Cloud Computing
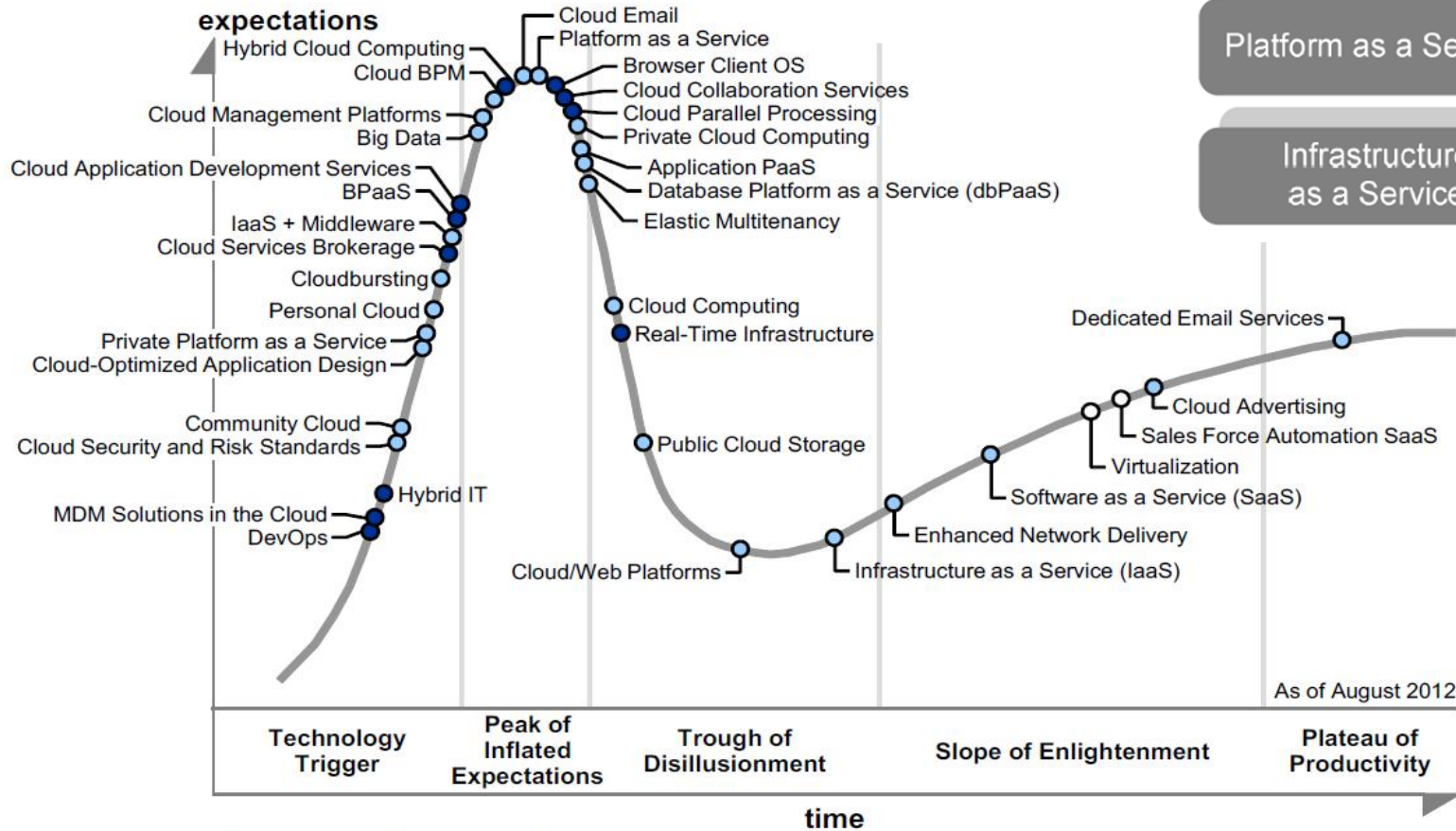
Thomas Michael Bohnert,
Andy Edmonds, Christof Marti
Philipp Aeschlimann, Lucas Graf, Toni Zehnder

