

Open Source as a strategic advantage – status and relevance in clouds



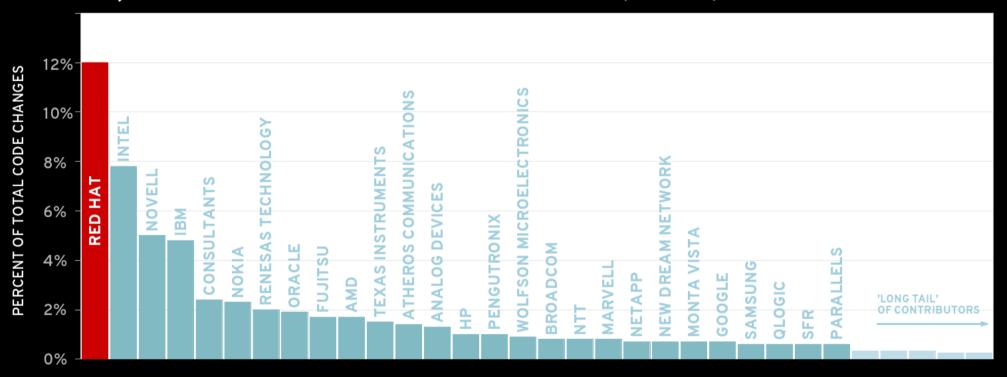
Werner Knoblich

General Manager Red Hat EMEA April 12, 2012

RED HAT DEVELOPMENT POWERHOUSE



Corporate Contributions to Linux KERNEL 2.6.30-2.6.35 (DEC 2010)



COMPANY / ORGANIZATION *

Source: The Linux Foundation Linux Kernel Development 2010 December 2010 (Pages 14-15)



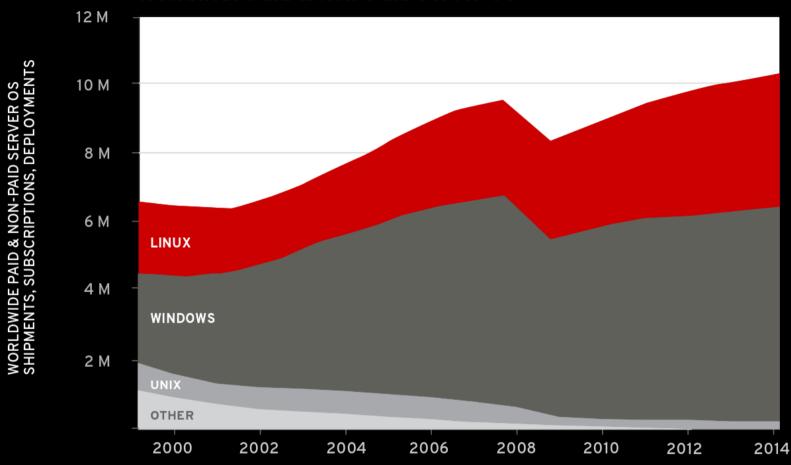
Our partnership with Red Hat has enabled us to offer a robust, scalable, high-performance, flexible, and cost-effective technology platform to our customers. —BRIJ MOHAN MAHENDRU, CTO

^{*} the developers who are 'known to be doing this work on their own, with no financial contribution happening from any company' are not grouped together as 'None' and instead are considered part of the 'long tail,' as are contributors of academic or unknown sponsorship.

ONLY TWO OPERATING SYSTEMS WILL REMAIN









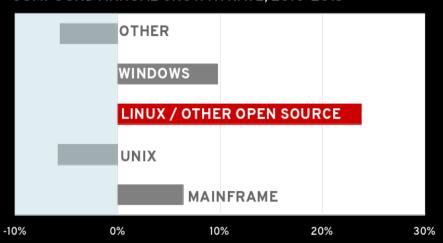
IDC 2010 Worldwide Client and Server Operating Environments 2011-2015 Forecast: The Perfect Storm of Disruption May 2011, #228201



WHAT THE ANALYSTS SAY



WORLDWIDE APPLICATION SOFTWARE REVENUE COMPOUND ANNUAL GROWTH RATE, 2010-2015



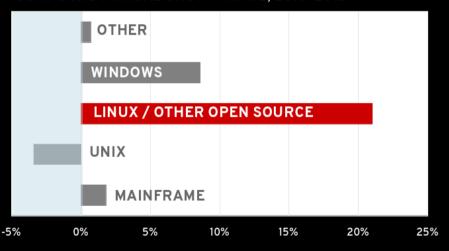
Through 2014, at least

75% of well-managed open source software

investments among mainstream IT organizations will result in

positive ROI over alternatives...

