

OPEN SOURCE SOFTWARE DEVELOPMENT

Lecture #03: **Commercial Open Source**

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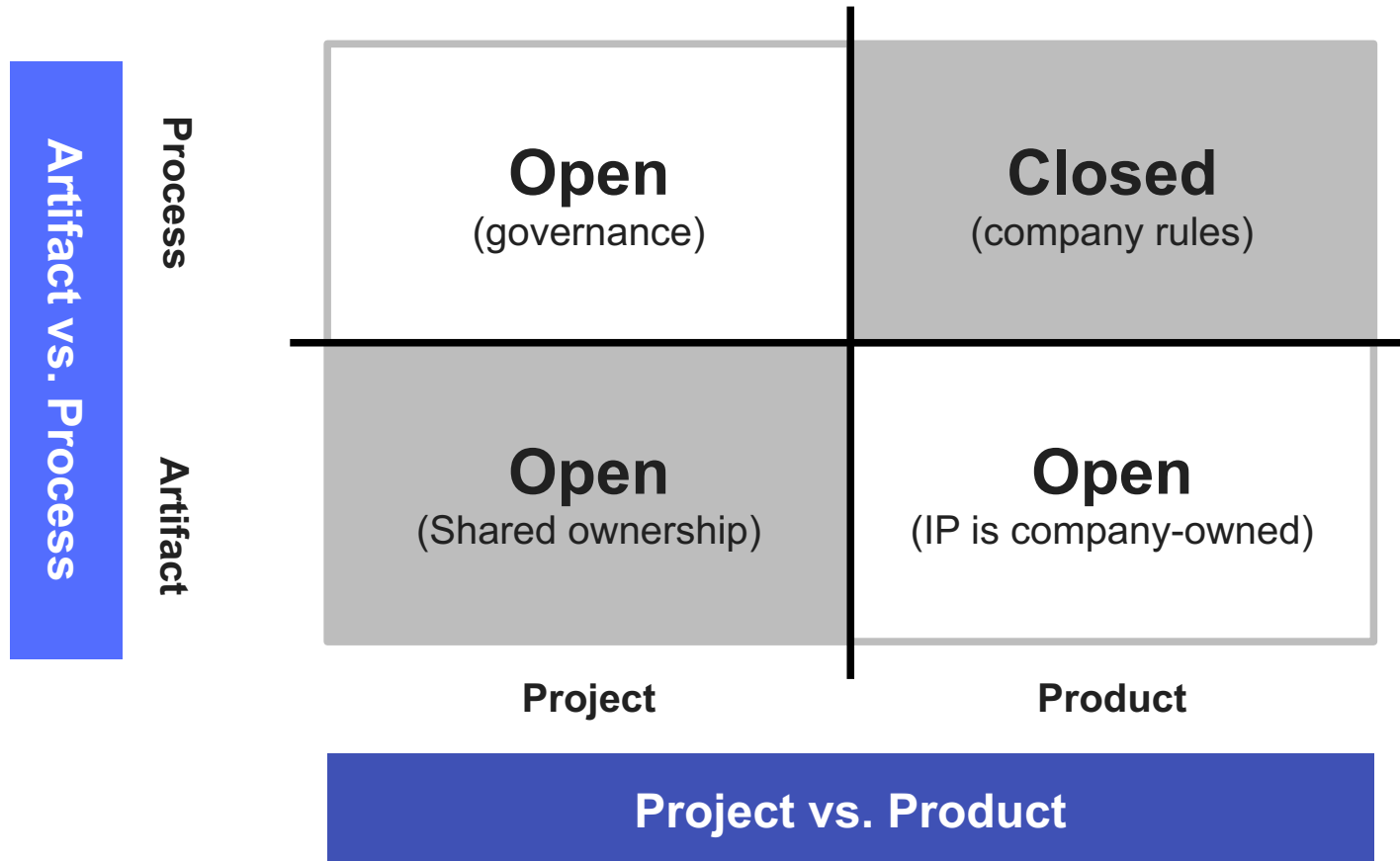
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COMMUNITY VS. COMMERCIAL OPEN SOURCE



COMMUNITY VS. COMMERCIAL OPEN SOURCE

- Community open source
 - Traditional open source projects (e.g. GIMP)
 - Developer-led projects / foundations (e.g. Jakarta / Eclipse)
 - User-led projects / foundations (e.g. Kuali)
- Commercial open source
 - Single-vendor open source firms (e.g. MongoDB)
 - Open source distributor firms (e.g. SUSE)
 - Service and support firms (e.g. Cygnus Solutions)

COMMERCIAL OPEN SOURCE??