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A Reality

Figure 1. Hype Cycle for Cloud Computing, 2012

A Business

Gartner Says Worldwide Public Cloud Services Market to Total $131 Billion (Ed. in 2013)

IaaS Continues as Fastest-Growing Market Segment

The public cloud services market is forecast to grow 18.5 percent in 2013 to total $131 billion worldwide, up from $111 billion in 2012, according to Gartner, Inc. Infrastructure as a service (IaaS), including cloud compute, storage and print services, continued as the fastest-growing segment of the market, growing 42.4 percent in 2012 to $6.1 billion and expected to grow 47.3 percent in 2013 to $9 billion.

"Although forecast growth is generally high across all regions, the adoption of cloud services varies significantly by country. Providers should not assume that a generic strategy applied to specific countries or regions of the world will produce the same outcome when applied to other countries, even countries with similar market characteristics," said Mr. Anderson. "Local economic factors, regulatory issues, the local political climate, the diverse landscape of global and local providers, including noncloud providers, and other country-specific factors ensure a unique marketplace in each country and region."

North America is the largest region in the cloud services market, accounting for 59 percent of all new spending on cloud services from 2013 through 2016. Western Europe, despite the growth challenges in the region, remains the second-largest region and will account for 24 percent of all new spending during the same time period. However, the highest growth rates for cloud services continue to come from the emerging regions of Emerging Asia/Pacific (led by Indonesia and India), Greater China and Latin America (led by Argentina, Mexico and Brazil).

"IT services providers, particularly those focused on delivering cloud services offerings or related services, must consider these disproportionately large mature markets if they want to play a leading role in cloud services growth worldwide," Mr. Anderson said. "Similarly, markets in Emerging Asia/Pacific, Greater China and Latin America should also be important considerations for IT services providers that want to capitalize on the high growth of these regions, particularly Latin America and Greater China."

Additional information is available in the report "Forecast Overview: Public Cloud Services, Worldwide, 2011-2016, 4Q12 Update." The report is available on Gartner's website at http://www.gartner.com/resId=2332215.

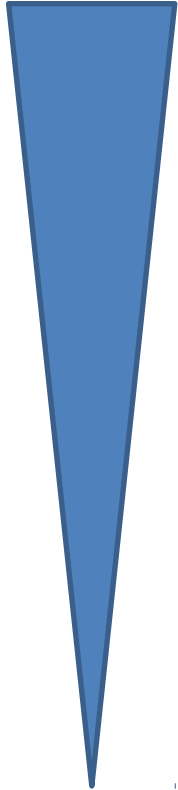www.cloudcomp.ch

We all …

… happily use it …

… the Cloud.

Thoughts

Thoughts – What is it?

Diversity

Software as a Service

Platform as a Service

Infrastructure as a Service

Thoughts - Options

Thoughts - Lock-in
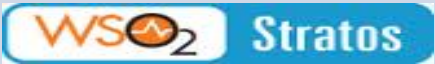
Thoughts – Open Source

	Year Started	License	Supported Hypervisors
EUCALYPTUS	2006	GPL	Xen, KVM, VMware*
cloudstack open source cloud computing	2008	Apache 2 (since 2012)	Xen, KVM, VMware, OracleVM
OpenNebula	2008	Apache 2	Xen, KVM, VMware
openstack™	2010	Apache 2	Xen, KVM, VMware, VirtualBox, Hyper-V, qcow2

Thoughts – Open Source

	Year Started	Sponsors	Supported Plattforms
CLOUD FOUNDRY™	2011	VMware	Java/Spring, Node.js, Grails, Ruby/Rails, Ruby/Sinatra, *)
OPENSHIFT	2011	RedHat	JavaEE6/JBoss, Ruby, PHP, Python, Perl, Node.js
WSO2 Stratos	2010	WSO2	JavaEE6, JBoss
SmartOS	2011	Joyent	Node.js