WORLDWIDE INFRASTRUCTURE SOFTWARE REVENUECOMPOUND ANNUAL GROWTH RATE, 2010-2015



By 2013, open source technology

will be included 85% of all modern, commercial software solutions.



IDC Worldwide Software 2011-2015 Forecast Summary June 2011, #228658

Gartner

What Every IT Practitioner Needs to Know About OSS October 2010, #G00207329



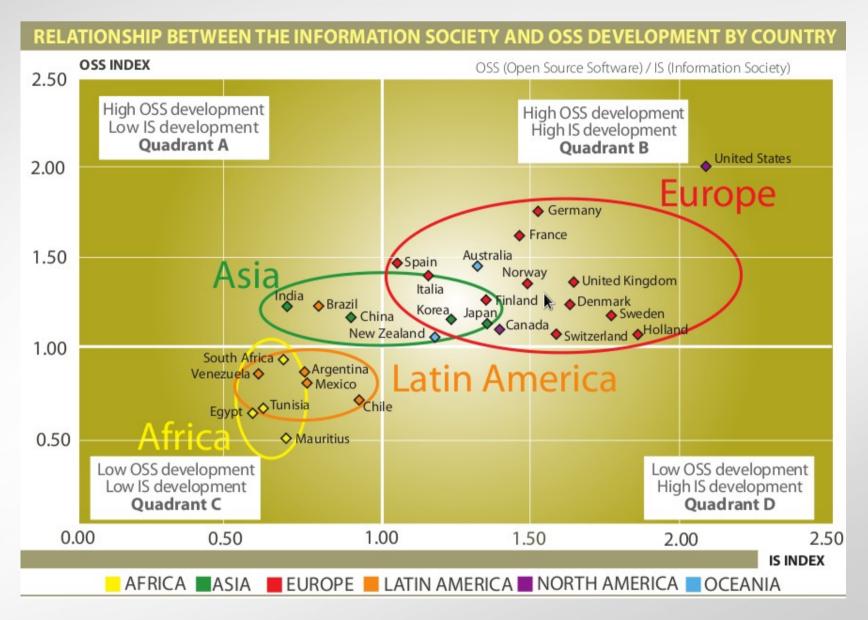
We handle up to 32,000 transactions/second... Red Hat Linux is our standard... it gives us the stability that we're looking for, faster time to market and it gives us much more flexibility. —ROBERT WISEMAN, CTO