“Como criar um negócio que gire em torno do produto que estamos querendo abrir para a comunidade (de forma gratuita)?”

COMMERCIAL OPEN SOURCE??

- Commercial open source software
 - **Is open source software that**
 - Is being developed by one or more software vendors
 - For the purposes of deriving indirect revenues from it
- The product is never open source software
 - **Customers pay for a basic or whole product**
 - **By a (the) commercial open source vendor**

BUT, WHY?

- To drive adoption (of the product) due to (nearly) frictionless distribution
 - To build a large user base from which benefits accrue
 - To have an existing base of users to convert to customers
 - To hinder competitors from getting in
- What is not new
 - Revenue sources
- What is new
 - Everything else (changes)

Who??



Red Hat



univention



MIRANTIS

Who?

COSS Company	OSS Origin	VC Raised (M)	Employees	Est. Revenue (M)	Est. Valuation (B)	Exit Value (B)	Public/Private	Status
Mirantis	Academia/Research (NASA)	\$227	580	\$100	\$1.0		Private	Independent
Linden Lab	Company project	\$19	247	\$100	\$0.5		Private	Independent
Pentaho	Company project	\$75	670	\$100	\$1.0	\$0.50	Public (via Hitachi)	Acquired (Hitachi)
Alfresco	Company project	\$70	419	\$100	\$0.3	\$1.00	Private	Hyland acquire
Cloudbees	Personal project	\$111	450	\$100	\$1.0		Private	Independent
Docker	Spin-out (dotCloud)	\$308	200	\$100	\$1.0		Private	Independent
Kaltura	Company project	\$166	710	\$120	\$1.0		Private	Independent
VA Linux (Geeknet)	Personal project	\$30	300	\$120	\$0.2	\$0.15	Private	Acquired
Canonical	Company project	\$12.80	875	\$150	\$1.5		Private	Independent
Puppet Labs	Company project	\$190	510	\$150	\$2.5		Private	Independent
Neo4j	Company Project	\$190	490	\$150	\$2.0		Private	Independent
Datastax	Internet-Scale (Facebook)	\$240	530	\$150	\$2.0		Private	Independent
Couchbase	Spin-out (LiveJournal)	\$251	630	\$150	\$1.5		Private	Independent
JBoss	Company project	\$230	820	\$160	\$5.0		Private	Independent
SugarCRM	Company project	\$146	504	\$175	\$1.0		Private	PE (KKR)
Liferay	Company project	-	1,250	\$200	\$2.0		Private	Independent
Instructure	Company project	\$90	1,200	\$200	\$1.4	\$0.65	Public	Independent (T)
Treasure Data	Company project	\$54	400	\$200	\$1.5	\$0.70	Private	Acquired (Arm)
Segment	Company project	\$284	650	\$200	\$3.2	\$3.20	Public (Twilio)	Acquired (Twilio)
Postman	Company project	\$208	560	\$200	\$5.0		Private	Independent
Mapbox	Company project (DevelopmentSeed)	\$275	530	\$200	\$2.0		Private	Independent
Magento Commerce	Company project (Varien)	\$272	700	\$200	\$1.7	\$1.68	Public (via Adobe)	Acquired (Adobe)
Redis Labs	Personal Project	\$555	500	\$200	\$1.1		Private	Independent
GitLab	Personal project	\$437	1,350	\$200	\$6.0		Private	Independent
Enterprise DB	Academia/Research (UCB)	\$67	900	\$200	\$1.0		Private	Independent
ForgeRock	Spin-out (Sun)	\$225	740	\$200	\$2.0		Private	Independent

<http://oss.cash>

- **Core product =**

- Open source software
- Additional functionality
- Complementary artifacts
- Self-help services