*) some derived products (AppFog, Stackato,…) also support PHP, Perl, Python, Erlang, Scala, Clojure, .Net

Thoughts – APIs
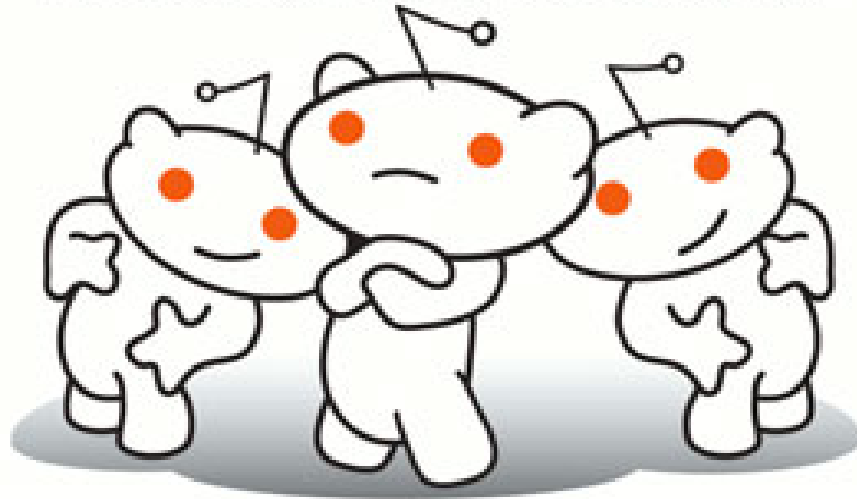
AWS or not AWS?!

Thoughts – Enterprise Grade

OpenSource, Cooperation, Foundation

Thoughts – Dependability

Apr 2011, Apr 2012, Jun 2012 ...

Thoughts – Dependability

Reddit And Netflix Down? Amazon Network Issue Causes Downtime For Multiple Sites (UPDATE)

Posted: 10/22/2012 2:55 pm EDT Updated: 10/22/2012 5:56 pm EDT

An apparent issue with Amazon Elastic Cloud Compute network caused partial outages of several popular sites on Monday afternoon.

Social news site Reddit was inaccessible for some users. The site confirmed the downtime in a tweet sent around 1:30 p.m. ET on Monday: "The site is down right now. It appears to be a network-related issue. We are investigating."

(At the time of writing, the site appeared to be at least partly up, but pages were slow to load when they loaded at all.)

Diagnostics site DownRightNow also reported around the same time that Netflix was experiencing a "likely service disruption."

Image-sharing site Imgur was also down for some, as was vacation-booking site Aribnb, Mashable reports.

Reddit-watcher blog the Daily Dot was affected and tweeted that the problem was on the Amazon network's end. "Amazon has broken the Internet and taken the Daily Dot with it. We'll be back just as soon as possible," read a tweet from the site's official feed.