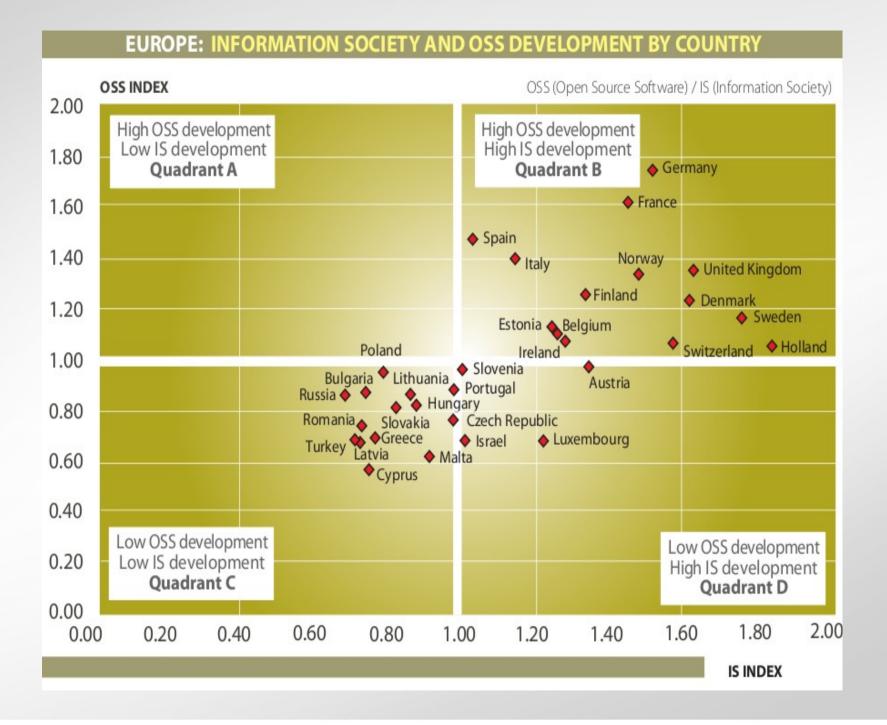






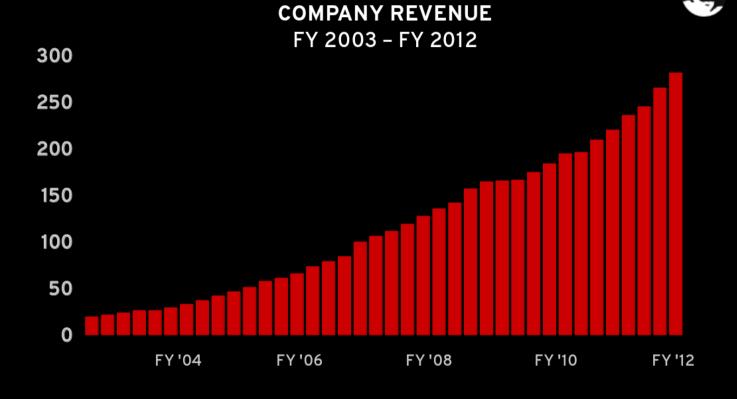
Source: National Open Source Software Observatory, CENATIC





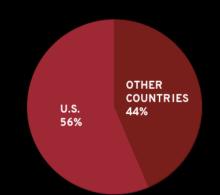












GLOBAL REVENUE FY2011

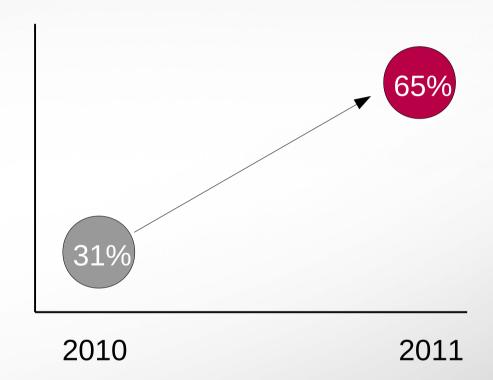


By running tests and executing numerous examples for specific teams, we were able to prove [...] not only would the solution work, but it will perform better & at a fraction of the costs.

EVANGELIZING OVER

RISING EXPECTATION FOR IT'S BUSINESS IMPACT GARTNER AND FORBES SURVEY OF BOARD OF DIRECTORS

Question: Rate your expectations of IT's strategic business contribution



Percentage of respondents that rated their expectations HIGH or EXTEMELY HIGH



PUBLIC CLOUDS ACHIEVE TREMENDOUS AGILITY AND EFFICIENCY

	PUBLIC CLOUDS		ENTERPRISE IT
Cost Per VM Hour:	\$0.10	VS.	\$1.00
Server: Admin Ratio:	300: 1	VS.	20: 1
Resource Utilization:	75 %	VS.	20%
App Deployment:	Minutes	VS.	Weeks
New App Development:	Weeks/ Months	VS.	Years



THE FIRST CLOUDS EVER BUILT WERE BUILT ON RED HAT TECHNOLOGY

TOP PUBLIC CLOUDS

- 80% Apps running on Linux
- Open source
- X86 volume infrastructure
- On demand "unlimited scalability"
- Multi-tenancy
- High density computing