} **Sometimes commercial**

- **Basic product =**

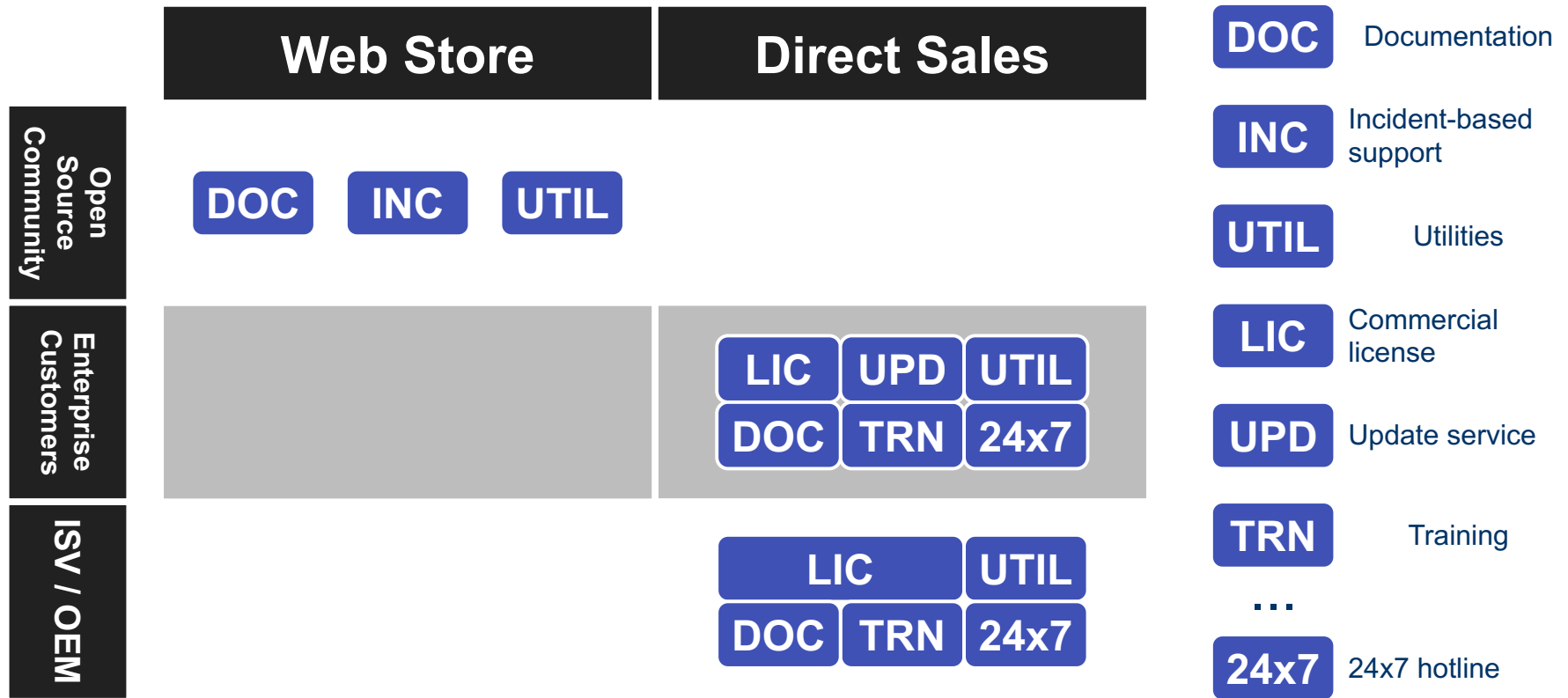
- Core product +
- Fitness for use
- Certification
- Support services

} **Always commercial**

- **Whole product =**

- Basic product +
- Training
- Consulting
- Operations

AN EXAMPLE...



COMMERCIAL OPEN SOURCE 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

SINGLE-VENDOR OPEN SOURCE FIRMS

DEFINITION OF SINGLE-VENDOR OPEN SOURCE

- Single-vendor open source software is commercial open source software that
 - **Is managed and developed by a single vendor**
- A single-vendor open source software firm is a software vendor that
 - **Manages and develops single-vendor open source software**

CHARACTERISTICS OF SINGLE-VENDOR OPEN SOURCE

- Single-vendor open source firms
 - **Owns 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 outsize returns**
- Perhaps better be called neo-proprietary software vendors

FIRST AND SECOND GENERATION SINGLE-VENDOR OPEN SOURCE FIRMS



kaltura




THIRD GENERATION SINGLE-VENDOR OPEN SOURCE FIRMS



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
 - 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

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 assignment 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.](#)

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

MULTI-VENDOR COMMERCIAL OPEN SOURCE

- 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

4. 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

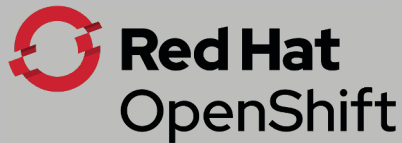
- Linux



CANONICAL



univention
be open.



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**

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**

5. 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**

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