According to TechCrunch, Amazon's AWS servers (in addition to EC2 servers) in its north Virginia data center were the source of the problem: "[Amazon's] Elastic Block Store part seems to be down. All services hosted on Heroku's virtual private servers are still down at the time of writing." Twitter users reported that GitHub, Pinterest, Gamespot and other services were also down as a result.
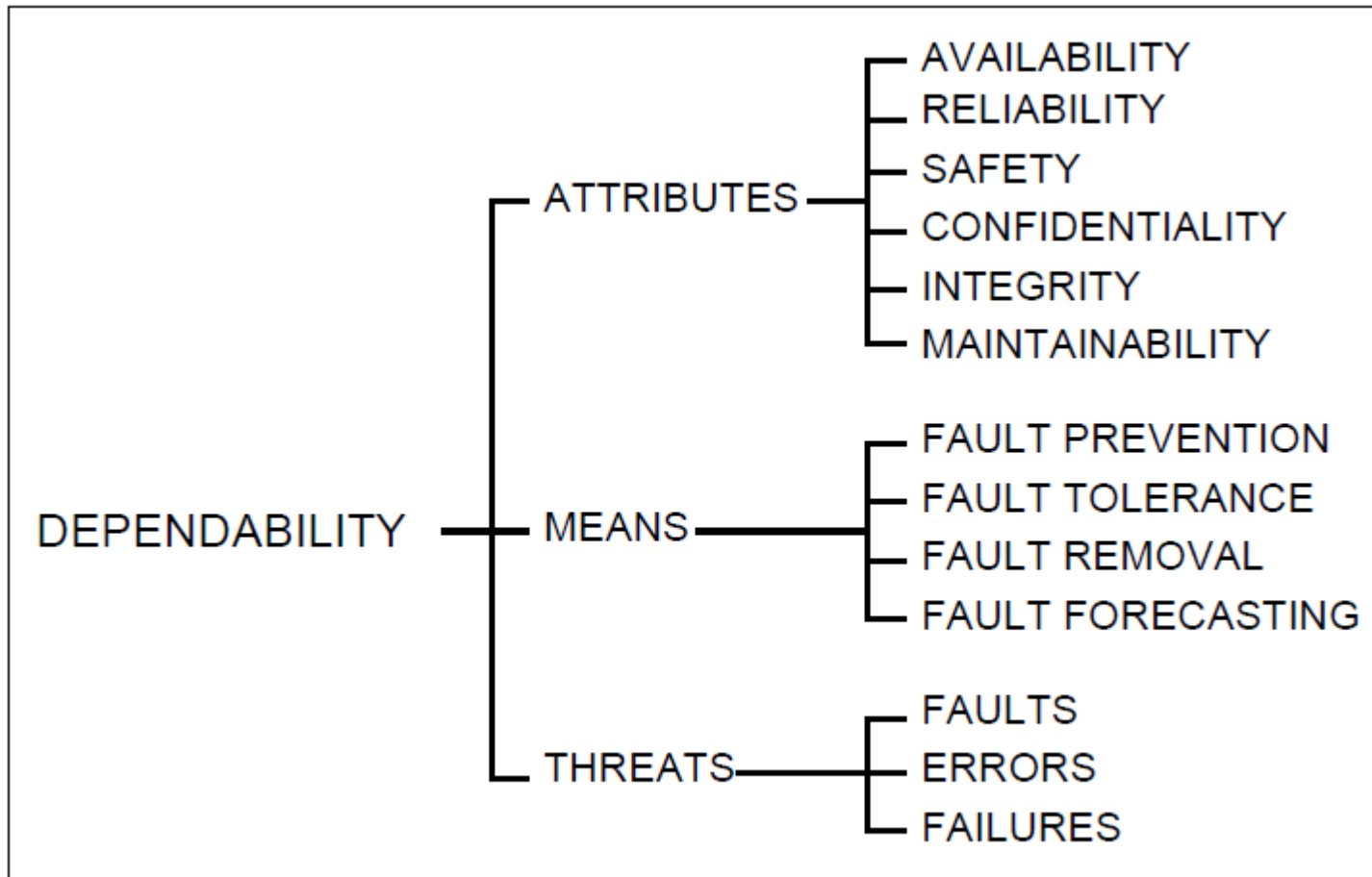
Have you had a problem with any of these sites today? Let us know in the comments or tweet us @HuffPostTech.