TOP PUBLIC CLOUDS RELY ON RED HAT



ENTERPRISE IT IS COMPLEX

TRADITIONAL ENTERPRISE IT

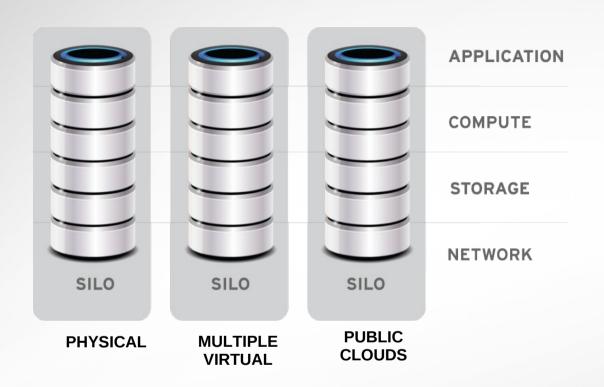
- Application-driven, purpose built
- Many legacy components
- Islands of underutilized capacity
- Regulatory and governance requirement
- Perceived slow to respond

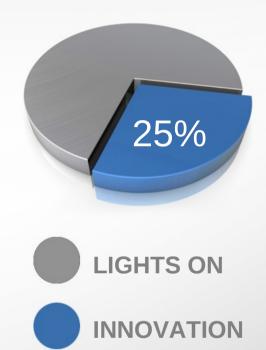


HOW TO INCREASE STRATEGIC RELEVANCE?



HOW CAN ENTERPRISES ACHIEVE THE SAME EFFICIENCY AND AGILITY?





TODAY'S INFRASTRUCTURE: Complex, inefficient

and expensive

Where your time is spent

Source: Ernst & Young Enterprise IT Investment Trends Survey, 2011





THE MOST CRITICAL IT STRATEGY DECISION THIS DECADE.

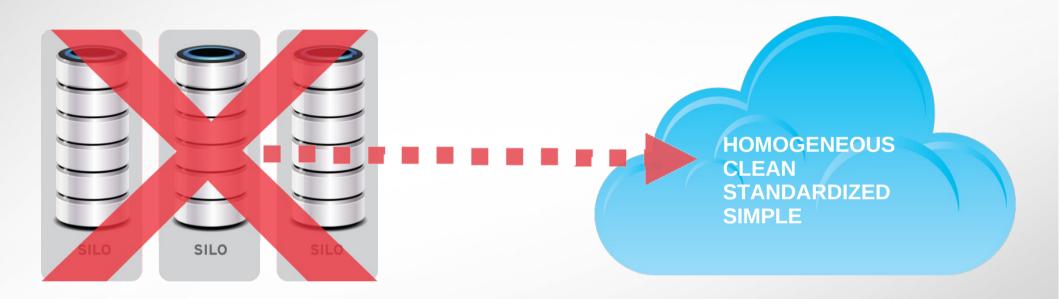
THREE CHOICES.







