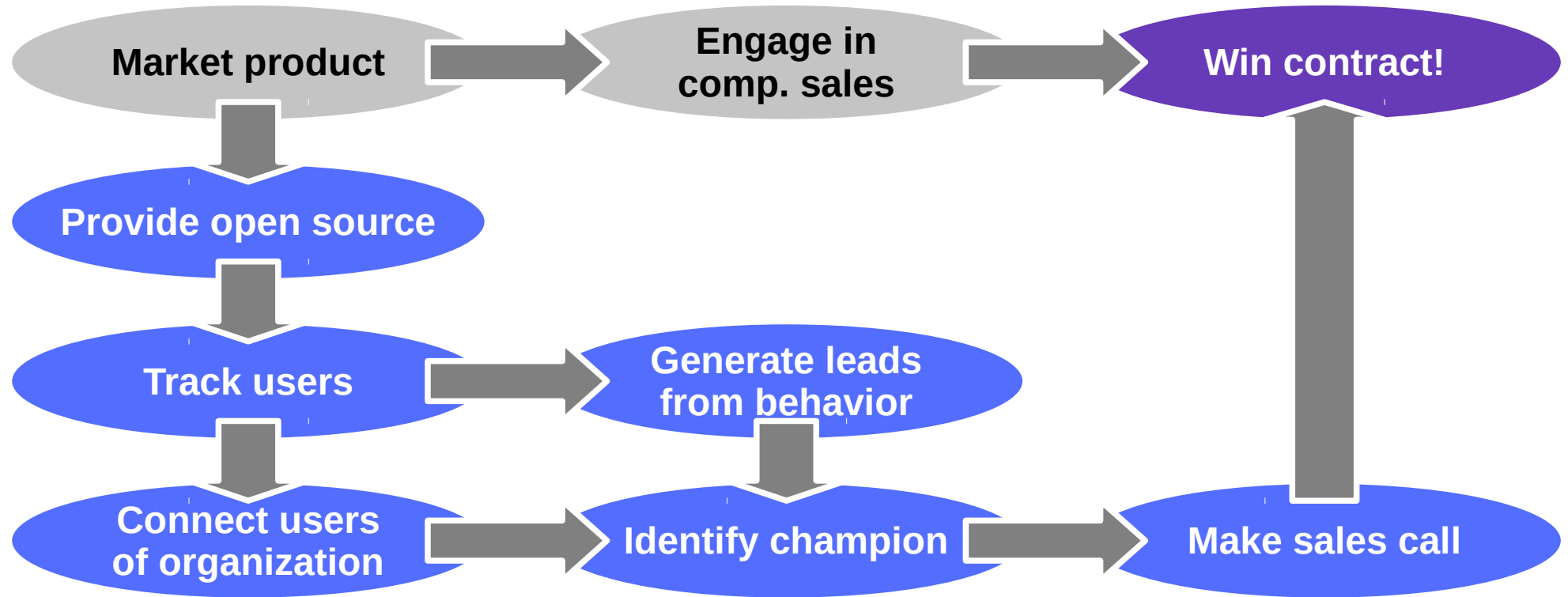
- Marketing
  - Generate leads more broadly, faster, cheaper
- Sales
  - Sell more effectively
- Business development
  - Identify partner opportunities better
- Product management
  - Identify market requirements faster better
- Software development
  - Build a superior product faster at lower cost
- Product support
  - Support better cheaper

# Benefits to Marketing

- Community word-of-mouth helps evangelize product
- Community creates wider outreach than possible without
- Frictionless distribution (no barriers) helps drive adoption



# Benefits to Sales





# Benefits to Business Development

- User innovation helps identify strategic partners

# Benefits to Product Management

- Identify customer requirements more readily
- Explore new market segments more cheaply
- Let users explore feature space for you
- Let users explore alternatives at no costs

# Benefits to Software Development

- Find bugs fast
- Get bug reports for free
- Get code contributions for free
- Explore design and implementation
- Recruit and hire more effectively

**“Source code [is just] 10% of the effort.” [L07]**

# Benefits to Support

- Get help with self-help services
- Reduce overall support load through self-help
- Feed self-help services into commercial documentation

# But at What Costs?

- Some retraining of traditional business functions
- Establishment of new community management function

# Summary

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# Thank you! Questions?

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- Contributions
  - None yet