UPDATE: 5:55 p.m. Amazon is working to restore normal service to the servers affected, per the company's Web Services Service Health Dashboard.
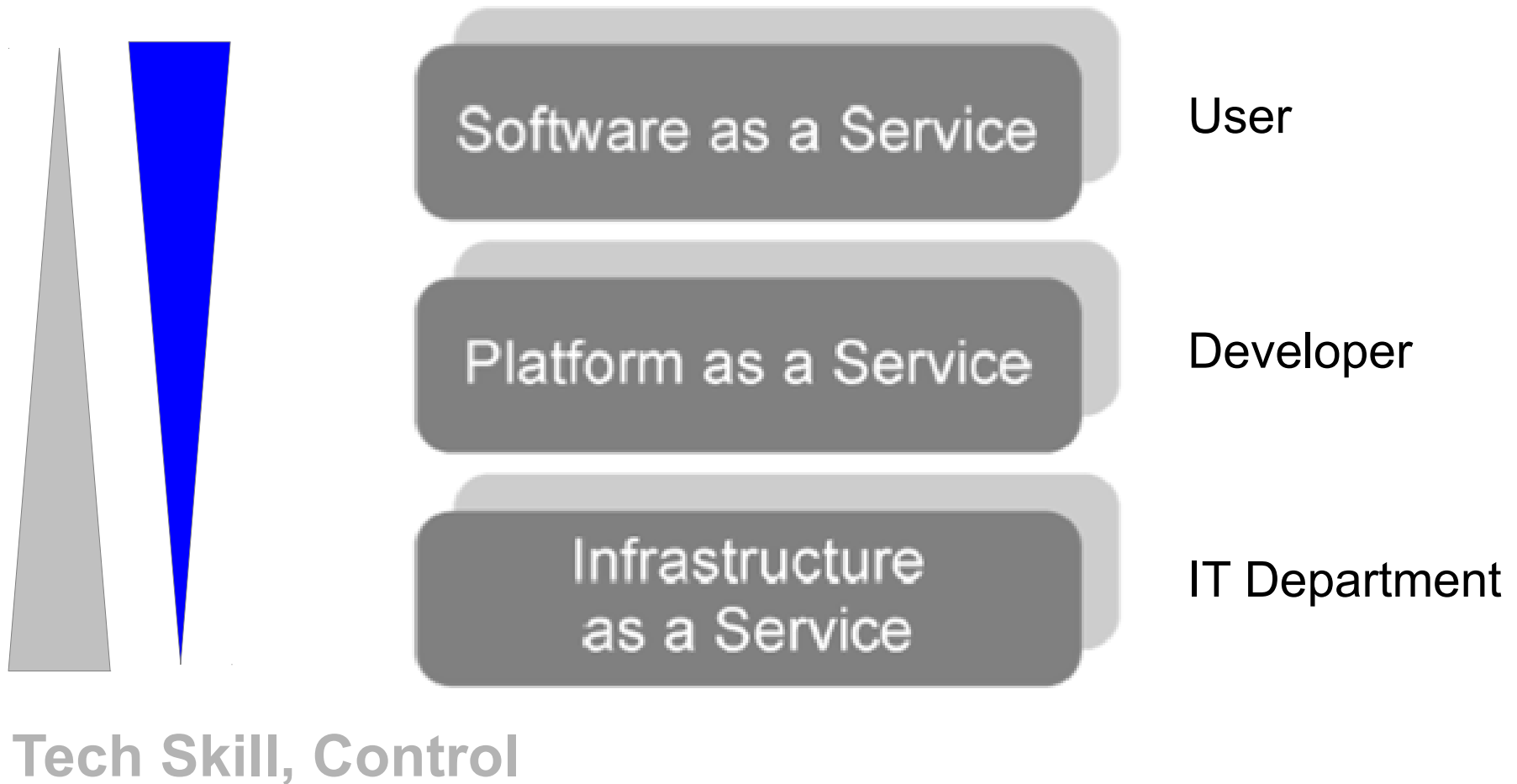
www.cloudcomp.ch

Thoughts – Dependability

Avizienis, Laprie, Randell, "Fundamental Concepts of Dependability"

Thoughts – Dependability

Ease of Use, Reliance

Software as a Service — User

Platform as a Service — Developer

Infrastructure as a Service — IT Department

Tech Skill, Control

Thoughts – Incident Management

Your Fault!

You, he, she and me:
- Do and Do Not

Thoughts – Federation

There is more than one Cloud

Enablement, but for what?

Many open questions