MIGRATION TO A HOMOGENEOUS INFRASTRUCTURE IS IMPRACTICAL



Naively simple for Enterprise

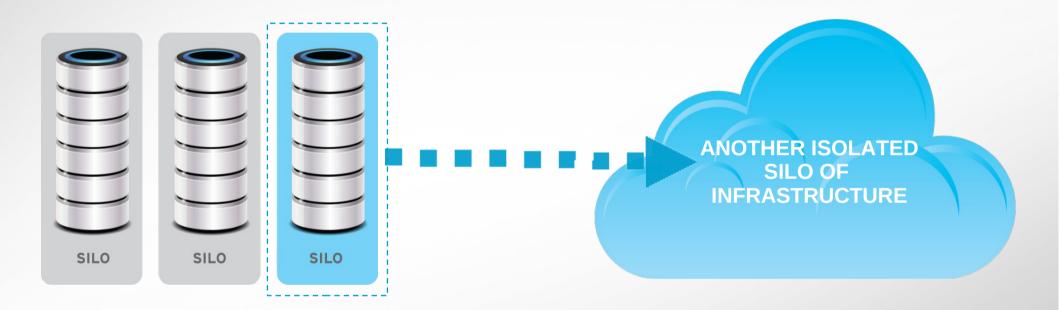
MAY WORK FOR SERVICE PROVIDERS, BUT IMPRACTICAL FOR ENTERPRISES







BUILD A CLOUD FROM A SMALL PART OF YOUR INFRASTRUCTURE



A CLOSED CLOUD... Now and forever

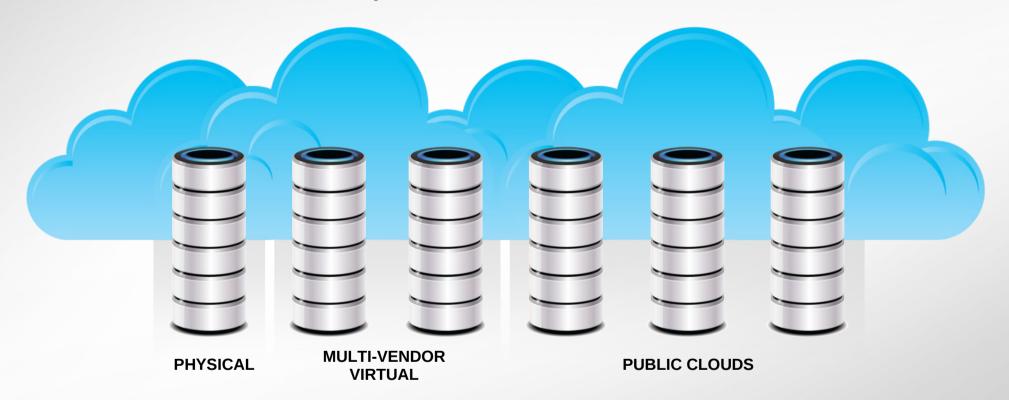
- Increases management complexity
- * Brings cloud's benefits to a fraction of your infrastructure
- Cuts off access to innovation
- Prevents use of most emerging public clouds
- Puts vendor in charge of your infrastructure options and your economics







BUILD AN <u>OPEN HYBRID</u> CLOUD OUT OF ALL YOUR RESOURCES, INCLUDING PUBLIC OPTIONS



Make a cloud out of what you have LEVERAGE EXISTING INVESTMENTS



KEY TAKE-AWAYS

BUILD AN OPEN CLOUD





OPEN CLOUD CHARACTERISTICS

Open source	 You choose your economics, not your vendor Avoid lock-in 	
Viable independent Community	 Not controlled or limited by one vendor 	
Open standards	Open standards at every level of the stack Access to greater innovation	
Freedom to use IP	 Able to be deployed without patent restriction 	
Choice of infrastructure	Deploy to any infrastructure you choose One that's right for you, not your vendor	
Open APIs	Extensible APIs for open interoperability	
Portability	Application portability across private and public clouds	

KEY TAKE-AWAYS

BUILD A HYBRID CLOUD





HYBRID CLOUD

Application and Data Portability Consistent Management & Policy

OPENSHIFT PLATFORM-AS-A-SERVICE

JBOSS ENTERPRISE MIDDLEWARE

CLOUDFORMS HYBRID CLOUD MANAGEMENT

RED HAT ENTERPRISE LINUX

RED HAT STORAGE

RED HAT ENTERPRISE VIRTUALIZATION

ON-PREMISE

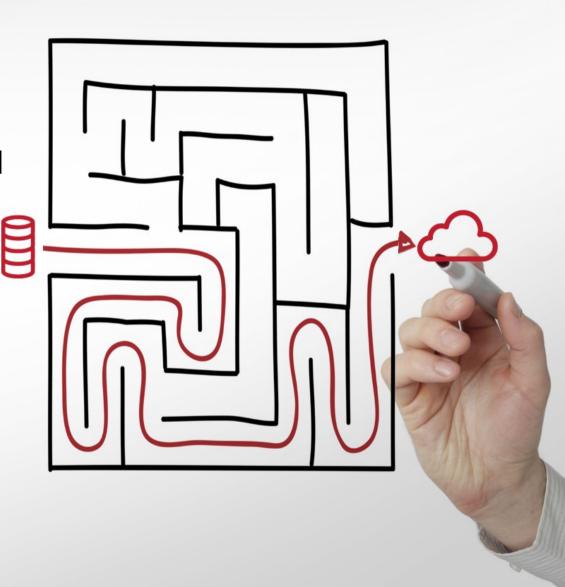
CONSISTENT ENVIRONMENT

PUBLIC CLOUD



RED HAT OPEN HYBRID CLOUDS PUT YOU IN CONTROL AGAIN

- Consistent certified environment on-premise and in public cloud
- Users retain easy, on-demand access to services
- Controlled by policies IT sets
- Applications and data are portable between public cloud and on-premise
- More choice
- Less complexity
- More control









OPEN HYBRID CLOUD IS THE FUTURE OF ENTERPRISE ARCHITECTURE.

